Apex Laboratories, LLC
6700 SW Sandburg St. Tigard, Oregon 97223
503.718.2323

Level IV Data Package for

Anchor QEA, LLC

Gasco PreRD_DG 2019 - 4a-b. DOC-CAP Testing Cores

Apex Laboratories Work Order #:

A0E0312

APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard, OR 97223 phone 503-718-2323

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APEX LABORATORIES, LLC
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Analytical Case Narrative

APEX LABORATORIES, LLC
6700 SW Sandburg St Tigard, OR 97223 phone 503-718-2323

Analytical Case Narrative

Client: Anchor QEA, LLC Date: 07/14/2020
Project: Gasco PreRD_DG 2019 - 4a-b. DOC-CAP Testing Cores
Apex Work Order Number: A0E0312

This data package contains data associated with analysis of samples for the above referenced Apex work order numbers. The data package Table of Contents, along with the PDF bookmarks, allow for ease of navigation and location of items within the data deliverable.

The Sample Receipt Documentation section of this package contains sample receipt information, including sample temperature and condition of receipt documented on Cooler Receipt Form(s). Apex analyzed the samples by the methods indicated on the Chain of Custody. Any additional analyses requested are indicated on the Apex Work Order.

If any anomalies were encountered during analysis that could potentially impact data quality, sample results are qualified and/or a separate Case Narrative is included in the Analytical Report. Please refer to the Notes and Definition section of the Analytical Report(s) for Qualifier explanations, Conventions, and the Blank Policy.

Data represented in this package are in compliance with the referenced method(s), both technically and for completeness, for all conditions other than those stated above and/or noted by qualification of the reported data. The signature below verifies that the Laboratory Director or his designee has authorized release of this data package.

Estella Rieben,
Quality Systems Manager
Apex Laboratories, LLC

APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard OR 97223 phone 503-718-2323

Analytical Report

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Wednesday, June 3, 2020

Ryan Barth
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A0E0312 - Gasco PreRD_DG 2019 - 4a-b. DOC-CAP Testing Cores - [none]

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A0E0312, which was received by the laboratory on 5/12/2020 at 10:08:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	1.8 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4a-b. DOC-CAP Testing Cores**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PDI-087SC-BB-05-07-200511	A0E0312-01	SE	05/11/20 13:10	05/12/20 10:08
PDI-TB-2005111337	A0E0312-02	WQ	05/11/20 13:37	05/12/20 10:08

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Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4a-b. DOC-CAP Testing Cores**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-TB-2005111337 (A0E0312-02)				**Matrix: WQ**		**Batch: 0050413**		
Benzene	ND	0.100	0.200	ug/L	1	05/12/20 19:12	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	05/12/20 19:12	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/12/20 19:12	EPA 8260C	
m,p-Xylene	ND	0.500	1.00	ug/L	1	05/12/20 19:12	EPA 8260C	
o-Xylene	ND	0.250	0.500	ug/L	1	05/12/20 19:12	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	05/12/20 19:12	EPA 8260C	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	05/12/20 19:12	EPA 8260C	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/12/20 19:12	EPA 8260C	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	05/12/20 19:12	EPA 8260C	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	05/12/20 19:12	EPA 8260C	
Vinyl chloride	ND	0.200	0.400	ug/L	1	05/12/20 19:12	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*110 %*	*Limits:* *80-120 %*	*1*	*05/12/20 19:12*	*EPA 8260C*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*05/12/20 19:12*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*05/12/20 19:12*	*EPA 8260C*	

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-087SC-BB-05-07-200511 (A0E0312-01)				**Matrix: SE**		**Batch: 0050519**		
Benzene	**116**	12.2	24.5	ug/kg dry	50	05/14/20 14:02	5035A/8260C	
Toluene	**61.4**	61.2	122	ug/kg dry	50	05/14/20 14:02	5035A/8260C	**J**
Ethylbenzene	**205**	30.6	61.2	ug/kg dry	50	05/14/20 14:02	5035A/8260C	
m,p-Xylene	**158**	61.2	122	ug/kg dry	50	05/14/20 14:02	5035A/8260C	
o-Xylene	**130**	30.6	61.2	ug/kg dry	50	05/14/20 14:02	5035A/8260C	
Chlorobenzene	ND	30.6	61.2	ug/kg dry	50	05/14/20 14:02	5035A/8260C	
1,1-Dichloroethene	ND	30.6	61.2	ug/kg dry	50	05/14/20 14:02	5035A/8260C	
cis-1,2-Dichloroethene	ND	30.6	61.2	ug/kg dry	50	05/14/20 14:02	5035A/8260C	
Tetrachloroethene (PCE)	ND	30.6	61.2	ug/kg dry	50	05/14/20 14:02	5035A/8260C	
Trichloroethene (TCE)	ND	30.6	61.2	ug/kg dry	50	05/14/20 14:02	5035A/8260C	
Vinyl chloride	ND	30.6	61.2	ug/kg dry	50	05/14/20 14:02	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:* *80-120 %*	*1*	*05/14/20 14:02*	*5035A/8260C*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*05/14/20 14:02*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*05/14/20 14:02*	*5035A/8260C*	

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Darwin Thomas, Business Development Director

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ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4a-b. DOC-CAP Testing Cores**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

ANALYTICAL SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-087SC-BB-05-07-200511 (A0E0312-01)				**Matrix: SE**				
Batch: 0050886								
Total Solids	**57.4**	1.00	1.00	% by Weight	1	05/28/20 12:54	SM 2540 G	

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Anchor QEA, LLC	Project:	**Gasco PreRD DG 2019 - 4a-b. DOC-CAP Testing Cores**
6720 SW Macadam Ave. Suite 125	Project Number:	**[none]**
Portland, OR 97219	Project Manager:	**Ryan Barth**

Report ID:
A0E0312 - 06 03 20 1037

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0050413 - EPA 5030B												**Water**
Blank (0050413-BLK1)			Prepared: 05/12/20 08:00 Analyzed: 05/12/20 09:36									
EPA 8260C												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 106 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*102 %*		*80-120 %*			*"*				
LCS (0050413-BS1)			Prepared: 05/12/20 08:00 Analyzed: 05/12/20 08:42									
EPA 8260C												
Benzene	21.4	0.100	0.200	ug/L	1	20.0	---	107	80-120%	---	---	
Toluene	20.1	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
Ethylbenzene	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
m,p-Xylene	41.1	0.500	1.00	ug/L	1	40.0	---	103	80-120%	---	---	
o-Xylene	19.5	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
Chlorobenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
1,1-Dichloroethene	20.5	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
cis-1,2-Dichloroethene	21.0	0.200	0.400	ug/L	1	20.0	---	105	80-120%	---	---	
Tetrachloroethene (PCE)	22.2	0.200	0.400	ug/L	1	20.0	---	111	80-120%	---	---	
Trichloroethene (TCE)	19.3	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
Vinyl chloride	18.4	0.200	0.400	ug/L	1	20.0	---	92	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 99 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				
Duplicate (0050413-DUP1)			Prepared: 05/12/20 10:12 Analyzed: 05/12/20 13:19									

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project:	**Gasco PreRD DG 2019 - 4a-b. DOC-CAP Testing Cores**
6720 SW Macadam Ave. Suite 125	Project Number:	**[none]**
Portland, OR 97219	Project Manager:	**Ryan Barth**

Report ID:
A0E0312 - 06 03 20 1037

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0050413 - EPA 5030B							**Water**					
Duplicate (0050413-DUP1)			Prepared: 05/12/20 10:12 Analyzed: 05/12/20 13:19									
QC Source Sample: Non-SDG (A0E0026-51RE1)												
Benzene	ND	5.00	10.0	ug/L	50	---	ND	---	---	---	30%	
Toluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
o-Xylene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	**33.5**	10.0	20.0	ug/L	50	---	32.5	---	---	3	30%	
cis-1,2-Dichloroethene	**1800**	10.0	20.0	ug/L	50	---	1750	---	---	3	30%	
Tetrachloroethene (PCE)	ND	10.0	20.0	ug/L	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	**2580**	10.0	20.0	ug/L	50	---	2400	---	---	7	30%	
Vinyl chloride	**110**	10.0	20.0	ug/L	50	---	105	---	---	4	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 111 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*99 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*102 %*		*80-120 %*				*"*			
Matrix Spike (0050413-MS1)			Prepared: 05/12/20 10:12 Analyzed: 05/12/20 11:57									
QC Source Sample: Non-SDG (A0E0293-01)												
EPA 8260C												
Benzene	22.1	0.100	0.200	ug/L	1	20.0	ND	111	79-120%	---	---	
Toluene	20.4	0.500	1.00	ug/L	1	20.0	ND	102	80-121%	---	---	
Ethylbenzene	21.9	0.250	0.500	ug/L	1	20.0	ND	110	79-121%	---	---	
m,p-Xylene	42.3	0.500	1.00	ug/L	1	40.0	ND	106	80-121%	---	---	
o-Xylene	20.0	0.250	0.500	ug/L	1	20.0	ND	100	78-122%	---	---	
Chlorobenzene	21.0	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---	
1,1-Dichloroethene	17.9	0.200	0.400	ug/L	1	20.0	ND	89	71-131%	---	---	
cis-1,2-Dichloroethene	21.8	0.200	0.400	ug/L	1	20.0	ND	109	78-123%	---	---	
Tetrachloroethene (PCE)	22.4	0.200	0.400	ug/L	1	20.0	ND	112	74-129%	---	---	
Trichloroethene (TCE)	19.2	0.200	0.400	ug/L	1	20.0	ND	96	79-123%	---	---	
Vinyl chloride	19.6	0.200	0.400	ug/L	1	20.0	ND	98	58-137%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 99 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*96 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*				*"*			

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Darwin Thomas, Business Development Director

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Anchor QEA, LLC	Project:	**Gasco PreRD DG 2019 - 4a-b. DOC-CAP Testing Cores**
6720 SW Macadam Ave. Suite 125	Project Number:	**[none]**
Portland, OR 97219	Project Manager:	**Ryan Barth**

Report ID:
A0E0312 - 06 03 20 1037

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0050519 - EPA 5035A							**Soil**					
Blank (0050519-BLK1)			Prepared: 05/14/20 09:00 Analyzed: 05/14/20 12:14									
5035A/8260C												
Benzene	ND	3.33	6.67	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 98 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*102 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*97 %*	*79-120 %*			*"*					
LCS (0050519-BS1)			Prepared: 05/14/20 09:00 Analyzed: 05/14/20 11:20									
5035A/8260C												
Benzene	1020	5.00	10.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Toluene	984	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Ethylbenzene	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
m,p-Xylene	2060	25.0	50.0	ug/kg wet	50	2000	---	103	80-120%	---	---	
o-Xylene	958	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Chlorobenzene	989	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,1-Dichloroethene	953	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
cis-1,2-Dichloroethene	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Tetrachloroethene (PCE)	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Trichloroethene (TCE)	936	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Vinyl chloride	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 98 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*99 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*			*"*					
Duplicate (0050519-DUP1)			Prepared: 05/11/20 13:10 Analyzed: 05/14/20 14:29									

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6720 SW Macadam Ave. Suite 125	Project Number:	**[none]**
Portland, OR 97219	Project Manager:	**Ryan Barth**

Report ID:
A0E0312 - 06 03 20 1037

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0050519 - EPA 5035A							**Soil**					
Duplicate (0050519-DUP1)			Prepared: 05/11/20 13:10		Analyzed: 05/14/20 14:29							
QC Source Sample: PDI-087SC-BB-05-07-200511 (A0E0312-01)												
5035A/8260C												
Benzene	**151**	12.5	25.0	ug/kg dry	50	---	116	---	---	26	30%	
Toluene	ND	62.6	125	ug/kg dry	50	---	ND	---	---	**---**	**30%**	Q-05
Ethylbenzene	**310**	31.3	62.6	ug/kg dry	50	---	205	---	---	**41**	**30%**	Q-05
m,p-Xylene	**251**	62.6	125	ug/kg dry	50	---	158	---	---	**46**	**30%**	Q-05
o-Xylene	**214**	31.3	62.6	ug/kg dry	50	---	130	---	---	**49**	**30%**	Q-05
Chlorobenzene	ND	31.3	62.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	31.3	62.6	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	31.3	62.6	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	31.3	62.6	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	31.3	62.6	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	31.3	62.6	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*97 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*103 %*		*79-120 %*				*"*			
Matrix Spike (0050519-MS1)			Prepared: 05/01/20 16:00		Analyzed: 05/14/20 13:08							
QC Source Sample: Non-SDG (A0E0105-01RE1)												
5035A/8260C												
Benzene	1200	5.68	11.4	ug/kg wet	50	1360	ND	88	77-121%	---	---	
Toluene	1130	28.4	56.8	ug/kg wet	50	1360	ND	83	77-121%	---	---	
Ethylbenzene	1210	14.2	28.4	ug/kg wet	50	1360	ND	88	76-122%	---	---	
m,p-Xylene	2360	28.4	56.8	ug/kg wet	50	2730	ND	87	77-124%	---	---	
o-Xylene	1190	14.2	28.4	ug/kg wet	50	1360	ND	87	77-123%	---	---	
Chlorobenzene	1130	14.2	28.4	ug/kg wet	50	1360	ND	83	79-120%	---	---	
1,1-Dichloroethene	1080	14.2	28.4	ug/kg wet	50	1360	ND	79	70-131%	---	---	
cis-1,2-Dichloroethene	1220	14.2	28.4	ug/kg wet	50	1360	ND	89	77-123%	---	---	
Tetrachloroethene (PCE)	1190	14.2	28.4	ug/kg wet	50	1360	ND	87	73-128%	---	---	
Trichloroethene (TCE)	1110	14.2	28.4	ug/kg wet	50	1360	ND	81	77-123%	---	---	
Vinyl chloride	1090	14.2	28.4	ug/kg wet	50	1360	ND	80	56-135%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*97 %*		*80-120 %*				*"*			

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4a-b. DOC-CAP Testing Cores**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0050519 - EPA 5035A							**Soil**					
Matrix Spike (0050519-MS1)					Prepared: 05/01/20 16:00 Analyzed: 05/14/20 13:08							
QC Source Sample: Non-SDG (A0E0105-01RE1)												
Surr: 4-Bromofluorobenzene (Surr)					*Recovery: 102 %*	*Limits: 79-120 %*						*Dilution: 1x*

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

QUALITY CONTROL (QC) SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0050886 - Total Solids (SM2540G/PSEP)							**Sediment**					
Duplicate (0050886-DUP1)			Prepared: 05/22/20 18:59		Analyzed: 05/28/20 12:54							
QC Source Sample: Non-SDG (A0E0310-02)												
Total Solids	**64.6**	1.00	1.00	% by Weight	1	---	64.9	---	---	0.5	10%	

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

SAMPLE PREPARATION INFORMATION

Selected Volatile Organic Compounds by EPA 8260C

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0050413							
A0E0312-02	WQ	EPA 8260C	05/11/20 13:37	05/12/20 10:12	5mL/5mL	5mL/5mL	1.00

Selected Volatile Organic Compounds by EPA 5035A/8260C

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0050519							
A0E0312-01	SE	5035A/8260C	05/11/20 13:10	05/11/20 13:10	5.11g/5mL	5g/5mL	0.98

Solid and Moisture Determinations

Prep: Total Solids (SM2540G/PSEP)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0050886							
A0E0312-01	SE	SM 2540 G	05/11/20 13:10	05/22/20 18:59			NA

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Darwin Thomas, Business Development Director

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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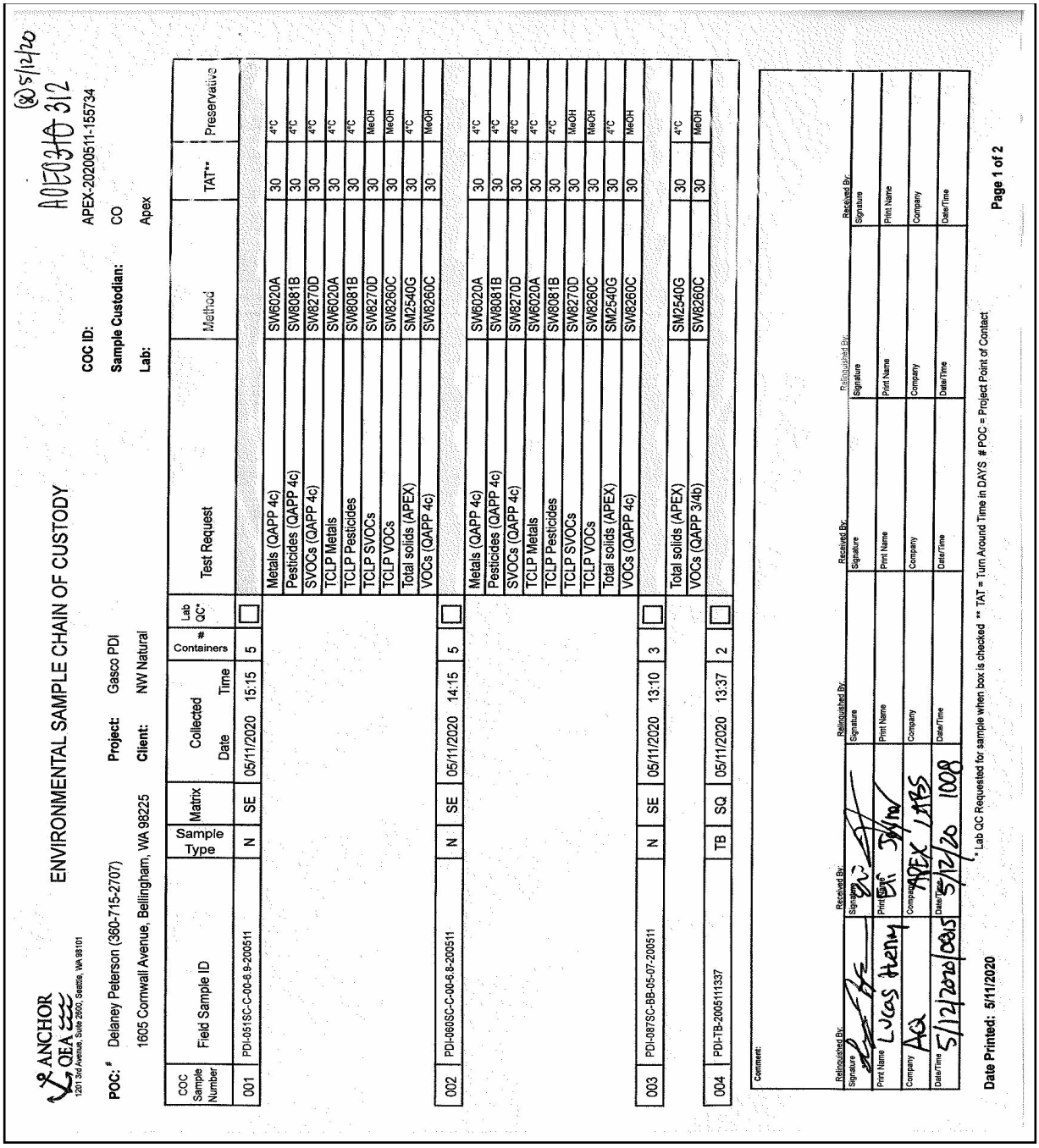
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project:	**Gasco PreRD DG 2019 - 4a-b. DOC-CAP Testing Cores**
6720 SW Macadam Ave. Suite 125	Project Number:	**[none]**
Portland, OR 97219	Project Manager:	**Ryan Barth**

Report ID:
A0E0312 - 06 03 20 1037



ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

POC: # Delaney Peterson (360-715-2707)
1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI
Client: NW Natural

COC ID: APEX-20200511-155734
Sample Custodian: CO
Lab: Apex

A0E0312 312
05/12/20

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-051SC-C-00-6.8-200511	N	SE	05/11/2020	15:15	5	☐	Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH
002	PDI-060SC-C-00-6.8-200511	N	SE	05/11/2020	14:15	5	☐	Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH
003	PDI-087SC-BB-05-07-200511	N	SE	05/11/2020	13:10	3	☐	Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 3/4b)	SW8260C	30	MeOH
004	PDI-TB-20051113337	TB	SQ	05/11/2020	13:37	2	☐				

Comment:

Relinquished By: Signature / Print Name / Company / Date/Time
Received By: Signature / Print Name / Company / Date/Time
Relinquished By: Signature / Print Name / Company / Date/Time
Received By: Signature / Print Name / Company / Date/Time

Print Name: Lucas Henry
Company: AQ
Date/Time: 5/12/2020 0815
Print Name: Eric Tyhon
Company: APEX Labs
Date/Time: 5/12/20 1008

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Date Printed: 5/11/2020

Page 1 of 2

Apex Laboratories

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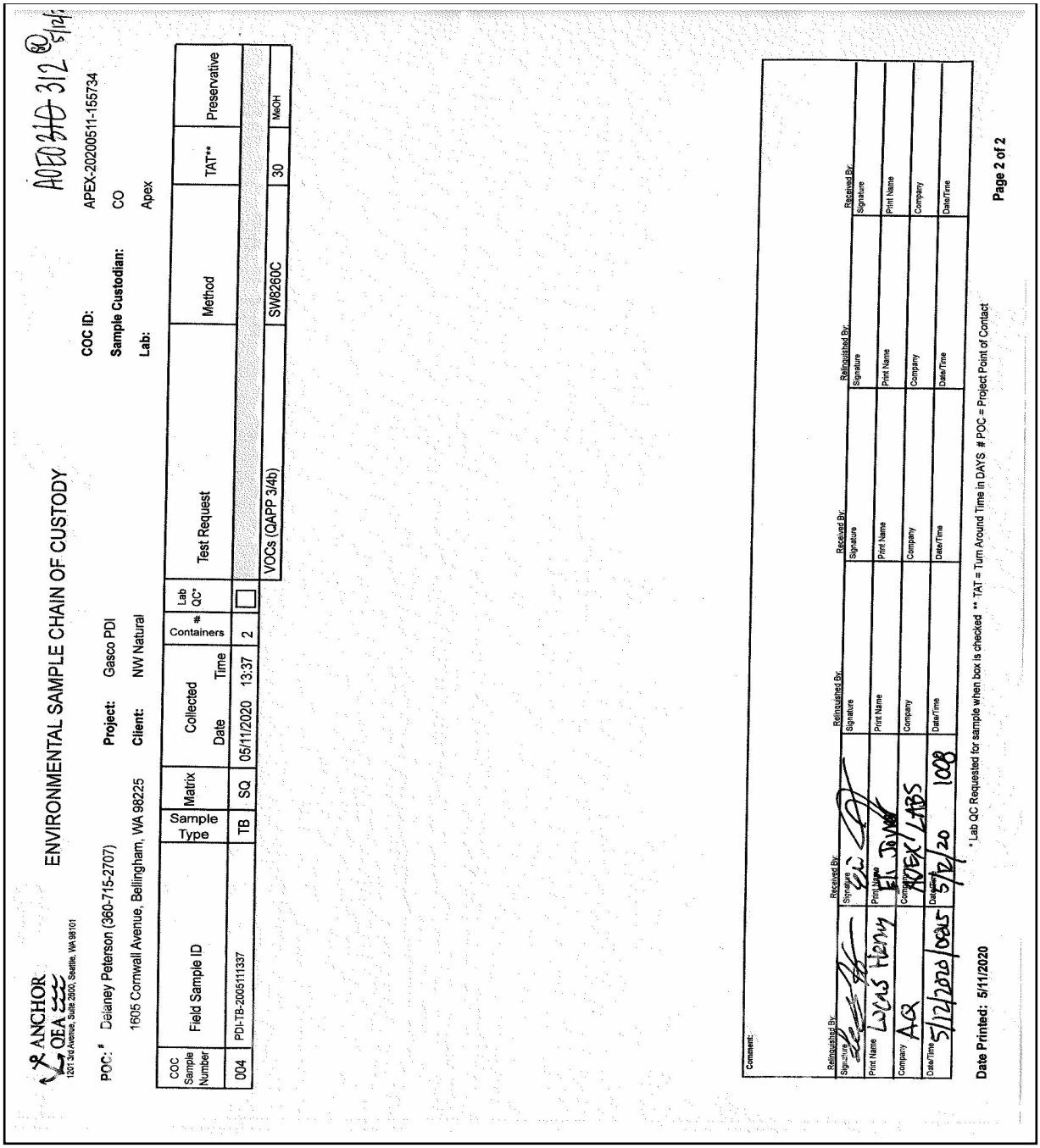
Darwin Thomas, Business Development Director

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4a-b. DOC-CAP Testing Cores**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**



ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

POC:* Delaney Peterson (360-715-2707)
1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI
Client: NW Natural

COC ID: APEX-202005111-155734
Sample Custodian: CO
Lab: Apex

A0E0312 312 @ 5/19/

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
004	PDI-TB-200511337	TB	SQ	05/11/2020	13:37	2	☐	VOCs (QAPP 3/4b)	SW8260C	30	MeOH

Comment:

Relinquished By: Signature / Print Name / Company / Date/Time
Received By: Signature / Print Name / Company / Date/Time
Relinquished By: Signature / Print Name / Company / Date/Time
Received By: Signature / Print Name / Company / Date/Time
Relinquished By: Signature / Print Name / Company / Date/Time
Received By: Signature / Print Name / Company / Date/Time

Print Name: Lucas Henry
Company: AQ
Date/Time: 5/12/2020 0845
Received By: Signature / Print Name: Eli Jump / Company: NDEQ/LABS / Date/Time: 5/12/20 1008

Date Printed: 5/11/2020

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Page 2 of 2

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503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4a-b. DOC-CAP Testing Cores**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A0E0312 - 06 03 20 1037**

APEX LABS COOLER RECEIPT FORM

Client: Anchor Element WO#: A0 E0310 312 @ 5/12/20

Project/Project #: Gasco PDI 20200511-155734

Delivery Info:

Date/time received: 5/12/20 @ 1008 By: EJ

Delivered by: Apex X Client ___ ESS ___ FedEx ___ UPS ___ Swift ___ Senvoy ___ SDS ___ Other ___

Cooler Inspection Date/time inspected: 5/12/20 @ 1048 By: EJ

Chain of Custody included? Yes X No ___ Custody seals? Yes X No ___

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.8						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition:	Good						

Cooler out of temp? (Y/N) Possible reason why: ___

If some coolers are in temp and some out, were green dots applied to out of temperature samples? Yes/No/NA

Out of temperature samples form initiated? Yes/No/NA

Samples Inspection: Date/time inspected: 5/12/20 @ 1509 By: EJ

All samples intact? Yes X No ___ Comments: ___

Bottle labels/COCs agree? Yes X No ___ Comments: ___

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No X NA ___

Comments ___

Water samples: pH checked: Yes ___ No X NA ___ pH appropriate? Yes ___ No X NA ___

Comments: ___

Additional information: ___

Labeled by: EJ Witness: EJ Cooler Inspected by: EJ See Project Contact Form: Y

Apex Laboratories

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Darwin Thomas, Business Development Director

APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard OR 97223 phone 503-718-2323

Sample Receipt Documentation
(Work orders, Chain of Custody & Cooler Receipt Forms)

A0E0312

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 4a-b. DOC-CAP Testing Cores**	**Project Number:**	**[none]**

Report To:

Anchor QEA, LLC
Ryan Barth
6720 SW Macadam Ave. Suite 125
Portland, OR 97219
Phone: (503) 670-1108
Fax: na

Invoice To:

Anchor QEA, LLC Seattle
Accounts Payable
1201 3rd Avenue, Suite 2600
Seattle, WA 98101
Phone :(206) 287-9130
Fax: (206) 287-9131

Date Due:	05/27/20 17:00 (10 day TAT)		
Received By:	Eli S. Joyner	Date Received:	05/12/20 10:08
Logged In By:	Susan L. Treat	Date Logged In:	05/12/20 14:11

Cooler #1 received at 1.8°C

Custody Seals	Yes	Containers Intact	Yes	COC/Labels Agree	Yes	PH Confirmed	No	Received On Ice	Yes
Temperature OK	Yes								

Analysis	Due	TAT	Expires	Comments
A0E0312-01 PDI-087SC-BB-05-07-200511 [Sediment] Sampled 05/11/20 13:10 (GMT-08:00) Pacific Time (US & Canada) 3 Containers				
Dry Weight				
Dry Weight	05/15/20 17:00	3	11/07/20 13:10	Use Results from TS.. Make NR once completed.
Project Mgmt				
Data Package	05/26/20 17:00	10	08/18/20 13:10	
Volatiles				
8260C BTEX+Halo6	05/26/20 17:00	10	05/13/20 13:10	CAP TESTING/Waters
Wet Chem				
Solids, Total (SM 2540 G,B)	05/26/20 17:00	10	11/07/20 13:10	Use Results for Dry Weight (Not for Waters)
A0E0312-02 PDI-TB-2005111337 [Water] Sampled 05/11/20 13:37 (GMT-08:00) Pacific Time (US & Canada) 2 Containers				
Volatiles				
8260C BTEX+Halo6	05/26/20 17:00	10	05/25/20 13:37	CAP TESTING/Waters

Reviewed By Date

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

(8) 5/12/20
A0E0~~310~~ 312

COC ID: APEX-20200511-155734
Sample Custodian: CO
Lab: Apex

POC: # Delaney Peterson (360-715-2707)
1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI
Client: NW Natural

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-051SC-C-00-6.9-200511	N	SE	05/11/2020	15:15	5	☐				
								Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH
002	PDI-060SC-C-00-6.8-200511	N	SE	05/11/2020	14:15	5	☐				
								Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH
003	PDI-087SC-BB-05-07-200511	N	SE	05/11/2020	13:10	3	☐				
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 3/4b)	SW8260C	30	MeOH
004	PDI-TB-2005111337	TB	SQ	05/11/2020	13:37	2	☐				

Comment:

	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	[signature]	[signature]				
Print Name	Lucas Henry	Eli Joyner				
Company	AQ	APEX LABS				
Date/Time	5/12/2020/0815	5/12/20 1008				

* Lab QC Required for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Date Printed: 5/11/2020

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

AOEO 310 312 60 5/12/

POC: # Delaney Peterson (360-715-2707)
1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI
Client: NW Natural

COC ID: APEX-20200511-155734
Sample Custodian: CO
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
004	PDI-TB-2005111337	TB	SQ	05/11/2020	13:37	2	☐	VOCs (QAPP 3/4b)	SW8260C	30	MeOH

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name Lucas Henry	Print Name Eli Joyce	Print Name	Print Name	Print Name	Print Name
Company AQ	Company APEX LABS	Company	Company	Company	Company
Date/Time 5/12/2020 0825	Date/Time 5/12/20 1008	Date/Time	Date/Time	Date/Time	Date/Time

* Lab QC Requested for sample when box is checked ** TAT = Turnaround Time (DAYS) PC = Project Point of Contact

Date Printed: 5/11/2020

Page 2 of 2

APEX LABS COOLER RECEIPT FORM

Client: Anchor Element WO#: A0 E0310 312 @5/12/20

Project/Project #: Gasco PDI 20200511-155734

Delivery Info:

Date/time received: 5/12/20 @ 1008 By: EJ

Delivered by: Apex X Client ___ ESS ___ FedEx ___ UPS ___ Swift ___ Senvoy ___ SDS ___ Other ___

Cooler Inspection Date/time inspected: 5/12/20 @ 1048 By: EJ

Chain of Custody included? Yes X No ___ Custody seals? Yes X No ___

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.8						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition:	Good						

Cooler out of temp? (Y/N) Possible reason why: ___

If some coolers are in temp and some out, were green dots applied to out of temperature samples? Yes/No/NA

Out of temperature samples form initiated? Yes/No/NA

Samples Inspection: Date/time inspected: 5/12/20 @ 1509 By: SC

All samples intact? Yes X No ___ Comments: ___

Bottle labels/COCs agree? Yes X No ___ Comments: ___

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No X NA ___

Comments ___

Water samples: pH checked: Yes ___ No X NA ___ pH appropriate? Yes ___ No X NA ___

Comments: ___

Additional information: ___

Labeled by: SC Witness: JS Cooler Inspected by: SC See Project Contact Form: Y

APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard OR 97223 phone 503-718-2323

CLP-Like Forms

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: GCMS

METHOD: EPA 8260C

ANALYSES DATA PACKAGE COVER PAGE

EPA 8260C

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 4a-b. DOC-CAP Testing C

Client Sample Id:	Lab Sample Id:	Matrix
PDI-TB-2005111337	A0E0312-02	WQ

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. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 
Name: David G. Jack

Forms Created: 7/6/2020 12:37PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 8260C

Laboratory: Apex Laboratories **SDG:** Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC **Project:** Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP

Batch Matrix: Water

Analyte	MDL	MRL	Units
Benzene	0.100	0.200	ug/L
Toluene	0.500	1.00	ug/L
Ethylbenzene	0.250	0.500	ug/L
m,p-Xylene	0.500	1.00	ug/L
o-Xylene	0.250	0.500	ug/L
Chlorobenzene	0.250	0.500	ug/L
1,1-Dichloroethene	0.200	0.400	ug/L
cis-1,2-Dichloroethene	0.200	0.400	ug/L
Tetrachloroethene (PCE)	0.200	0.400	ug/L
Trichloroethene (TCE)	0.200	0.400	ug/L
Vinyl chloride	0.200	0.400	ug/L

Note: MDLs are listed only if the corresponding analyte was evalutated to the MDL in this report .

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

PDI-TB-2005111337

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing Co
Matrix:	WQ	Laboratory ID:	A0E0312-02	File ID:	VG20051226.D
Sampled:	05/11/20 13:37	Prepared:	05/12/20 10:12	Analyzed:	05/12/20 19:12
		Preparation:	EPA 5030B	Initial/Final:	5 mL / 5 mL

Batch: 0050413 Sequence: 0E12021 Calibration: A0D3007 Instrument: VOA-GCMS7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-43-2	Benzene	1	0.100	U
108-88-3	Toluene	1	0.500	U
100-41-4	Ethylbenzene	1	0.250	U
179601-23-1	m,p-Xylene	1	0.500	U
95-47-6	o-Xylene	1	0.250	U
108-90-7	Chlorobenzene	1	0.250	U
127-18-4	Tetrachloroethene (PCE)	1	0.200	U
75-35-4	1,1-Dichloroethene	1	0.200	U
79-01-6	Trichloroethene (TCE)	1	0.200	U
156-59-2	cis-1,2-Dichloroethene	1	0.200	U
75-01-4	Vinyl chloride	1	0.200	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	54.8	110	80 - 120	
Toluene-d8 (Surr)	50.0	50.0	100	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	50.3	101	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	137386	6.837	174536	6.837	
Chlorobenzene-d5 (ISTD)	414674	10.434	497754	10.434	
1,4-Dichlorobenzene-d4 (ISTD)	185055	12.275	254849	12.275	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing Cc
Batch: 0050413
Batch Matrix: Water
Preparation: EPA 5030B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	0050413-BLK1	VG20051205.D	05/12/20 08:00	
LCS	0050413-BS1	VG20051203.D	05/12/20 08:00	
PDI-TB-2005111337	A0E0312-02	VG20051226.D	05/12/20 10:12	

Note: Client samples are listed only if they are included in this report.
Duplicates and Matrix Spike/Duplicates QC Samples are only listed if sourced from a sample included in this report.

METHOD BLANK DATA SHEET
EPA 8260C

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Matrix:	Water	Laboratory ID:	0050413-BLK1	File ID:	VG20051205.D
Prepared:	05/12/20 08:00	Preparation:	EPA 5030B	Initial/Final:	5 mL / 5 mL
Analyzed:	05/12/20 09:36	Instrument:	VOA-GCMS7		
Batch:	0050413	Sequence:	0E12021	Calibration:	A0D3007

CAS NO.	COMPOUND	CONC. (ug/L)	Q
71-43-2	Benzene	0.100	U
108-88-3	Toluene	0.500	U
100-41-4	Ethylbenzene	0.250	U
179601-23-1	m,p-Xylene	0.500	U
95-47-6	o-Xylene	0.250	U
108-90-7	Chlorobenzene	0.250	U
127-18-4	Tetrachloroethene (PCE)	0.200	U
75-35-4	1,1-Dichloroethene	0.200	U
79-01-6	Trichloroethene (TCE)	0.200	U
156-59-2	cis-1,2-Dichloroethene	0.200	U
75-01-4	Vinyl chloride	0.200	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	53.2	106	80 - 120	
Toluene-d8 (Surr)	50.0	49.8	100	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	51.2	102	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	133806	6.837	174536	6.837	
Chlorobenzene-d5 (ISTD)	391889	10.434	497754	10.434	
1,4-Dichlorobenzene-d4 (ISTD)	170758	12.275	254849	12.275	

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing Co
Matrix:	Water		
Batch:	0050413	Laboratory ID:	0050413-BS1
Preparation:	EPA 5030B	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Benzene	20.0	21.4	107	80 - 120
Toluene	20.0	20.1	100	80 - 120
Ethylbenzene	20.0	21.2	106	80 - 120
m,p-Xylene	40.0	41.1	103	80 - 120
o-Xylene	20.0	19.5	98	80 - 120
Chlorobenzene	20.0	20.4	102	80 - 120
Tetrachloroethene (PCE)	20.0	22.2	111	80 - 120
1,1-Dichloroethene	20.0	20.5	102	80 - 120
Trichloroethene (TCE)	20.0	19.3	96	80 - 120
cis-1,2-Dichloroethene	20.0	21.0	105	80 - 120
Vinyl chloride	20.0	18.4	92	80 - 120

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Sequence:	0D28059	Instrument:	VOA-GCMS7
Matrix:	Water	Calibration:	A0D3007

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0D28059-TUN1	VG20042803.D	04/28/20 14:55
Initial Cal Blank	0D28059-ICB1	VG20042804.D	04/28/20 15:22
Cal Standard	0D28059-CAL1	VG20042805.D	04/28/20 15:49
Cal Standard	0D28059-CAL2	VG20042806.D	04/28/20 16:16
Cal Standard	0D28059-CAL3	VG20042807.D	04/28/20 16:43
Cal Standard	0D28059-CAL4	VG20042808.D	04/28/20 17:10
Cal Standard	0D28059-CAL5	VG20042809.D	04/28/20 17:37
Cal Standard	0D28059-CAL6	VG20042810.D	04/28/20 18:04
Cal Standard	0D28059-CAL7	VG20042811.D	04/28/20 18:31
Cal Standard	0D28059-CAL8	VG20042812.D	04/28/20 18:58
Cal Standard	0D28059-CAL9	VG20042813.D	04/28/20 19:25
Cal Standard	0D28059-CALA	VG20042815.D	04/28/20 20:19
Cal Standard	0D28059-CALB	VG20042817.D	04/28/20 21:14
Initial Cal Check	0D28059-ICV1	VG20042820.D	04/28/20 22:35

Note: Client samples are listed only if they are included in this report.
Duplicates and Matrix Spike/Duplicates QC Samples are only listed if sourced from a sample included in this report.

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Sequence:	0E12021	Instrument:	VOA-GCMS7
Matrix:	Water	Calibration:	A0D3007

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0E12021-TUN1	VG20051202.D	05/12/20 08:15
Calibration Check	0E12021-CCV1	VG20051203.D	05/12/20 08:42
Blank	0050413-BLK1	VG20051205.D	05/12/20 09:36
PDI-TB-2005111337	A0E0312-02	VG20051226.D	05/12/20 19:12

Note: Client samples are listed only if they are included in this report.
Duplicates and Matrix Spike/Duplicates QC Samples are only listed if sourced from a sample included in this report.

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Lab File ID:	VG20042803.D	Injection Date:	04/28/20
Instrument ID:	VOA-GCMS7	Injection Time:	14:55
Sequence:	0D28059	Lab Sample ID:	0D28059-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	122.11	PASS
m/z 96	5 - 9% of m/z 95	6.59	PASS
m/z 173	Less than 2% of m/z 174	0.59	PASS
m/z 174	50 - 200% of m/z 95	81.89	PASS
m/z 175	5 - 9% of m/z 174	6.98	PASS
m/z 176	95 - 105% of m/z 174	96.48	PASS
m/z 177	5 - 10% of m/z 176	6.50	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Lab File ID:	VG20051202.D	Injection Date:	05/12/20
Instrument ID:	VOA-GCMS7	Injection Time:	08:15
Sequence:	0E12021	Lab Sample ID:	0E12021-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	121.22	PASS
m/z 96	5 - 9% of m/z 95	6.67	PASS
m/z 173	Less than 2% of m/z 174	0.58	PASS
m/z 174	50 - 200% of m/z 95	82.49	PASS
m/z 175	5 - 9% of m/z 174	6.97	PASS
m/z 176	95 - 105% of m/z 174	97.26	PASS
m/z 177	5 - 10% of m/z 176	6.37	PASS

INITIAL CALIBRATION DATA (Summary)

EPA 8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing

Calibration: A0D3007 Date: 04/30/20 16:18 Instrument: VOA-GCMS7

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Benzene	3.96816	Ave	7.851201	6.727	5.778003E-02			20	
Toluene	1.580707	Ave	10.0996	9.020091	1.535634E-02			20	
Ethylbenzene	1.561105	Ave	7.392247	10.46873	4.114612E-02			20	
m,p-Xylene	1.057092	XXX	15.25919	10.59327	3.120231E-02				
o-Xylene	1.011683	XXX	20.67143	10.94764	2.606792E-02				
Chlorobenzene	0.9963687	Ave	9.125382	10.44545	2.048998E-02			20	
Tetrachloroethene (PCE)	0.3268779	Ave	6.62251	9.411091	2.342388E-02			20	
1,1-Dichloroethene	1.392254	Ave	5.338628	3.563545	9.267448E-02			20	
Trichloroethene (TCE)	1.096361	Ave	10.32083	7.382	5.522908E-02			20	
cis-1,2-Dichloroethene	1.307613	Ave	7.479204	5.798091	7.700076E-02			20	
Vinyl chloride	1.231398	Ave	5.857741	2.098909	0.1131401			20	
1,4-Difluorobenzene (Surr)	3.216917	Ave	1.750201	7.422	1.021206E-02			20	
Toluene-d8 (Surr)	1.365108	Ave	2.733357	8.965	2.139081E-02			20	
4-Bromofluorobenzene (Surr)	0.8021398	Ave	3.410392	11.42782	1.185887E-02			20	

Note: ** Quad COD may be incorrect if weighting (1/a) or (1/a2) used. Weighting not shown here. Please see instrument calibration printouts for validation.

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Te
Calibration: A0D3007
Instrument: VOA-GCMS7
Calibration Date: 04/30/20 16:18

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
Benzene	0.1	4.417295	0.2	3.805997	0.4	3.472035	1	3.62183	2	3.628158	5	3.914027
Toluene	0.1	2.039612	0.2	1.606634	0.4	1.601195	1	1.506691	2	1.464126	5	1.517766
Ethylbenzene	0.1	1.741329	0.2	1.390234	0.4	1.395905	1	1.506301	2	1.470853	5	1.528409
m,p-Xylene	0.2	0.9424136	0.4	0.900484	0.8	0.8399966	2	0.9115889	4	0.9161075	10	1.04835
o-Xylene	0.1	1.064145	0.2	0.74459	0.4	0.7548046	1	0.7945953	2	0.821777	5	0.947403
Xylenes, total	0.3	0.9829909	0.6	0.8485193	1.2	0.8115993	3	0.8725911	6	0.884664	15	1.014701
Chlorobenzene	0.1	1.264076	0.2	0.9766515	0.4	0.9728823	1	0.9584254	2	0.9364336	5	0.9718497
Tetrachloroethene (PCE)	0.1	0.3031202	0.2	0.3075171	0.4	0.350445	1	0.3144082	2	0.2933691	5	0.3330258
1,1-Dichloroethene	0.1	1.567854	0.2	1.412351	0.4	1.393041	1	1.366715	2	1.314063	5	1.317396
Trichloroethene (TCE)	0.1	1.400499	0.2	1.136237	0.4	1.161508	1	1.038502	2	1.008476	5	1.057264
cis-1,2-Dichloroethene	0.1	1.347649	0.2	1.203776	0.4	1.16343	1	1.211945	2	1.22117	5	1.276643
Vinyl chloride	0.1	1.387286	0.2	1.293165	0.4	1.210505	1	1.211227	2	1.167554	5	1.165308
1,4-Difluorobenzene (Surr)	50	3.247175	50	3.304631	50	3.282782	50	3.271734	50	3.226354	50	3.185244
Toluene-d8 (Surr)	50	1.410628	50	1.406848	50	1.386443	50	1.387665	50	1.393789	50	1.369514
4-Bromofluorobenzene (Surr)	50	0.8326555	50	0.8264596	50	0.8297939	50	0.8241855	50	0.8227063	50	0.8043802

INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Te
Calibration: A0D3007
Instrument: VOA-GCMS7
Matrix:
Calibration Date: 04/30/20 16:18

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
Benzene	10	3.992491	20	4.253417	50	4.216124	100	4.026935	200	4.301454		
Toluene	10	1.512633	20	1.583339	50	1.561497	100	1.472939	200	1.52134		
Ethylbenzene	10	1.563588	20	1.665245	50	1.668314	100	1.585854	200	1.656126		
m,p-Xylene	20	1.12378	40	1.22953	100	1.255705	200	1.209829	400	1.250222		
o-Xylene	10	1.049828	20	1.194388	50	1.258466	100	1.223484	200	1.275031		
Xylenes, total	30	1.099129	60	1.217816	150	1.256626	300	1.214381	600	1.258492		
Chlorobenzene	10	0.957436	20	1.004701	50	0.9915996	100	0.9457738	200	0.9802268		
Tetrachloroethene (PCE)	10	0.3196402	20	0.3441199	50	0.3413264	100	0.3255426	200	0.3631428		
1,1-Dichloroethene	10	1.329623	20	1.420733	50	1.41049	100	1.333962	200	1.448569		
Trichloroethene (TCE)	10	1.023145	20	1.091477	50	1.058137	100	0.9953207	200	1.089405		
cis-1,2-Dichloroethene	10	1.319115	20	1.400257	50	1.417377	100	1.374669	200	1.447717		
Vinyl chloride	10	1.154867	20	1.202211	50	1.30238	100	1.187962	200	1.262908		
1,4-Difluorobenzene (Surr)	50	3.155319	50	3.149654	50	3.169607	50	3.156234	50	3.237351		
Toluene-d8 (Surr)	50	1.361381	50	1.350286	50	1.33504	50	1.322794	50	1.291798		
4-Bromofluorobenzene (Surr)	50	0.7985304	50	0.7814303	50	0.7680889	50	0.7553605	50	0.7799467		

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP T
Instrument ID:	VOA-GCMS7	Calibration:	A0D3007
Lab File ID:	VG20042820.D		
Sequence:	0D28059	Inject Date:	04/28/20
Lab Sample ID:	0D28059-ICV1	Inject Time:	22:35

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Benzene	20.0	21.1	5.3	70 - 130
Toluene	20.0	20.0	0.1	70 - 130
Ethylbenzene	20.0	21.8	8.8	70 - 130
Xylenes, total	60.0	63.0	4.9	70 - 130
Chlorobenzene	20.0	20.6	3.2	70 - 130
Tetrachloroethene (PCE)	20.0	21.4	7.0	70 - 130
1,1-Dichloroethene	20.0	17.0	-14.8	70 - 130
Trichloroethene (TCE)	20.0	20.2	1.0	70 - 130
cis-1,2-Dichloroethene	20.0	20.9	4.6	70 - 130
Vinyl chloride	20.0	19.5	-2.6	70 - 130

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Sequence:	0D28059	Instrument:	VOA-GCMS7
Matrix:	Water	Calibration:	A0D3007

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (0D28059-ICV1)				Lab File ID: VG20042820.D		Analyzed: 04/28/20 22:35		
1,4-Difluorobenzene (Surr)	50.0	98	70 - 130	7.422	7.422	0.0000	+/-1.0	
Toluene-d8 (Surr)	50.0	99	70 - 130	8.965	8.965	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	98	70 - 130	11.428	11.42782	0.0002	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Sequence:	0E12021	Instrument:	VOA-GCMS7
Matrix:	Water	Calibration:	A0D3007

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
LCS (0050413-BS1)			Lab File ID: VG20051203.D		Analyzed: 05/12/20 08:42			
1,4-Difluorobenzene (Surr)	50.0	99	80 - 120	7.422	7.422	0.0000	+/-1.0	
Toluene-d8 (Surr)	50.0	97	80 - 120	8.965	8.965	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	96	80 - 120	11.427	11.42782	-0.0008	+/-1.0	
Blank (0050413-BLK1)			Lab File ID: VG20051205.D		Analyzed: 05/12/20 09:36			
1,4-Difluorobenzene (Surr)	50.0	106	80 - 120	7.422	7.422	0.0000	+/-1.0	
Toluene-d8 (Surr)	50.0	100	80 - 120	8.965	8.965	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	102	80 - 120	11.428	11.42782	0.0002	+/-1.0	
PDI-TB-2005111337 (A0E0312-02)			Lab File ID: VG20051226.D		Analyzed: 05/12/20 19:12			
1,4-Difluorobenzene (Surr)	50.0	110	80 - 120	7.422	7.422	0.0000	+/-1.0	
Toluene-d8 (Surr)	50.0	100	80 - 120	8.965	8.965	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	101	80 - 120	11.428	11.42782	0.0002	+/-1.0	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Sequence:	0E12021	Instrument:	VOA-GCMS7
Matrix:	Water	Calibration:	A0D3007

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (0050413-BS1)			Lab File ID: VG20051203.D			Analyzed: 05/12/20 08:42			
Pentafluorobenzene (ISTD)	174536	6.837	174536	6.837	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	497754	10.434	497754	10.434	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	254849	12.275	254849	12.275	100	50 - 200	0.0000	+/-0.50	
Calibration Check (0E12021-CCV1)			Lab File ID: VG20051203.D			Analyzed: 05/12/20 08:42			
Pentafluorobenzene (ISTD)	174536	6.837	145168	6.837	120	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	497754	10.434	402229	10.434	124	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	254849	12.275	194144	12.275	131	50 - 200	0.0000	+/-0.50	
Blank (0050413-BLK1)			Lab File ID: VG20051205.D			Analyzed: 05/12/20 09:36			
Pentafluorobenzene (ISTD)	133806	6.837	174536	6.837	77	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	391889	10.434	497754	10.434	79	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	170758	12.275	254849	12.275	67	50 - 200	0.0000	+/-0.50	
Matrix Spike (0050413-MS1)			Lab File ID: VG20051210.D			Analyzed: 05/12/20 11:57			
Pentafluorobenzene (ISTD)	151470	6.837	174536	6.837	87	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	429067	10.434	497754	10.434	86	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	217238	12.275	254849	12.275	85	50 - 200	0.0000	+/-0.50	
Duplicate (0050413-DUP1)			Lab File ID: VG20051213.D			Analyzed: 05/12/20 13:19			
Pentafluorobenzene (ISTD)	141909	6.837	174536	6.837	81	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	405042	10.434	497754	10.434	81	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	178105	12.275	254849	12.275	70	50 - 200	0.0000	+/-0.50	
PDI-TB-2005111337 (A0E0312-02)			Lab File ID: VG20051226.D			Analyzed: 05/12/20 19:12			
Pentafluorobenzene (ISTD)	137386	6.837	174536	6.837	79	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	414674	10.434	497754	10.434	83	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	185055	12.275	254849	12.275	73	50 - 200	0.0000	+/-0.50	

HOLDING TIME SUMMARY

EPA 8260C

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
PDI-TB-2005111337	05/11/20 13:37	05/12/20 10:08	05/12/20 10:12	0.86	14.00	05/12/20 19:12	1.23	14.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: GCMS

METHOD: 5035A/8260C

ANALYSES DATA PACKAGE COVER PAGE

5035A/8260C

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019

Project: Gasco PreRD_DG 2019 - 4a-b. DOC-CAP Testing C

Client Sample Id:	Lab Sample Id:	Matrix
PDI-087SC-BB-05-07-200511	A0E0312-01	SE

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. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: David G. Jack

Forms Created: 7/6/2020 12:37PM

Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

5035A/8260C

Laboratory: Apex Laboratories **SDG:** Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC **Project:** Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Benzene	5.00	10.0	ug/kg
Toluene	25.0	50.0	ug/kg
Ethylbenzene	12.5	25.0	ug/kg
m,p-Xylene	25.0	50.0	ug/kg
o-Xylene	12.5	25.0	ug/kg
Chlorobenzene	12.5	25.0	ug/kg
1,1-Dichloroethene	12.5	25.0	ug/kg
cis-1,2-Dichloroethene	12.5	25.0	ug/kg
Tetrachloroethene (PCE)	12.5	25.0	ug/kg
Trichloroethene (TCE)	12.5	25.0	ug/kg
Vinyl chloride	12.5	25.0	ug/kg

Note: MDLs are listed only if the corresponding analyte was evalutated to the MDL in this report .

ORGANIC ANALYSIS DATA SHEET

5035A/8260C

PDI-087SC-BB-05-07-200511

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing Co
Matrix:	SE	Laboratory ID:	A0E0312-01	File ID:	VJ20051409.D
Sampled:	05/11/20 13:10	Prepared:	05/11/20 13:10	Analyzed:	05/14/20 14:02
Solids:	57.36	Preparation:	EPA 5035A	Initial/Final:	5.11 g / 5 mL
Batch:	0050519	Sequence:	0E14042	Calibration:	A0D1605
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-43-2	Benzene	50	116	
108-88-3	Toluene	50	61.4	J
100-41-4	Ethylbenzene	50	205	
179601-23-1	m,p-Xylene	50	158	
95-47-6	o-Xylene	50	130	
108-90-7	Chlorobenzene	50	30.6	U
75-35-4	1,1-Dichloroethene	50	30.6	U
156-59-2	cis-1,2-Dichloroethene	50	30.6	U
127-18-4	Tetrachloroethene (PCE)	50	30.6	U
79-01-6	Trichloroethene (TCE)	50	30.6	U
75-01-4	Vinyl chloride	50	30.6	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	50.7	101	80 - 120	
Toluene-d8 (Surr)	50.0	49.6	99	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	49.9	100	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	131242	6.053	112638	6.053	
Chlorobenzene-d5 (ISTD)	368623	9.776	306654	9.77	
1,4-Dichlorobenzene-d4 (ISTD)	170895	11.735	135069	11.735	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing Cc
Batch: 0050519 Batch Matrix: Soil
Preparation: EPA 5035A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	0050519-BLK1	VJ20051405.D	05/14/20 09:00	
LCS	0050519-BS1	VJ20051403.D	05/14/20 09:00	
PDI-087SC-BB-05-07-200511 (Dup	0050519-DUP1	VJ20051410.D	05/11/20 13:10	
PDI-087SC-BB-05-07-200511	A0E0312-01	VJ20051409.D	05/11/20 13:10	

Note: Client samples are listed only if they are included in this report.
Duplicates and Matrix Spike/Duplicates QC Samples are only listed if sourced from a sample included in this report.

METHOD BLANK DATA SHEET

5035A/8260C

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Matrix:	Soil	Laboratory ID:	0050519-BLK1	File ID:	VJ20051405.D
Prepared:	05/14/20 09:00	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	05/14/20 12:14	Instrument:	VOA-GCMS10		
Batch:	0050519	Sequence:	0E14042	Calibration:	A0D1605

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
71-43-2	Benzene	3.33	U
108-88-3	Toluene	16.7	U
100-41-4	Ethylbenzene	8.33	U
179601-23-1	m,p-Xylene	16.7	U
95-47-6	o-Xylene	8.33	U
108-90-7	Chlorobenzene	8.33	U
75-35-4	1,1-Dichloroethene	8.33	U
156-59-2	cis-1,2-Dichloroethene	8.33	U
127-18-4	Tetrachloroethene (PCE)	8.33	U
79-01-6	Trichloroethene (TCE)	8.33	U
75-01-4	Vinyl chloride	8.33	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	49.0	98	80 - 120	
Toluene-d8 (Surr)	50.0	50.9	102	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	48.7	97	79 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	102628	6.053	112638	6.053	
Chlorobenzene-d5 (ISTD)	274949	9.77	306654	9.77	
1,4-Dichlorobenzene-d4 (ISTD)	115116	11.735	135069	11.735	

LCS / LCS DUPLICATE RECOVERY

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing Co
Matrix:	Soil		
Batch:	0050519	Laboratory ID:	0050519-BS1
Preparation:	EPA 5035A	Initial/Final:	5 g / 5 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Benzene	1000	1020	102	80 - 120
Toluene	1000	984	98	80 - 120
Ethylbenzene	1000	1050	105	80 - 120
m,p-Xylene	2000	2060	103	80 - 120
o-Xylene	1000	958	96	80 - 120
Chlorobenzene	1000	989	99	80 - 120
1,1-Dichloroethene	1000	953	95	80 - 120
cis-1,2-Dichloroethene	1000	1050	105	80 - 120
Tetrachloroethene (PCE)	1000	1030	103	80 - 120
Trichloroethene (TCE)	1000	936	94	80 - 120
Vinyl chloride	1000	1100	110	80 - 120

* = Values outside of QC limits

PDI-087SC-BB-05-07-200511

DUPLICATES

5035A/8260C

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Soil
Batch: 0050519
Preparation: EPA 5035A
Source Sample Name: PDI-087SC-BB-05-07-200511

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP T
Laboratory ID: 0050519-DUP1
Lab Source ID: A0E0312-01
Initial/Final: 4.95 g / 5 mL
% Solids: 57.36

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (ug/kg dry)	C	DUPLICATE CONCENTRATION (ug/kg dry)	C	RPD %	Q	METHOD
Benzene	30	116		151		26		5035A/8260C
Toluene	30	61.4		ND				5035A/8260C
Ethylbenzene	30	205		310		41	*	5035A/8260C
m,p-Xylene	30	158		251		46	*	5035A/8260C
o-Xylene	30	130		214		49	*	5035A/8260C
Chlorobenzene	30	0.00		ND				5035A/8260C
1,1-Dichloroethene	30	0.00		ND				5035A/8260C
cis-1,2-Dichloroethene	30	0.00		ND				5035A/8260C
Tetrachloroethene (PCE)	30	0.00		ND				5035A/8260C
Trichloroethene (TCE)	30	0.00		ND				5035A/8260C
Vinyl chloride	30	0.00		ND				5035A/8260C

* Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Sequence:	0D14058	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0D1605

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0D14058-TUN1	VJ20041402.D	04/14/20 17:38
Initial Cal Blank	0D14058-ICB1	VJ20041403.D	04/14/20 18:05
Cal Standard	0D14058-CAL1	VJ20041404.D	04/14/20 18:32
Cal Standard	0D14058-CAL2	VJ20041405.D	04/14/20 18:59
Cal Standard	0D14058-CAL3	VJ20041406.D	04/14/20 19:26
Cal Standard	0D14058-CAL4	VJ20041407.D	04/14/20 19:52
Cal Standard	0D14058-CAL5	VJ20041408.D	04/14/20 20:19
Cal Standard	0D14058-CAL6	VJ20041409.D	04/14/20 20:46
Cal Standard	0D14058-CAL7	VJ20041410.D	04/14/20 21:13
Cal Standard	0D14058-CAL8	VJ20041411.D	04/14/20 21:40
Cal Standard	0D14058-CAL9	VJ20041412.D	04/14/20 22:07
Cal Standard	0D14058-CALA	VJ20041414.D	04/14/20 23:00
Cal Standard	0D14058-CALB	VJ20041416.D	04/14/20 23:54
Initial Cal Check	0D14058-ICV1	VJ20041419.D	04/15/20 01:15

Note: Client samples are listed only if they are included in this report.
Duplicates and Matrix Spike/Duplicates QC Samples are only listed if sourced from a sample included in this report.

ANALYSIS BATCH (SEQUENCE) SUMMARY

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Sequence:	0E14042	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0D1605

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0E14042-TUN1	VJ20051402.D	05/14/20 10:53
Calibration Check	0E14042-CCV1	VJ20051403.D	05/14/20 11:20
Blank	0050519-BLK1	VJ20051405.D	05/14/20 12:14
PDI-087SC-BB-05-07-200511	A0E0312-01	VJ20051409.D	05/14/20 14:02
PDI-087SC-BB-05-07-200511 (Dup)	0050519-DUP1	VJ20051410.D	05/14/20 14:29

Note: Client samples are listed only if they are included in this report.
Duplicates and Matrix Spike/Duplicates QC Samples are only listed if sourced from a sample included in this report.

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Lab File ID:	VJ20041402.D	Injection Date:	04/14/20
Instrument ID:	VOA-GCMS10	Injection Time:	17:38
Sequence:	0D14058	Lab Sample ID:	0D14058-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	136.76	PASS
m/z 96	5 - 9% of m/z 95	6.98	PASS
m/z 173	Less than 2% of m/z 174	0.00	PASS
m/z 174	50 - 200% of m/z 95	73.12	PASS
m/z 175	5 - 9% of m/z 174	7.29	PASS
m/z 176	95 - 105% of m/z 174	96.24	PASS
m/z 177	5 - 10% of m/z 176	6.65	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Lab File ID:	VJ20051402.D	Injection Date:	05/14/20
Instrument ID:	VOA-GCMS10	Injection Time:	10:53
Sequence:	0E14042	Lab Sample ID:	0E14042-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	143.75	PASS
m/z 96	5 - 9% of m/z 95	6.93	PASS
m/z 173	Less than 2% of m/z 174	0.67	PASS
m/z 174	50 - 200% of m/z 95	69.57	PASS
m/z 175	5 - 9% of m/z 174	7.01	PASS
m/z 176	95 - 105% of m/z 174	95.37	PASS
m/z 177	5 - 10% of m/z 176	6.84	PASS

INITIAL CALIBRATION DATA (Summary)

5035A/8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing

Calibration: A0D1605 Date: 04/16/20 11:04 Instrument: VOA-GCMS10

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Benzene	5.131798	Ave	7.494501	5.967182	5.925638E-02			20	
Toluene	1.915327	Ave	7.436978	8.189091	4.798825E-02			20	
Ethylbenzene	1.875364	Ave	5.982239	9.828182	3.524342E-02			20	
m,p-Xylene	1.32317	XXX	7.890472	9.964454	4.94806E-03				
o-Xylene	1.281365	XXX	11.10361	10.348	1.552636E-02				
Chlorobenzene	1.165932	Ave	6.052266	9.792909	2.921708E-02			20	
1,1-Dichloroethene	1.513982	Ave	13.58947	3.118	0.3550786			20	
cis-1,2-Dichloroethene	1.592699	Ave	2.382042	5.0978	8.307355E-02			20	
Tetrachloroethene (PCE)	0.3812595	Ave	8.989933	8.641	4.673907E-02			20	
Trichloroethene (TCE)	1.25315	Ave	6.194151	6.5868	0.0356748			20	
Vinyl chloride	1.129786	Ave	12.22475	1.977	0.3716955			20	
1,4-Difluorobenzene (Surr)	3.13256	Ave	0.6594852	6.617	4.973106E-02			20	
Toluene-d8 (Surr)	1.359628	Ave	0.8692508	8.131364	3.985433E-02			20	
4-Bromofluorobenzene (Surr)	0.7594899	Ave	1.498871	10.853	1.694716E-02			20	

Note: ** Quad COD may be incorrect if weighting (1/a) or (1/a2) used. Weighting not shown here. Please see instrument calibration printouts for validation.

INITIAL CALIBRATION DATA

5035A/8260C

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A0D1605

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Te

Instrument: VOA-GCMS10

Calibration Date: 04/16/20 11:04

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
Benzene	0.1	6.238049	0.2	5.153272	0.4	5.1305	1	5.167732	2	5.029713	5	4.84056
Toluene	0.1	2.289171	0.2	2.039884	0.4	1.843281	1	1.978121	2	1.852143	5	1.832775
Ethylbenzene	0.1	2.117483	0.2	1.763156	0.4	1.748088	1	1.83735	2	1.772577	5	1.793792
m,p-Xylene	0.2	1.359629	0.4	1.221998	0.8	1.194671	2	1.21953	4	1.203509	10	1.26597
o-Xylene	0.1	~~1.260778~~	0.2	1.159624	0.4	1.15919	1	1.183102	2	1.11551	5	1.187292
Xylenes, total	0.3	~~1.326679~~	0.6	1.201206	1.2	1.182844	3	1.207387	6	1.174176	15	1.239744
Chlorobenzene	0.1	1.354426	0.2	1.211456	0.4	1.155729	1	1.197197	2	1.132959	5	1.132185
1,1-Dichloroethene	0.1	~~0~~	0.2	1.825469	0.4	1.541281	1	1.422528	2	1.730238	5	1.603129
cis-1,2-Dichloroethene	0.1	~~0~~	0.2	1.538506	0.4	1.60047	1	1.59272	2	1.61346	5	1.549517
Tetrachloroethene (PCE)	0.1	~~0~~	0.2	0.2907845	0.4	0.3669254	1	0.3961368	2	0.3749537	5	0.3876265
Trichloroethene (TCE)	0.1	~~0~~	0.2	1.073096	0.4	1.258357	1	1.331038	2	1.276949	5	1.187853
Vinyl chloride	0.1	~~0~~	0.2	~~0~~	0.4	1.164839	1	1.343335	2	1.053298	5	0.9782058
1,4-Difluorobenzene (Surr)	50	3.140323	50	3.137925	50	3.150245	50	3.116921	50	3.149254	50	3.111643
Toluene-d8 (Surr)	50	1.364772	50	1.360815	50	1.377165	50	1.380332	50	1.363332	50	1.364043
4-Bromofluorobenzene (Surr)	50	0.7493225	50	0.7455188	50	0.7484794	50	0.7675388	50	0.7522397	50	0.7672115

INITIAL CALIBRATION DATA (Continued)

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Te
Calibration: A0D1605
Instrument: VOA-GCMS10
Matrix:
Calibration Date: 04/16/20 11:04

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
Benzene	10	5.095129	20	4.821374	50	5.018936	100	4.967537	200	4.986974		
Toluene	10	1.877536	20	1.800443	50	1.874762	100	1.84845	200	1.832027		
Ethylbenzene	10	1.877019	20	1.858075	50	1.977523	100	1.951379	200	1.932561		
m,p-Xylene	20	1.381087	40	1.373141	100	1.481423	200	1.435793	400	1.418114		
o-Xylene	10	1.289237	20	1.31461	50	1.479058	100	1.453405	200	1.47262		
Xylenes, total	30	1.35047	60	1.353631	150	1.480635	300	1.441664	600	1.436283		
Chlorobenzene	10	1.152739	20	1.102023	50	1.146669	100	1.12337	200	1.116501		
1,1-Dichloroethene	10	1.658536	20	1.236397	50	1.247805	100	1.577818	200	1.296618		
cis-1,2-Dichloroethene	10	1.632862	20	1.534474	50	1.625163	100	1.612054	200	1.627764		
Tetrachloroethene (PCE)	10	0.409446	20	0.3884088	50	0.4027127	100	0.4014824	200	0.3941185		
Trichloroethene (TCE)	10	1.302367	20	1.211803	50	1.27475	100	1.294503	200	1.320787		
Vinyl chloride	10	1.073243	20	0.9767979	50	1.298239	100	1.035767	200	1.244353		
1,4-Difluorobenzene (Surr)	50	3.117315	50	3.099339	50	3.127449	50	3.136075	50	3.17167		
Toluene-d8 (Surr)	50	1.346418	50	1.352258	50	1.352919	50	1.345704	50	1.348148		
4-Bromofluorobenzene (Surr)	50	0.7685219	50	0.7719982	50	0.7529466	50	0.7785457	50	0.7520662		

SECOND-SOURCE CALIBRATION VERIFICATION

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP T
Instrument ID:	VOA-GCMS10	Calibration:	A0D1605
Lab File ID:	VJ20041419.D		
Sequence:	0D14058	Inject Date:	04/15/20
Lab Sample ID:	0D14058-ICV1	Inject Time:	01:15

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Benzene	20.0	19.9	-0.4	70 - 130
Toluene	20.0	19.2	-4.1	70 - 130
Ethylbenzene	20.0	20.4	2.0	70 - 130
Xylenes, total	60.0	59.0	-1.6	70 - 130
Chlorobenzene	20.0	19.4	-2.8	70 - 130
1,1-Dichloroethene	20.0	21.9	9.6	70 - 130
cis-1,2-Dichloroethene	20.0	20.7	3.3	70 - 130
Tetrachloroethene (PCE)	20.0	21.0	4.8	70 - 130
Trichloroethene (TCE)	20.0	20.2	0.8	70 - 130
Vinyl chloride	20.0	21.4	7.0	70 - 130

SURROGATE STANDARD RECOVERY AND RT SUMMARY

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Sequence:	0D14058	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0D1605

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (0D14058-ICV1)				Lab File ID: VJ20041419.D		Analyzed: 04/15/20 01:15		
1,4-Difluorobenzene (Surr)	50.0	102	70 - 130	6.612	6.617	-0.0050	+/-1.0	
Toluene-d8 (Surr)	50.0	99	70 - 130	8.127	8.131364	-0.0044	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	99	70 - 130	10.853	10.853	0.0000	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Sequence:	0E14042	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0D1605

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
LCS (0050519-BS1)			Lab File ID: VJ20051403.D		Analyzed: 05/14/20 11:20			
1,4-Difluorobenzene (Surr)	50.0	98	80 - 120	6.612	6.617	-0.0050	+/-1.0	
Toluene-d8 (Surr)	50.0	99	80 - 120	8.127	8.131364	-0.0044	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	100	79 - 120	10.853	10.853	0.0000	+/-1.0	
Blank (0050519-BLK1)			Lab File ID: VJ20051405.D		Analyzed: 05/14/20 12:14			
1,4-Difluorobenzene (Surr)	50.0	98	80 - 120	6.612	6.617	-0.0050	+/-1.0	
Toluene-d8 (Surr)	50.0	102	80 - 120	8.127	8.131364	-0.0044	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	97	79 - 120	10.853	10.853	0.0000	+/-1.0	
PDI-087SC-BB-05-07-200511 (A0E0312-01)			Lab File ID: VJ20051409.D		Analyzed: 05/14/20 14:02			
1,4-Difluorobenzene (Surr)	50.0	101	80 - 120	6.618	6.617	0.0010	+/-1.0	
Toluene-d8 (Surr)	50.0	99	80 - 120	8.127	8.131364	-0.0044	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	100	80 - 120	10.846	10.853	-0.0070	+/-1.0	
Duplicate (0050519-DUP1)			Lab File ID: VJ20051410.D		Analyzed: 05/14/20 14:29			
1,4-Difluorobenzene (Surr)	50.0	102	80 - 120	6.612	6.617	-0.0050	+/-1.0	
Toluene-d8 (Surr)	50.0	97	80 - 120	8.127	8.131364	-0.0044	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	103	79 - 120	10.853	10.853	0.0000	+/-1.0	

INTERNAL STANDARD AREA AND RT SUMMARY
5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C
Sequence:	0E14042	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0D1605

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (0050519-BS1)			Lab File ID: VJ20051403.D			Analyzed: 05/14/20 11:20			
Pentafluorobenzene (ISTD)	112638	6.053	112638	6.053	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	306654	9.77	306654	9.77	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	135069	11.735	135069	11.735	100	50 - 200	0.0000	+/-0.50	
Calibration Check (0E14042-CCV1)			Lab File ID: VJ20051403.D			Analyzed: 05/14/20 11:20			
Pentafluorobenzene (ISTD)	112638	6.053	120657	6.059	93	50 - 200	-0.0060	+/-0.50	
Chlorobenzene-d5 (ISTD)	306654	9.77	327947	9.776	94	50 - 200	-0.0060	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	135069	11.735	140705	11.741	96	50 - 200	-0.0060	+/-0.50	
Blank (0050519-BLK1)			Lab File ID: VJ20051405.D			Analyzed: 05/14/20 12:14			
Pentafluorobenzene (ISTD)	102628	6.053	112638	6.053	91	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	274949	9.77	306654	9.77	90	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	115116	11.735	135069	11.735	85	50 - 200	0.0000	+/-0.50	
Matrix Spike (0050519-MS1)			Lab File ID: VJ20051407.D			Analyzed: 05/14/20 13:08			
Pentafluorobenzene (ISTD)	126513	6.053	112638	6.053	112	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	359795	9.77	306654	9.77	117	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	158409	11.735	135069	11.735	117	50 - 200	0.0000	+/-0.50	
PDI-087SC-BB-05-07-200511 (A0E0312-01)			Lab File ID: VJ20051409.D			Analyzed: 05/14/20 14:02			
Pentafluorobenzene (ISTD)	131242	6.053	112638	6.053	117	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	368623	9.776	306654	9.77	120	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	170895	11.735	135069	11.735	127	50 - 200	0.0000	+/-0.50	
Duplicate (0050519-DUP1)			Lab File ID: VJ20051410.D			Analyzed: 05/14/20 14:29			
Pentafluorobenzene (ISTD)	121626	6.053	112638	6.053	108	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	351088	9.77	306654	9.77	114	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	158243	11.735	135069	11.735	117	50 - 200	0.0000	+/-0.50	

HOLDING TIME SUMMARY

5035A/8260C

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
PDI-087SC-BB-05-07-200511	05/11/20 13:10	05/12/20 10:08	05/11/20 13:10	0.00	2.00	05/14/20 14:02	3.04	14.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: WET

METHOD: SM 2540 G

ANALYSES DATA PACKAGE COVER PAGE

SM 2540 G

Laboratory: Apex Laboratories
SDG: Gasco PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco PreRD_DG 2019 - 4a-b. DOC-CAP Testing C

Client Sample Id:	Lab Sample Id:	Matrix
PDI-087SC-BB-05-07-200511	A0E0312-01	SE

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. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 
Name: David G. Jack

Forms Created: 7/6/2020 12:37PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

SM 2540 G

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Total Solids	1.00	1.00	% by Weight

Note: MDLs are listed only if the corresponding analyte was evalutated to the MDL in this report .

INORGANIC ANALYSIS DATA SHEET

SM 2540 G

PDI-087SC-BB-05-07-200511

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing Cores
Matrix: SE
Laboratory ID: A0E0312-01
Sampled: 05/11/20 13:10
Prepared: 05/22/20 18:59
Analyzed: 05/28/20 12:54
Solids: 57.36
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 0050886
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	57.4	1		SM 2540 G

PREPARATION BATCH SUMMARY

SM 2540 G

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing Cc
Batch: 0050886
Batch Matrix: Sediment
Preparation: Total Solids (SM2540G/PSEP)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
PDI-087SC-BB-05-07-200511	A0E0312-01		05/22/20 18:59	

Note: Client samples are listed only if they are included in this report.
Duplicates and Matrix Spike/Duplicates QC Samples are only listed if sourced from a sample included in this report.

HOLDING TIME SUMMARY

SM 2540 G

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4a-b. DOC-CAP Testing C

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
PDI-087SC-BB-05-07-200511	05/11/20 13:10	05/12/20 10:08	05/22/20 18:59	11.24	180.00	05/28/20 12:54	5.75		

APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard OR 97223 phone 503-718-2323

Raw Data

APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard OR 97223 phone 503-718-2323

Selected Volatile Organic Compounds by EPA 5035A/8260C
Benchsheet & Analysis Sequence Data

Batch 0050413
Sequence 0E12021 (A0E0312-02)

PREPARATION BENCH SHEET

Apex Laboratories

BATCH #: 0050413 (Water)

Prep Method: EPA 5030B

Lab Number	Cont.	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	ClientID / Sample	Extraction Comments	pH*
0050413-BLK1		QC	05/12/20 08:00	5	5							
0050413-BS1		QC	05/12/20 08:00	5	5	A20E099		5				
0050413-BS2		QC	05/12/20 08:00	5	5	A20E074		5				
A0D0003-01	A	8260D Full List	05/12/20 10:12	5	5					Vols Water Fridge Blank 4/1/20		<2
A0D0003-02	A	8260D Full List	05/12/20 10:12	5	5					Sample Receiving Fridge Blank 4		<2
A0D0003-07	A	8260D Full List	05/12/20 10:12	5	5					Vols Water Fridge 2 Blank 4/1/20		<2
A0E0026-34RE2	C	8260D Full List	05/12/20 10:12	5	5					P89332 / MW50-2-20200429	10x RR2 C-12DCE only	<2
A0E0026-40RE1	B	8260D Full List	05/12/20 10:12	5	5					P89332 / MW39-2-20200429	1X RR-03	<2
A0E0026-41RE1	B	8260D Full List	05/12/20 10:12	5	5					P89332 / MW38-2-20200429	50X C-12DCE only RR2	<2
A0E0026-51RE1	B	8260C Full List	05/12/20 10:12	5	5					P89332 / Dup1-20200429	Added for BatchQC in: 0050413	<2
A0E0026-51RE1	B	8260C BTEX+Halo6	05/12/20 10:12	5	5					P89332 / Dup1-20200429	Added for BatchQC in: 0050413	<2
A0E0026-51RE1	B	8260D Full List	05/12/20 10:12	5	5					P89332 / Dup1-20200429	50X RR-02 C-12DCE & TCE only	<2
A0E0026-51RE1	B	8260D BTEX	05/12/20 10:12	5	5					P89332 / Dup1-20200429	Added for BatchQC in: 0050413	<2
A0E0026-51RE1	B	8260D RBDM List	05/12/20 10:12	5	5					P89332 / Dup1-20200429	Added for BatchQC in: 0050413	<2
A0E0026-51RE1	B	NWTPH-Gx	05/12/20 10:12	5	5					P89332 / Dup1-20200429	Added for BatchQC in: 0050413	<2
0050413-DUP1		QC	05/12/20 10:12	5	5		A0E0026-51RE1					<2
A0E0026-52RE1	B	8260D Full List	05/12/20 10:12	5	5					P89332 / Dup2-20200429	5X RR3	<2
A0E0026-52RE2	C	8260D Full List	05/12/20 10:12	5	5					P89332 / Dup2-20200429	5X CONFIRMATION FOR Cis12I	<2
A0E0026-53RE1	B	8260D Full List	05/12/20 10:12	5	5					P89332 / Dup3-20200429	100X RR2 VC & C-1,2-DCE only	<2
A0E0026-54RE1	B	8260D Full List	05/12/20 10:12	5	5					P89332 / Dup4-20200430	50X RR2/3 VC & C-12DCE only	<2
A0E0026-55RE1	B	8260D Full List	05/12/20 10:12	5	5					P89332 / Dup5-20200430	2X RR1,RR3	<2
A0E0280-05	A	8260C BTEX+Halo6	05/12/20 10:12	5	5					PDI-TB-2005090845	CAP TESTING/Waters	<2

05/13/20 tnl

Prepared By: Date

dgj 5/13/20

Reviewed By: Date

PREPARATION BENCH SHEET

BATCH #: 0050413 (Water)

Apex Laboratories

Prep Method: EPA 5030B

Lab Number	Cont.	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	ClientID / Sample	Extraction Comments	pH*
A0E0281-19	A	8260C BTEX+Halo6	05/12/20 10:12	5	5					PDI-TB-2005100852	CAP TESTING/Waters	<2
A0E0293-01	A	8260C Full List	05/12/20 10:12	5	5					DA6-Disch-2020.05.11	Added for BatchQC in: 0050413	<2
A0E0293-01	A	8260C BTEX+Halo6	05/12/20 10:12	5	5					DA6-Disch-2020.05.11	Added for BatchQC in: 0050413	<2
A0E0293-01	A	8260D Full List	05/12/20 10:12	5	5					DA6-Disch-2020.05.11	Added for BatchQC in: 0050413	<2
A0E0293-01	A	8260D BTEX	05/12/20 10:12	5	5					DA6-Disch-2020.05.11	Added for BatchQC in: 0050413	<2
A0E0293-01	A	8260D RBDM List	05/12/20 10:12	5	5					DA6-Disch-2020.05.11		<2
A0E0293-01	A	NWTPH-Gx	05/12/20 10:12	5	5					DA6-Disch-2020.05.11	Added for BatchQC in: 0050413	<2
0050413-MS1		QC	05/12/20 10:12	5	5	A20E099	A0E0293-01	5				<2
A0E0295-01	A	8260D BTEX	05/12/20 10:12	5	5					LD-UIC		<2
A0E0295-01	A	NWTPH-Gx	05/12/20 10:12	5	5					LD-UIC		<2
A0E0295-02	A	8260D BTEX	05/12/20 10:12	5	5					Office-UIC		<2
A0E0295-02	A	NWTPH-Gx	05/12/20 10:12	5	5					Office-UIC		<2
A0E0312-02	A	8260C BTEX+Halo6	05/12/20 10:12	5	5					PDI-TB-2005111337	CAP TESTING/Waters	<2
A0E0314-02	A	8260C Full List	05/12/20 10:12	5	5					PDI-TB-2005120905		<2

*pH <2 verified 05/13/20 PS

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description

Analyte Spike(s)

Std ID	Exp. Date	Description
A20E074	09/13/20	Prim NWTPH-Gx Spike (500 ug/mL)
A20E099	10/05/20	8260 Cal. Std. B VOCR+OXY Spike (20-40ug/m

Surrogate(s)

Std ID	Exp. Date	Description

GCMS7

Prepared By: Date

dgj 5/13/20

Reviewed By: Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: 0E12021 Instrument: VOA-GCMS7

Date: **05/12/20 07:18** Calibration: **A0D3007**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0E12021-IBL1	Water	QC	QC			A20D005	
2	0E12021-TUN1	Water	QC	QC			A20D005	
3	0E12021-CCV1	Water	QC	QC			A20C050	
4	0050413-BS1	Water	QC	QC		0050413	A20D005	
5	0E12021-CCV2	Water	QC	QC			A20C050	
6	0050413-BS2	Water	QC	QC		0050413	A20D005	
7	0050413-BLK1	Water	QC	QC		0050413	A20D005	
8	0E12021-CRL1	Water	QC	QC			A20D005	A20E129
9	A0E0280-05	Water	8260C BTEX+Halo6	Anchor QEA, LLC	05/22/20	0050413	A20D005	
10	A0E0281-19	Water	8260C BTEX+Halo6	Anchor QEA, LLC	05/22/20	0050413	A20D005	
11	A0E0293-01	Water	8260D RBDM List		05/14/20	0050413	A20D005	
"	"	Water	8260C Full List	(QC Source)		0050413	A20D005	
"	"	Water	8260C BTEX+Halo6	(QC Source)		0050413	A20D005	
"	"	Water	8260D Full List	(QC Source)		0050413	A20D005	
"	"	Water	8260D BTEX	(QC Source)		0050413	A20D005	
"	"	Water	NWTPH-Gx	(QC Source)		0050413	A20D005	
12	0050413-MS1	Water	QC	QC		0050413	A20D005	
13	0E12021-IBL2	Water	QC	QC			A20D005	
14	A0E0026-51RE1	Water	8260D Full List		05/14/20	0050413	A20D005	
"	"	Water	8260C Full List	(QC Source)		0050413	A20D005	
"	"	Water	8260C BTEX+Halo6	(QC Source)		0050413	A20D005	
"	"	Water	8260D BTEX	(QC Source)		0050413	A20D005	
"	"	Water	8260D RBDM List	(QC Source)		0050413	A20D005	
"	"	Water	NWTPH-Gx	(QC Source)		0050413	A20D005	
15	0050413-DUP1	Water	QC	QC		0050413	A20D005	
16	A0E0026-41RE1	Water	8260D Full List		05/14/20	0050413	A20D005	
17	A0E0026-40RE1	Water	8260D Full List		05/14/20	0050413	A20D005	
18	A0E0026-54RE1	Water	8260D Full List		05/14/20	0050413	A20D005	
19	0E12021-IBL3	Water	QC	QC			A20D005	
20	A0E0026-55RE1	Water	8260D Full List		05/14/20	0050413	A20D005	
21	A0E0026-52RE1	Water	8260D Full List		05/14/20	0050413	A20D005	
22	0E12021-IBL4	Water	QC	QC			A20D005	
23	A0E0026-34RE2	Water	8260D Full List		05/14/20	0050413	A20D005	
24	A0E0026-53RE1	Water	8260D Full List		05/14/20	0050413	A20D005	
25	0E12021-IBL5	Water	QC	QC			A20D005	
26	A0E0295-01	Water	8260D BTEX		05/19/20	0050413	A20D005	
"	"	Water	NWTPH-Gx		05/19/20	0050413	A20D005	
27	A0E0295-02	Water	8260D BTEX		05/19/20	0050413	A20D005	
"	"	Water	NWTPH-Gx	"	05/19/20	0050413	A20D005	
28	A0E0312-02	Water	8260C BTEX+Halo6	Anchor QEA, LLC	05/26/20	0050413	A20D005	
29	A0E0314-02	Water	8260C Full List	Anchor QEA, LLC	05/26/20	0050413	A20D005	
30	A0E0026-52RE2	Water	8260D Full List		05/14/20	0050413	A20D005	
31	0E12021-IBL6	Water	QC	QC			A20D005	
32	0E12021-IBL7	Water	QC	QC			A20D005	
33	0E12021-IBL8	Water	QC	QC			A20D005	
34	A0D0003-01	Water	8260D Full List		04/14/20	0050413	A20D005	
35	A0D0003-02	Water	8260D Full List		04/14/20	0050413	A20D005	
36	A0D0003-07	Water	8260D Full List		04/14/20	0050413	A20D005	

Sequence:	0E12021	Instrument:	VOA-GCMS7		
Date:	**05/12/20 07:18**	Calibration:	**A0D3007**		

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID

Comments: Cis13DCP mdl/MRL up 1PPB/2PPB
CH3Cl MDL =MRL @5PPB Q-55

Data Entered By: 05/13/20 tnl

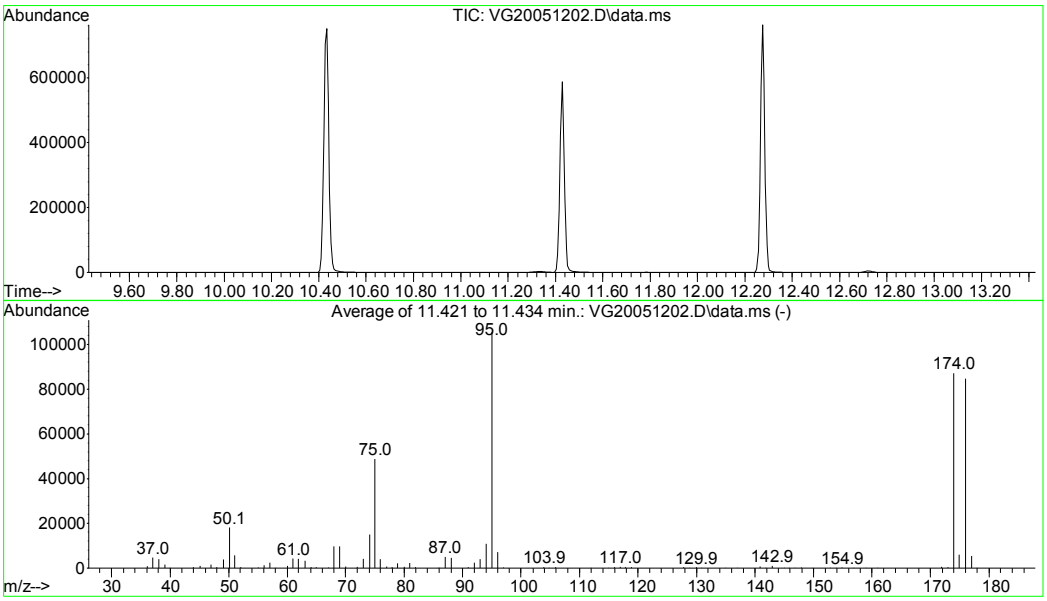
Data Reviewed By: dgj 5/13/20

BFB

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051202.D
Acq On : 12 May 2020 8:15 am 05/13/20 tnl
Operator : PS
Sample : 0E12021-TUN1
Misc : 1X A20D004 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VG200429W.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Wed Apr 29 15:17:10 2020



AutoFind: Scans 1605, 1606, 1607; Background Corrected with Scan 1598

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	121.2	105520	PASS
96	95	5	9	6.7	7040	PASS
173	174	0.00	2	0.6	506	PASS
174	95	50	200	82.5	87048	PASS
175	174	5	9	7.0	6063	PASS
176	174	95	105	97.3	84667	PASS
177	176	5	10	6.4	5395	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051202.D
Acq On : 12 May 2020 8:15 am 05/13/20 tnl
Operator : PS
Sample : 0E12021-TUN1
Misc : 1X A20D004 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 14:50:35 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

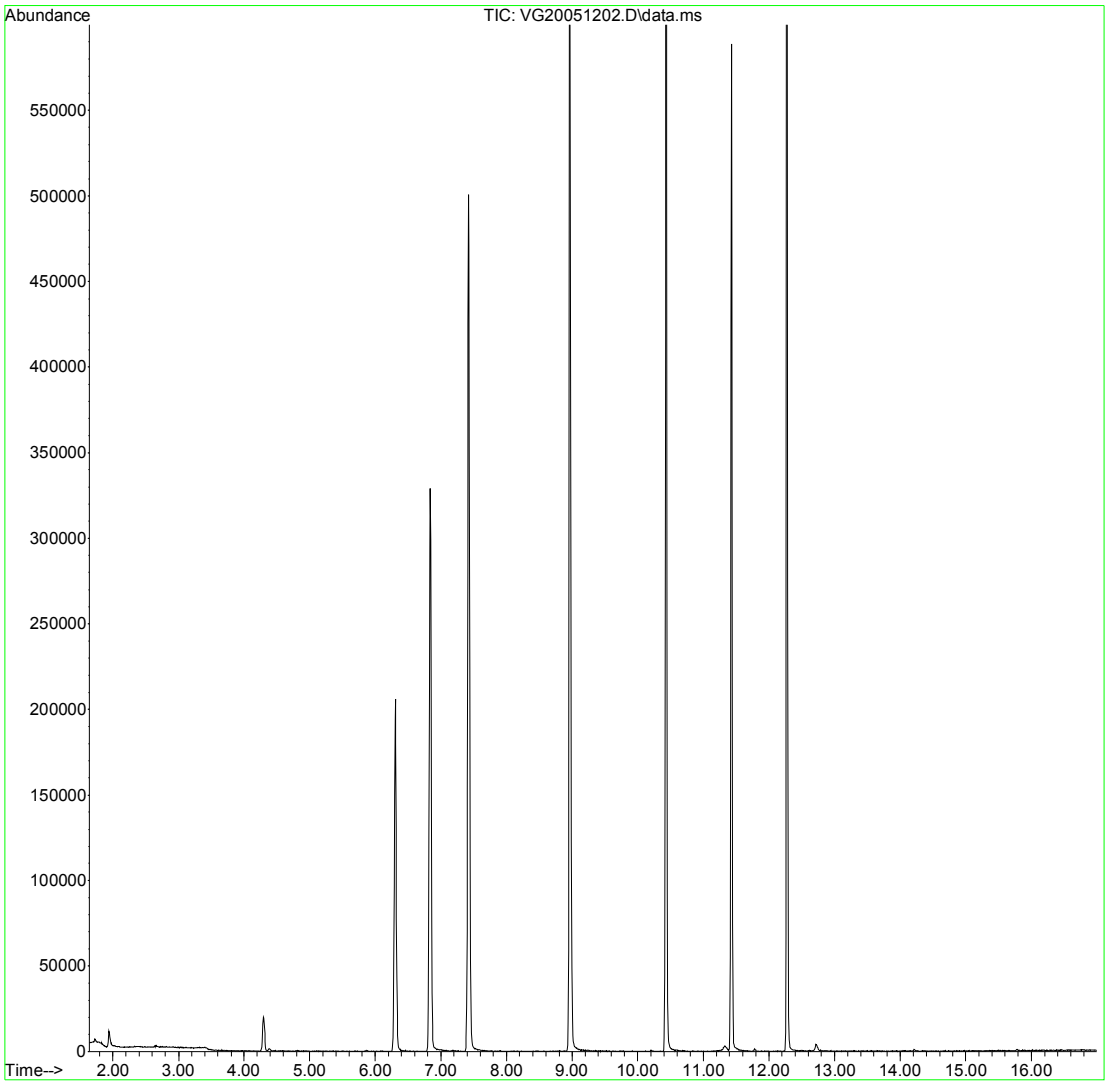
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	128519	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	378572	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	168620	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	142012	55.58	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	442961	53.57	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	516440	49.97	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	135477	50.08	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.972	50	328	0.10	ug/L		67
6) Chloroethane	2.734	64	259	Below Cal			60
8) Ethanol	3.618	45	119	1.79	ug/L	#	29
14) Methylene Chloride	4.295	84	9269	3.17	ug/L		94
15) Acetone	4.380	43	1872	1.42	ug/L		94
19) tert-Butanol (TBA)	4.801	59	278	0.71	ug/L	#	42
61) m,p-Xylenes (2)	10.605	91	119	0.15	ug/L	#	34
62) o-Xylene	10.952	91	10	0.09	ug/L	#	35
77) 1,2,4-Trimethylbenzene	11.970	105	11	0.15	ug/L	#	36

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051202.D
Acq On : 12 May 2020 8:15 am
Operator : PS
Sample : 0E12021-TUN1
Misc : 1X A20D004 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 14:50:35 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

05/13/20 tnl

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051203.D
Acq On : 12 May 2020 8:42 am
Operator : PS
Sample : 0050413-BS1
Misc : 1X 5mL A20E056 20-40PPB VOCRO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 14:50:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)	
1	I	Pentafluorobenzene (I)	50.000	50.000	0.0	120	0.00	
2		Dichlorodifluoromethane	20.000	18.048	9.8	115	0.00	
3	P	Chloromethane	20.000	15.639	21.8	99	0.00	Q55
4	C	Vinyl Chloride	20.000	18.428	7.9	113	0.00	
5		Bromomethane	20.000	13.540	32.3#	79	0.00	Q55
6		Chloroethane	20.000	19.598	2.0	122	-0.02	
7		Trichlorofluoromethane	20.000	20.008	-0.0	125	-0.02	
8		Ethanol	1250.000	1145.868	8.3	109	0.00	
9	C	1,1-Dichloroethene	20.000	20.484	-2.4	121	0.00	
10		Carbon Disulfide	20.000	23.379	-16.9	132	0.00	
11		Freon 113	20.000	21.647	-8.2	130	-0.02	
12		Iodomethane	20.000	12.668	36.7#	75	0.00	NR
13		Acrolein	20.000	18.476	7.6	109	0.00	
14		Methylene Chloride	20.000	23.989	-19.9	144	0.00	
15		Acetone	40.000	36.817	8.0	111	-0.01	
16		t-1,2-Dichloroethene	20.000	20.007	-0.0	119	0.00	
17		n-Hexane	20.000	22.372	-11.9	133	0.00	
18		Methyl-tert-butyl-ether	20.000	22.865	-14.3	123	0.00	
19		tert-Butanol (TBA)	1250.000	1548.138	-23.9	129	0.00	NR
20		Diisopropyl ether (DIPE)	5.000	5.039	-0.8	112	0.00	
21	P	1,1-Dichloroethane	20.000	20.628	-3.1	120	0.00	
22		Acrylonitrile	20.000	20.691	-3.5	113	0.00	
23		Vinyl Acetate	20.000	19.663	1.7	145	0.00	
24		Ethyl-tert-butyl ether (ETB	5.000	5.558	-11.2	121	0.00	
25		c-1,2-Dichloroethene	20.000	20.978	-4.9	118	0.00	
26		2,2-Dichloropropane	20.000	28.773	-43.9#	165	-0.01	Q56
27		Bromochloromethane	20.000	19.387	3.1	117	0.00	
28	C	Chloroform	20.000	20.799	-4.0	124	0.00	
29		Carbon Tetrachloride	20.000	24.806	-24.0	134	0.00	Q56
30		Tetrahydrofuran	20.000	19.625	1.9	112	0.00	
31		1,1,1-Trichloroethane	20.000	22.595	-13.0	131	0.00	
32	S	Dibromofluoromethane (S)	50.000	51.536	-3.1	125	0.00	
33		1,1-Dichloropropene	20.000	22.606	-13.0	121	-0.01	
34		2-Butanone (MEK)	40.000	42.313	-5.8	115	0.00	

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051203.D
Acq On : 12 May 2020 8:42 am
Operator : PS
Sample : 0050413-BS1
Misc : 1X 5mL A20E056 20-40PPB VOCRO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 14:50:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
35		Benzene	20.000	21.448	-7.2	120	0.00
36		tert-Amyl methyl ether (TAM	5.000	5.459	-9.2	127	0.04
37		1,2-Dichloroethane (EDC)	20.000	20.577	-2.9	121	0.00
38		iso-Butyl Alcohol	500.000	503.370	-0.7	118	-0.01
39	S	1,4-Difluorobenzene (S)	50.000	49.545	0.9	122	0.00
40		Trichloroethene (TCE)	20.000	19.279	3.6	116	-0.01
41		tert-Amyl ethyl ether (TAEE	5.000	5.658	-13.2	124	0.00
42		Dibromomethane	20.000	21.083	-5.4	124	0.01
43	C	1,2-Dichloropropane	20.000	20.604	-3.0	119	-0.01
44		Bromodichloromethane	20.000	22.692	-13.5	125	0.00
45		Chlorobenzene-d5 (I)	50.000	50.000	0.0	124	0.00
46		2-Chloroethyl Vinyl Ether	20.000	17.816	10.9	112	0.00
47		c-1,3-Dichloropropene	20.000	20.620	-3.1	129	-0.01
48	S	Toluene-d8 (S)	50.000	48.343	3.3	121	0.00
49	C	Toluene	20.000	20.076	-0.4	124	0.00
50		Tetrachloroethene (PCE)	20.000	22.179	-10.9	130	0.00
51		4-Methyl-2-Pentanone (MIBK)	40.000	40.865	-2.2	116	-0.03
52		t-1,3-Dichloropropene	20.000	21.274	-6.4	133	-0.02
53		1,1,2-Trichloroethane	20.000	20.750	-3.8	123	-0.02
54		Dibromochloromethane	20.000	20.532	-2.7	128	0.00
55		1,3-Dichloropropane	20.000	20.768	-3.8	120	0.00
56		1,2-Dibromoethane (EDB)	20.000	22.248	-11.2	124	0.00
57		2-Hexanone	40.000	40.321	-0.8	117	-0.03
58	P	Chlorobenzene	20.000	20.437	-2.2	125	0.00
59	C	Ethylbenzene	20.000	21.178	-5.9	123	0.00
60		1,1,1,2-Tetrachloroethane	20.000	22.798	-14.0	131	0.00
61		m,p-Xylenes (2)	40.000	41.132	-2.8	124	0.00
62		o-Xylene	20.000	19.526	2.4	119	0.00
63		Styrene	20.000	20.597	-3.0	123	-0.02
64	P	Bromoform	20.000	20.726	-3.6	136	0.00
65		Isopropylbenzene	20.000	20.241	-1.2	122	0.00
66	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	131	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051203.D
Acq On : 12 May 2020 8:42 am
Operator : PS
Sample : 0050413-BS1
Misc : 1X 5mL A20E056 20-40PPB VOCRO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 14:50:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
67	S	4-Bromofluorobenzene (S)	50.000	48.129	3.7	130	0.00
68		Bromobenzene	20.000	20.086	-0.4	130	0.00
69		n-Propylbenzene	20.000	20.198	-1.0	124	0.00
70	P	1,1,2,2-Tetrachloroethane	20.000	21.580	-7.9	142	-0.01
71		2-Chlorotoluene	20.000	20.538	-2.7	127	-0.01
72		1,3,5-Trimethylbenzene	20.000	21.272	-6.4	125	0.00
73		1,2,3-Trichloropropane	20.000	20.826	-4.1	132	0.00
74		t-1,4-Dichloro-2-butene	20.000	21.391	-7.0	148	0.00
75		4-Chlorotoluene	20.000	20.864	-4.3	124	0.00
76		tert-Butylbenzene	20.000	20.574	-2.9	122	0.00
77		1,2,4-Trimethylbenzene	20.000	21.373	-6.9	126	0.00
78		sec-Butylbenzene	20.000	20.685	-3.4	124	0.00
79		4-Isopropyltoluene	20.000	19.858	0.7	126	0.00
80		1,3-Dichlorobenzene	20.000	21.576	-7.9	132	0.00
81		1,4-Dichlorobenzene	20.000	19.774	1.1	132	0.00
82		n-Butylbenzene	20.000	21.029	-5.1	125	0.00
83		1,2-Dichlorobenzene	20.000	21.786	-8.9	130	0.00
84		1,2-Dibromo-3-Chloropropane	20.000	21.675	-8.4	142	0.00
85		Hexachlorobutadiene	20.000	23.435	-17.2	142	0.00
86		1,2,4-Trichlorobenzene	20.000	20.773	-3.9	127	-0.02
87		Naphthalene	20.000	20.253	-1.3	127	-0.01
88		1,2,3-Trichlorobenzene	20.000	23.010	-15.1	131	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051203.D
Acq On : 12 May 2020 8:42 am
Operator : PS
Sample : 0050413-BS1
Misc : 1X 5mL A20E056 20-40PPB VOCRO
ALS Vial : 3 Sample Multiplier: 1

05/13/20 tnl

Quant Time: May 12 14:50:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	174536	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	497754	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	254849	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	178840	51.54	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	556353	49.54	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	656973	48.34	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.427	174	196775	48.13	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	65477	18.05	ug/L		98
3) Chloromethane	1.978	50	67279	15.64	ug/L		98
4) Vinyl Chloride	2.100	62	79212	18.43	ug/L		96
5) Bromomethane	2.533	96	34779	13.54	ug/L		98
6) Chloroethane	2.704	64	25681	19.60	ug/L		93
7) Trichlorofluoromethane	2.899	101	87539	20.01	ug/L		98
8) Ethanol	3.618	45	103553	1145.87	ug/L		83
9) 1,1-Dichloroethene	3.563	61	99550	20.48	ug/L		96
10) Carbon Disulfide	3.563	76	142086	23.38	ug/L		99
11) Freon 113	3.636	101	66465	21.65	ug/L		93
12) Iodomethane	3.728	142	11567	12.67	ug/L		99
13) Acrolein	4.014	56	15717	18.48	ug/L		91
14) Methylene Chloride	4.295	84	95390	23.99	ug/L		97
15) Acetone	4.380	43	65978	36.82	ug/L		97
16) t-1,2-Dichloroethene	4.484	61	94983	20.01	ug/L		98
17) n-Hexane	4.581	86	9891	22.37	ug/L	#	28
18) Methyl-tert-butyl-ether	4.642	73	176200	22.87	ug/L		98
19) tert-Butanol (TBA)	4.801	59	818387	1548.14	ug/L	#	84
20) Diisopropyl ether (DIPE)	5.087	45	43794	5.04	ug/L		97
21) 1,1-Dichloroethane	5.191	63	129248	20.63	ug/L		99
22) Acrylonitrile	5.264	53	40864	20.69	ug/L		98
23) Vinyl Acetate	5.502	43	121212	19.66	ug/L		96
24) Ethyl-tert-butyl ether...	5.496	59	37322	5.56	ug/L		94
25) c-1,2-Dichloroethene	5.794	61	95753	20.98	ug/L		99
26) 2,2-Dichloropropane	5.910	77	75973	28.77	ug/L		83
27) Bromochloromethane	6.014	49	66571	19.39	ug/L		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051203.D
Acq On : 12 May 2020 8:42 am
Operator : PS
Sample : 0050413-BS1
Misc : 1X 5mL A20E056 20-40PPB VOCRO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 14:50:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Chloroform	6.105	83	125463	20.80	ug/L		96
29) Carbon Tetrachloride	6.239	117	75720	24.81	ug/L		95
30) Tetrahydrofuran	6.282	42	33365	19.63	ug/L		93
31) 1,1,1-Trichloroethane	6.313	97	98644	22.60	ug/L		93
33) 1,1-Dichloropropene	6.453	75	91761	22.61	ug/L		97
34) 2-Butanone (MEK)	6.453	43	110956	42.31	ug/L		98
35) Benzene	6.727	78	297087	21.45	ug/L		98
36) tert-Amyl methyl ether...	6.873	73	36322	5.46	ug/L		82
37) 1,2-Dichloroethane (EDC)	6.959	62	96908	20.58	ug/L		98
38) iso-Butyl Alcohol	7.020	43	166194	503.37	ug/L		93
40) Trichloroethene (TCE)	7.380	130	73784	19.28	ug/L		99
41) tert-Amyl ethyl ether ...	7.660	59	25147	5.66	ug/L		90
42) Dibromomethane	7.855	93	49470	21.08	ug/L		90
43) 1,2-Dichloropropane	7.965	63	76863	20.60	ug/L		93
44) Bromodichloromethane	8.050	83	85018	22.69	ug/L		99
46) 2-Chloroethyl Vinyl Ether	8.715	63	28281	17.82	ug/L	#	1
47) c-1,3-Dichloropropene	8.769	75	98990	20.62	ug/L		96
49) Toluene	9.019	91	315923	20.08	ug/L		99
50) Tetrachloroethene (PCE)	9.410	166	72172	22.18	ug/L		96
51) 4-Methyl-2-Pentanone (...	9.410	43	210452	40.86	ug/L		100
52) t-1,3-Dichloropropene	9.446	75	92189	21.27	ug/L		98
53) 1,1,2-Trichloroethane	9.599	97	73572	20.75	ug/L		96
54) Dibromochloromethane	9.769	129	66221	20.53	ug/L		99
55) 1,3-Dichloropropane	9.855	76	117915	20.77	ug/L		100
56) 1,2-Dibromoethane (EDB)	9.983	107	73567	22.25	ug/L		99
57) 2-Hexanone	10.190	43	154002	40.32	ug/L		99
58) Chlorobenzene	10.446	112	202715	20.44	ug/L		99
59) Ethylbenzene	10.470	91	329129	21.18	ug/L		100
60) 1,1,1,2-Tetrachloroethane	10.501	131	64216	22.80	ug/L		97
61) m,p-Xylenes (2)	10.592	91	489531	41.13	ug/L		100
62) o-Xylene	10.946	91	227999	19.53	ug/L		96
63) Styrene	10.995	104	192307	20.60	ug/L		97
64) Bromoform	11.019	173	48089	20.73	ug/L		96
65) Isopropylbenzene	11.196	105	274914	20.24	ug/L		98
68) Bromobenzene	11.513	156	83896	20.09	ug/L		91
69) n-Propylbenzene	11.525	91	335087	20.20	ug/L		96
70) 1,1,2,2-Tetrachloroethane	11.586	83	111402	21.58	ug/L		99
71) 2-Chlorotoluene	11.647	126	71068	20.54	ug/L		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051203.D
Acq On : 12 May 2020 8:42 am
Operator : PS
Sample : 0050413-BS1
Misc : 1X 5mL A20E056 20-40PPB VOCRO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 14:50:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

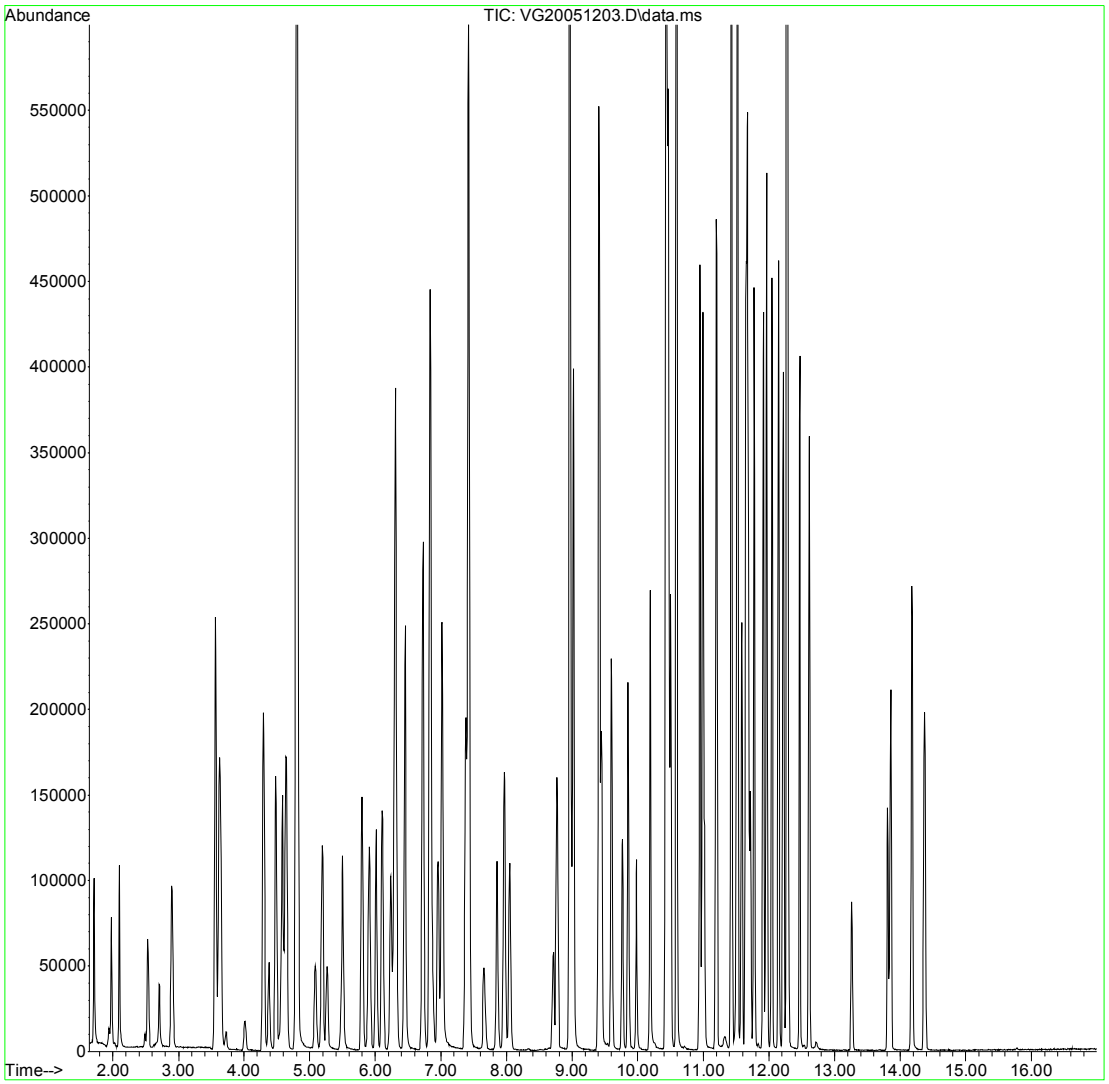
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
72) 1,3,5-Trimethylbenzene	11.671	105	230030	21.27	ug/L		95
73) 1,2,3-Trichloropropane	11.690	110	33847	20.83	ug/L		87
74) t-1,4-Dichloro-2-butene	11.720	88	11997	21.39	ug/L	#	88
75) 4-Chlorotoluene	11.775	91	212946	20.86	ug/L		96
76) tert-Butylbenzene	11.915	91	114238	20.57	ug/L		97
77) 1,2,4-Trimethylbenzene	11.964	105	228429	21.37	ug/L		98
78) sec-Butylbenzene	12.043	105	258859	20.69	ug/L		96
79) 4-Isopropyltoluene	12.147	119	205903	19.86	ug/L		99
80) 1,3-Dichlorobenzene	12.220	146	142871	21.58	ug/L		97
81) 1,4-Dichlorobenzene	12.287	146	148878	19.77	ug/L		97
82) n-Butylbenzene	12.470	91	187460	21.03	ug/L		95
83) 1,2-Dichlorobenzene	12.616	146	137078	21.79	ug/L		98
84) 1,2-Dibromo-3-Chloropr...	13.262	157	21826	21.67	ug/L		81
85) Hexachlorobutadiene	13.811	223	18125	23.43	ug/L		93
86) 1,2,4-Trichlorobenzene	13.854	180	69507	20.77	ug/L		97
87) Naphthalene	14.177	128	223563	20.25	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	72718	23.01	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051203.D
Acq On : 12 May 2020 8:42 am
Operator : PS
Sample : 0050413-BS1
Misc : 1X 5mL A20E056 20-40PPB VOCRO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 14:50:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051204.D
Acq On : 12 May 2020 9:09 am
Operator : PS
Sample : 0050413-BS2
Misc : 1X 5mL A20E008 500PPB GX
ALS Vial : 4 Sample Multiplier: 1

05/13/20 tnl

Quant Time: May 12 14:51:26 2020
Quant Method : C:\msdchem\1\methods\VG200429G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Apr 30 13:33:36 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene (IS)	50.000	50.000	0.0	102	0.00
2	S	1,4-Difluorobenzene (Sur)	50.000	49.445	1.1	101	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	49.766	0.5	103	0.00
4	H	NWTPH-Gx (TPH)	500.000	436.798	12.6	98	0.00
5	H	TPHg (C5-C9)	500.000	463.669	7.3	100	0.00
6	H	TPHg (C6-C10)	500.000	462.795	7.4	100	0.00
7	H	CA-LUFT (C5-C12)	500.000	451.875	9.6	98	0.00
8		Benzene (NR)	-1.000	0.000	0.0	0	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	0	0.00
10		Toluene (NR)	-1.000	0.000	0.0	0	0.00
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	0	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	0	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	0	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051204.D
Acq On : 12 May 2020 9:09 am
Operator : PS
Sample : 0050413-BS2
Misc : 1X 5mL A20E008 500PPB GX
ALS Vial : 4 Sample Multiplier: 1

05/13/20 tnl

Quant Time: May 12 14:51:26 2020
Quant Method : C:\msdchem\1\methods\VG200429G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Apr 30 13:33:36 2020
Response via : Initial Calibration

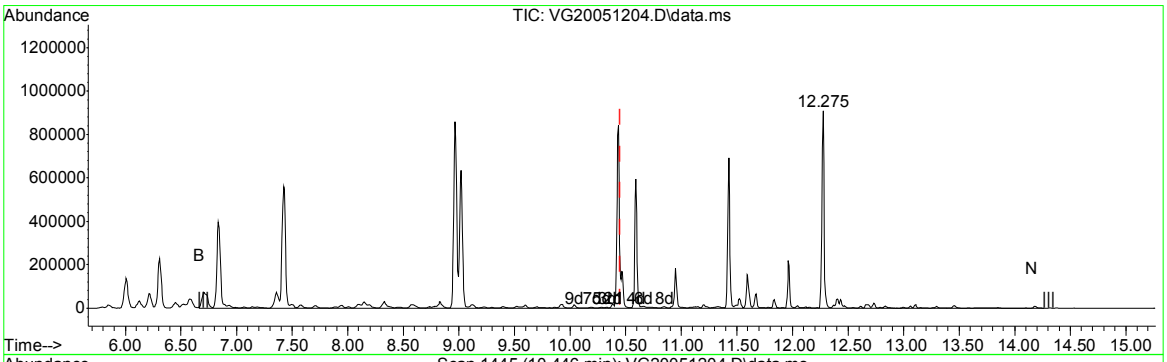
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.837	168	305801	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	7.422	114	507147	49.45	ug/L	0.00
3) 4-Bromofluorobenzene (...	11.428	174	162344	49.77	ug/L	0.00
9) Toluene-d8 (NR)	8.965	98	588167	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	10.434	117	431832	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	12.275	150	313006	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	10.446	TIC	4949768m	436.80	ug/L	
5) TPHg (C5-C9)	10.446	TIC	6578077m	463.67	ug/L	
6) TPHg (C6-C10)	10.446	TIC	5684028m	462.79	ug/L	
7) CA-LUFT (C5-C12)	10.446	TIC	7788244m	451.87	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051204.D
Acq On : 12 May 2020 9:09 am
Operator : PS
Sample : 0050413-BS2
Misc : 1X 5mL A20E008 500PPB GX
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 12 14:51:26 2020
Quant Method : C:\msdchem\1\methods\VG200429G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Apr 30 13:33:36 2020
Response via : Initial Calibration



TIC: VG20051204.D\data.ms

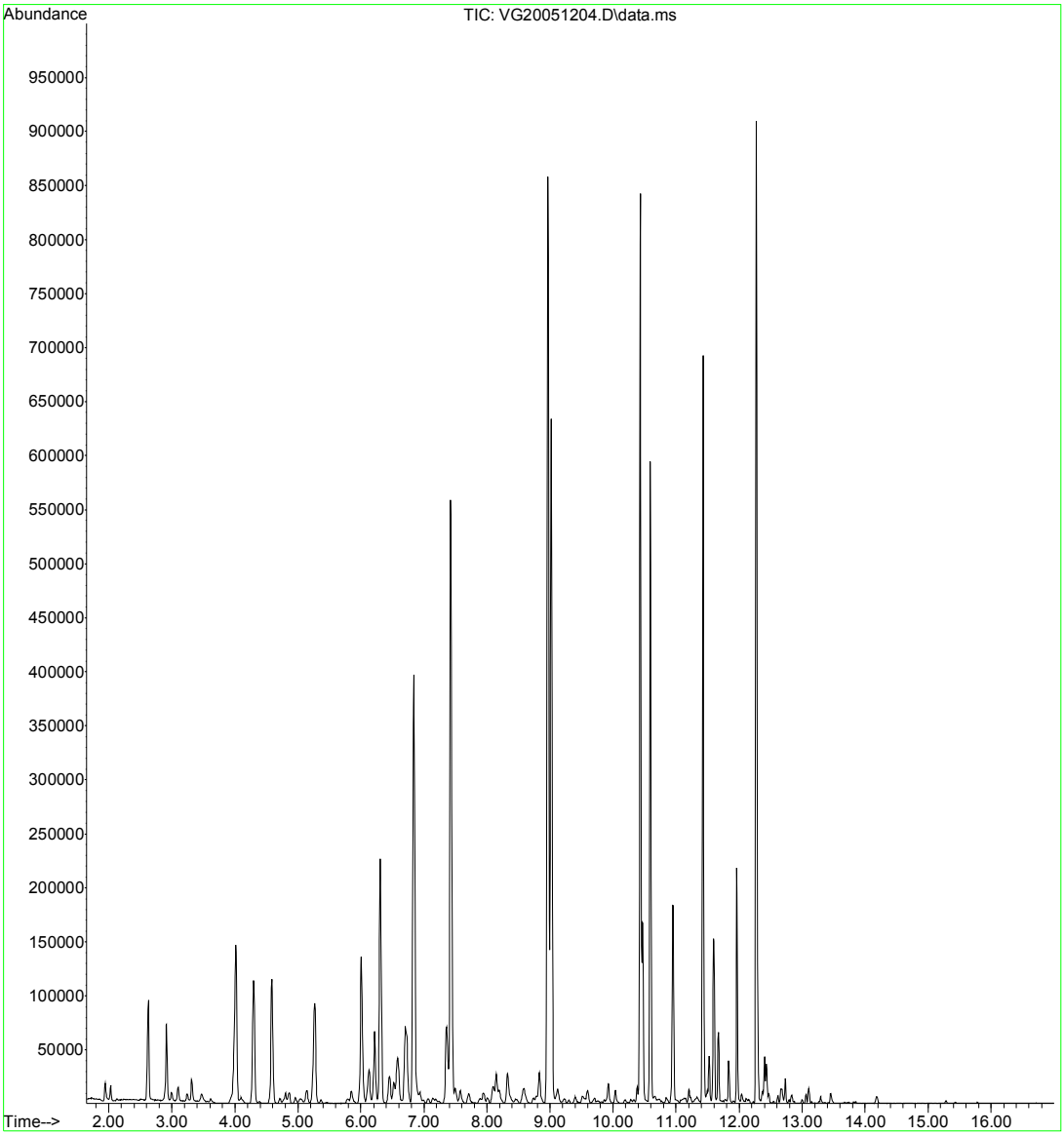
(4) NWTPH-Gx (TPH) (H)

10.446min (0.000) 436.80 ug/L m

response 4949768

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.01#
0.00	0.00	0.01#
0.00	0.00	0.00

File :C:\msdchem\1\data\2020-05\0E12021\VG20051204.D
Operator : PS
Acquired : 12 May 2020 9:09 am using AcqMethod VG1808RUN.M
Instrument : VOA-GCMS7
Sample Name: 0050413-BS2
Misc Info : 1X 5mL A20E008 500PPB GX
Vial Number: 4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051205.D
Acq On : 12 May 2020 9:36 am
Operator : PS
Sample : 0050413-BLK1
Misc : 1X 5mL DI
ALS Vial : 5 Sample Multiplier: 1

05/13/20 tnl

Quant Time: May 12 14:52:13 2020
Quant Method : C:\msdchem\1\methods\VG200429G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Apr 30 13:33:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.837	168	257243	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	7.422	114	458555	53.15	ug/L	0.00
3) 4-Bromofluorobenzene (...	11.428	174	140813	51.31	ug/L	0.00
9) Toluene-d8 (NR)	8.965	98	533374	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	10.434	117	392530	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	12.275	150	268366	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	10.446	TIC	64388m	24.32	ug/L	
5) TPHg (C5-C9)	10.446	TIC	539793m	29.44	ug/L	
6) TPHg (C6-C10)	10.446	TIC	493822m	30.82	ug/L	
7) CA-LUFT (C5-C12)	10.446	TIC	560450m	36.15	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051205.D
Acq On : 12 May 2020 9:36 am
Operator : PS
Sample : 0050413-BLK1
Misc : 1X 5mL DI
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 14:52:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

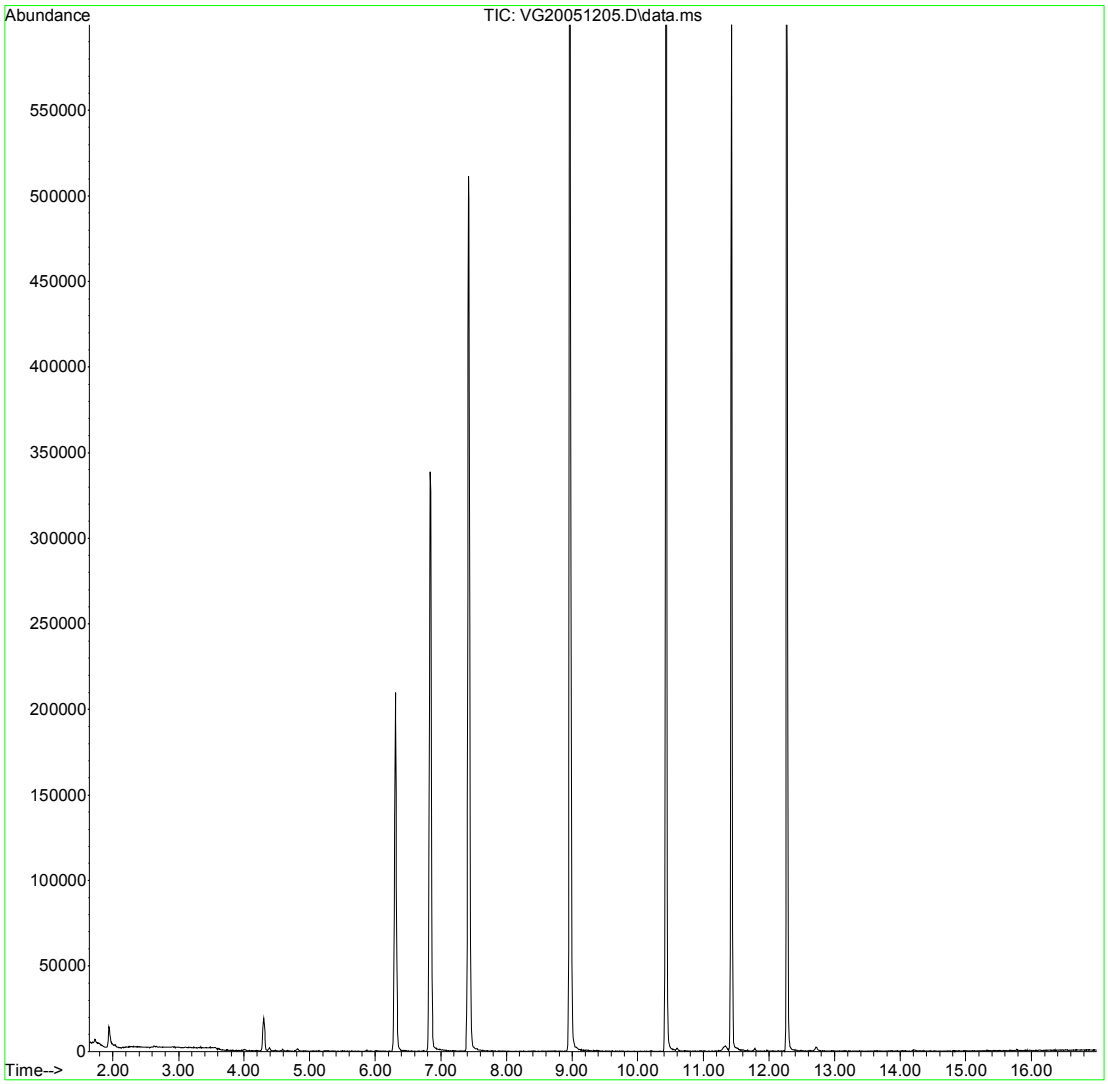
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	133806	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	391889	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	170758	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	145004	54.51	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	458051	53.21	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	533374	49.85	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	140274	51.21	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.978	50	372	0.11	ug/L	#	50
6) Chloroethane	2.728	64	150	Below Cal		#	47
8) Ethanol	3.612	45	419	6.05	ug/L		97
14) Methylene Chloride	4.301	84	8875	2.91	ug/L		94
15) Acetone	4.386	43	2057	1.50	ug/L		95
19) tert-Butanol (TBA)	4.813	59	943	2.33	ug/L	#	77
23) Vinyl Acetate	5.624	43	10	1.13	ug/L		74
47) c-1,3-Dichloropropene	8.806	75	10	0.59	ug/L	#	33
49) Toluene	9.026	91	1551	0.13	ug/L		92
52) t-1,3-Dichloropropene	9.471	75	11	0.35	ug/L	#	45
61) m,p-Xylenes (2)	10.598	91	870	0.23	ug/L		84
62) o-Xylene	10.946	91	178	0.10	ug/L	#	35
65) Isopropylbenzene	11.196	105	72	0.19	ug/L		53
77) 1,2,4-Trimethylbenzene	11.970	105	299	0.19	ug/L		85
79) 4-Isopropyltoluene	12.153	119	110	0.17	ug/L		72
86) 1,2,4-Trichlorobenzene	13.872	180	43	0.27	ug/L		78
87) Naphthalene	14.195	128	151	0.91	ug/L		79

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051205.D
Acq On : 12 May 2020 9:36 am
Operator : PS
Sample : 0050413-BLK1
Misc : 1X 5mL DI
ALS Vial : 5 Sample Multiplier: 1

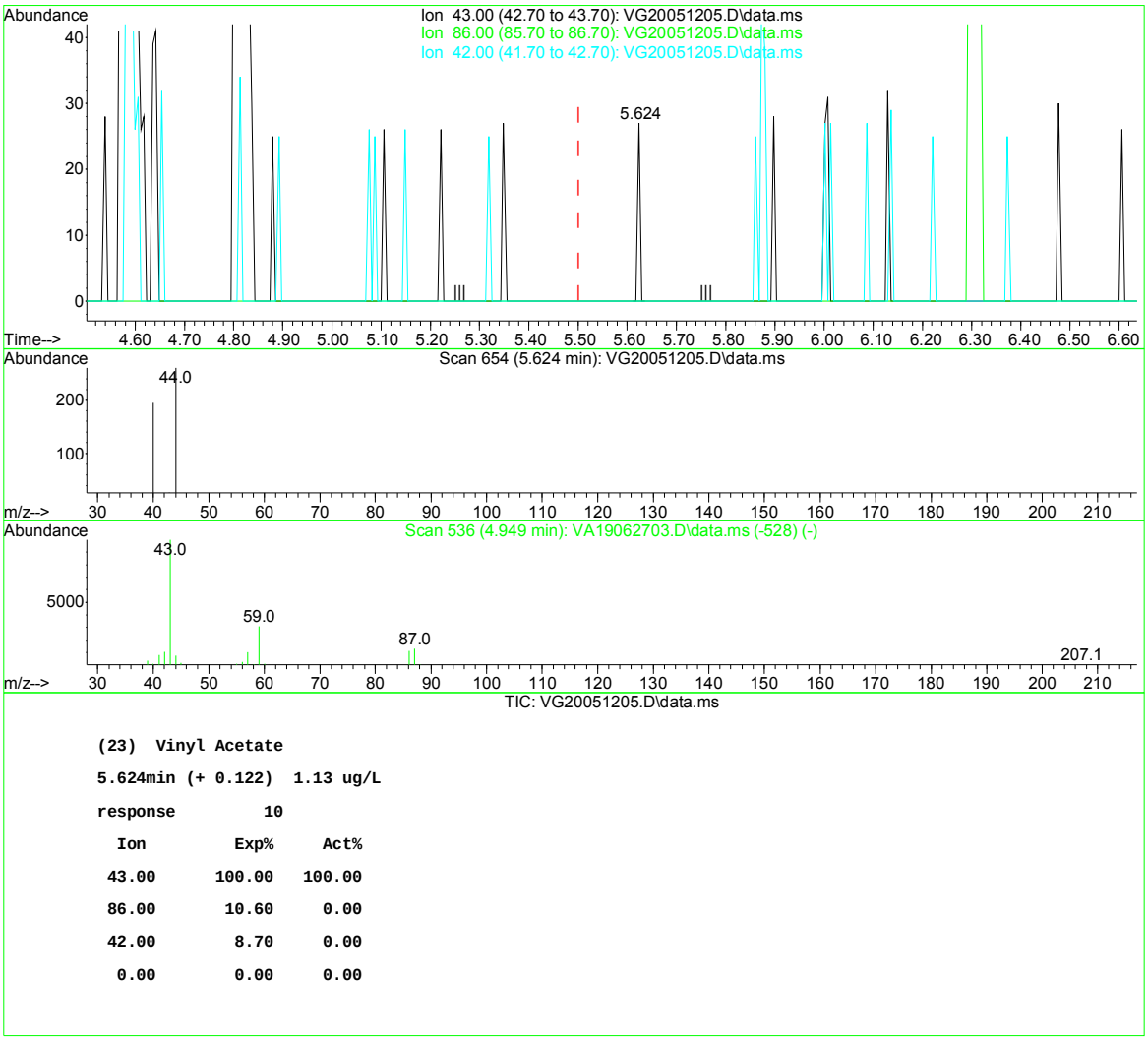
Quant Time: May 12 14:52:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051205.D
Acq On : 12 May 2020 9:36 am
Operator : PS
Sample : 0050413-BLK1
Misc : 1X 5mL DI
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 14:52:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



TIC: VG20051205.D\data.ms

(23) Vinyl Acetate

5.624min (+ 0.122) 1.13 ug/L

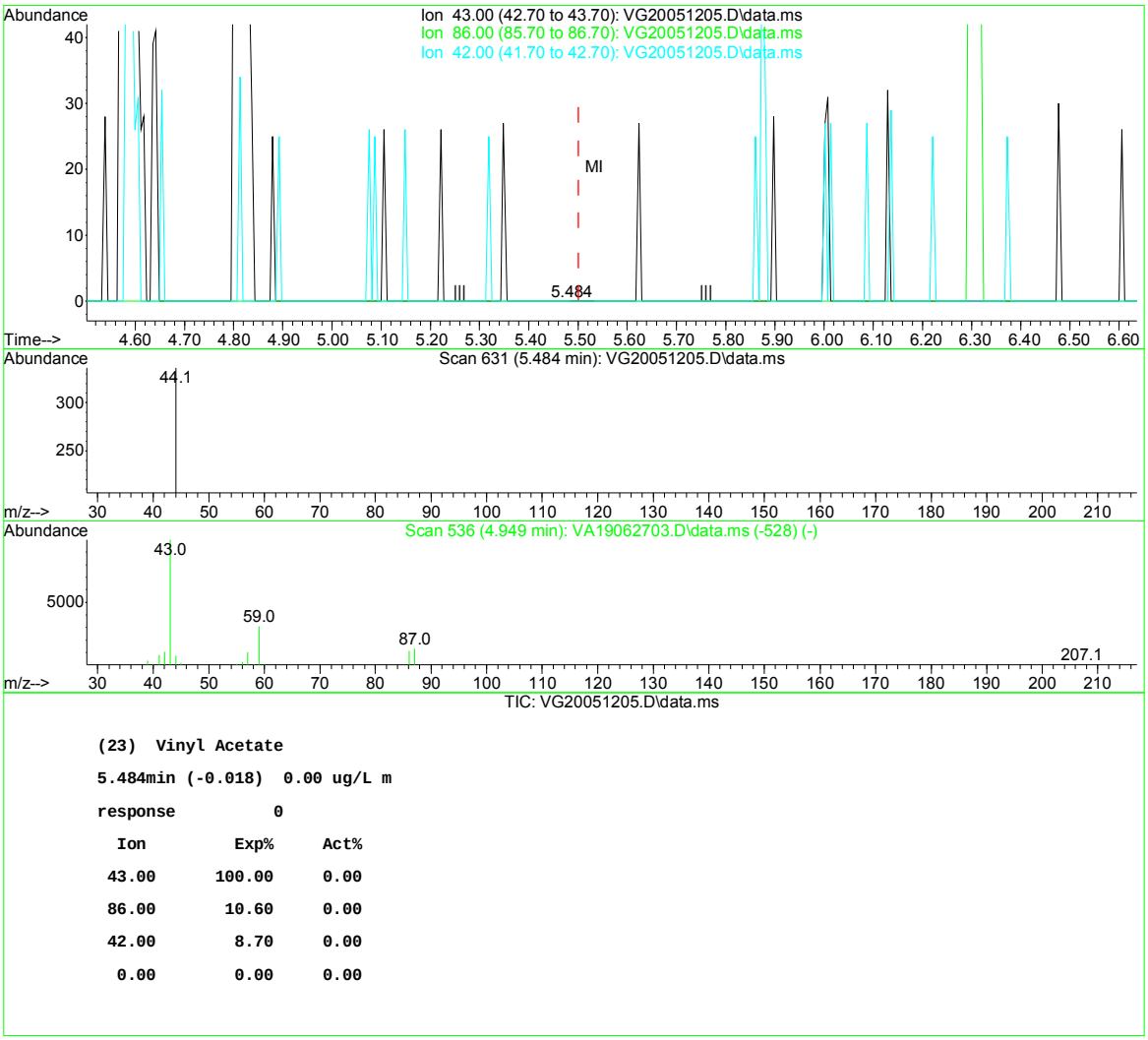
response 10

Ion	Exp%	Act%
43.00	100.00	100.00
86.00	10.60	0.00
42.00	8.70	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051205.D
Acq On : 12 May 2020 9:36 am
Operator : PS
Sample : 0050413-BLK1
Misc : 1X 5mL DI
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 14:52:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



TIC: VG20051205.D\data.ms

(23) Vinyl Acetate

5.484min (-0.018) 0.00 ug/L m

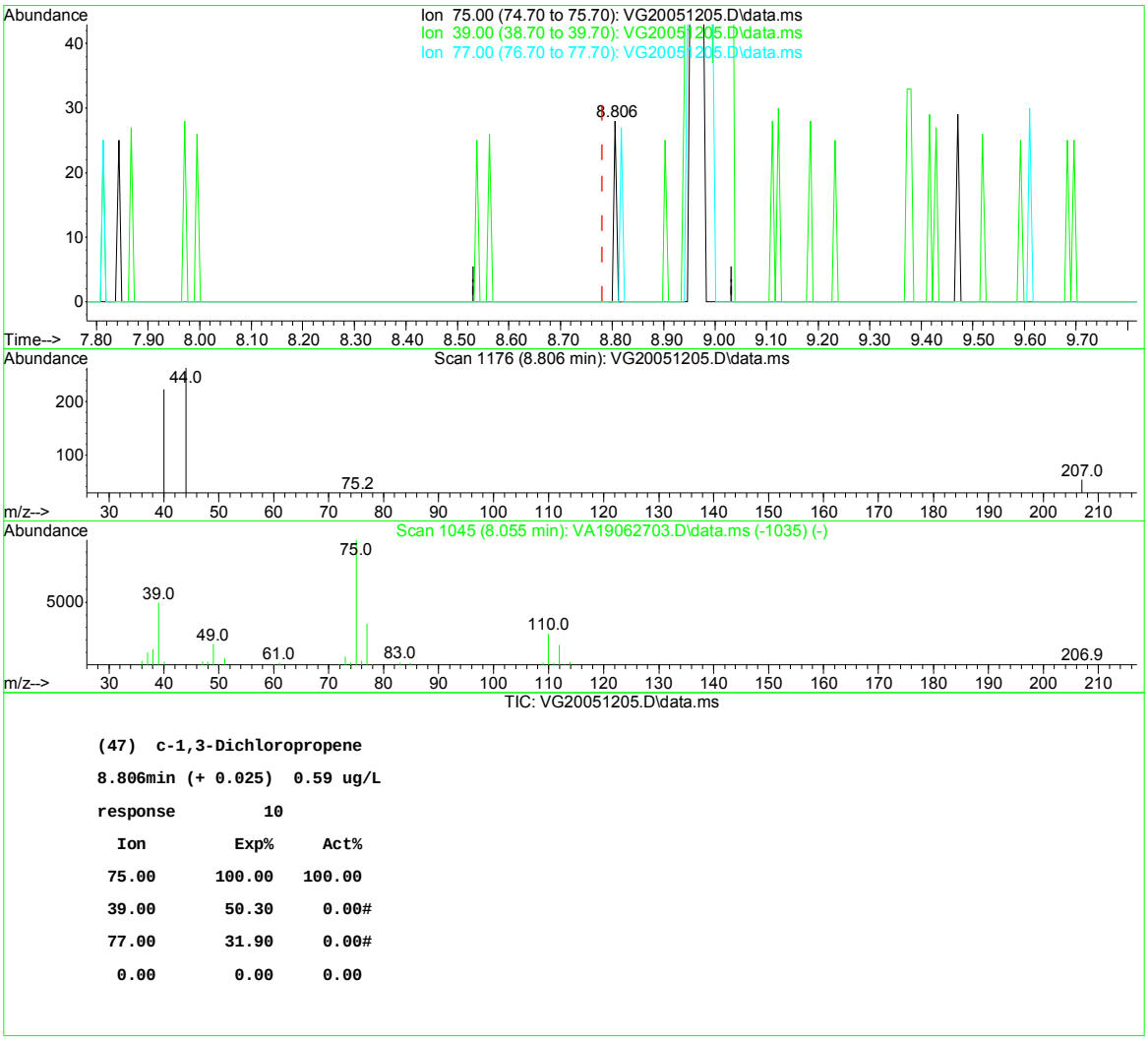
response 0

Ion	Exp%	Act%
43.00	100.00	0.00
86.00	10.60	0.00
42.00	8.70	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051205.D
Acq On : 12 May 2020 9:36 am
Operator : PS
Sample : 0050413-BLK1
Misc : 1X 5mL DI
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 14:52:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



TIC: VG20051205.D\data.ms

(47) c-1,3-Dichloropropene

8.806min (+ 0.025) 0.59 ug/L

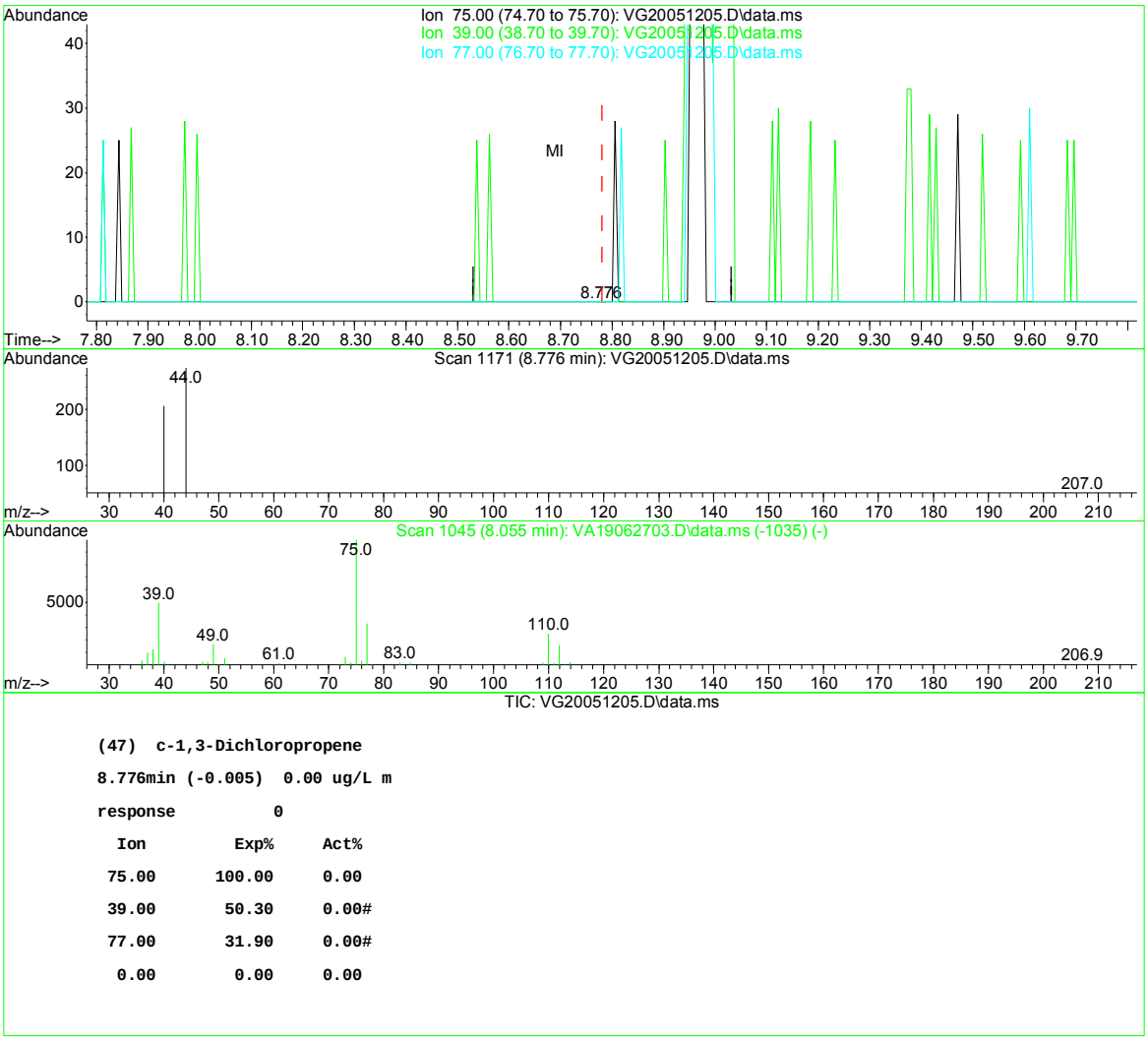
response 10

Ion	Exp%	Act%
75.00	100.00	100.00
39.00	50.30	0.00#
77.00	31.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051205.D
Acq On : 12 May 2020 9:36 am
Operator : PS
Sample : 0050413-BLK1
Misc : 1X 5mL DI
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 14:52:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



TIC: VG20051205.D\data.ms

(47) c-1,3-Dichloropropene

8.776min (-0.005) 0.00 ug/L m

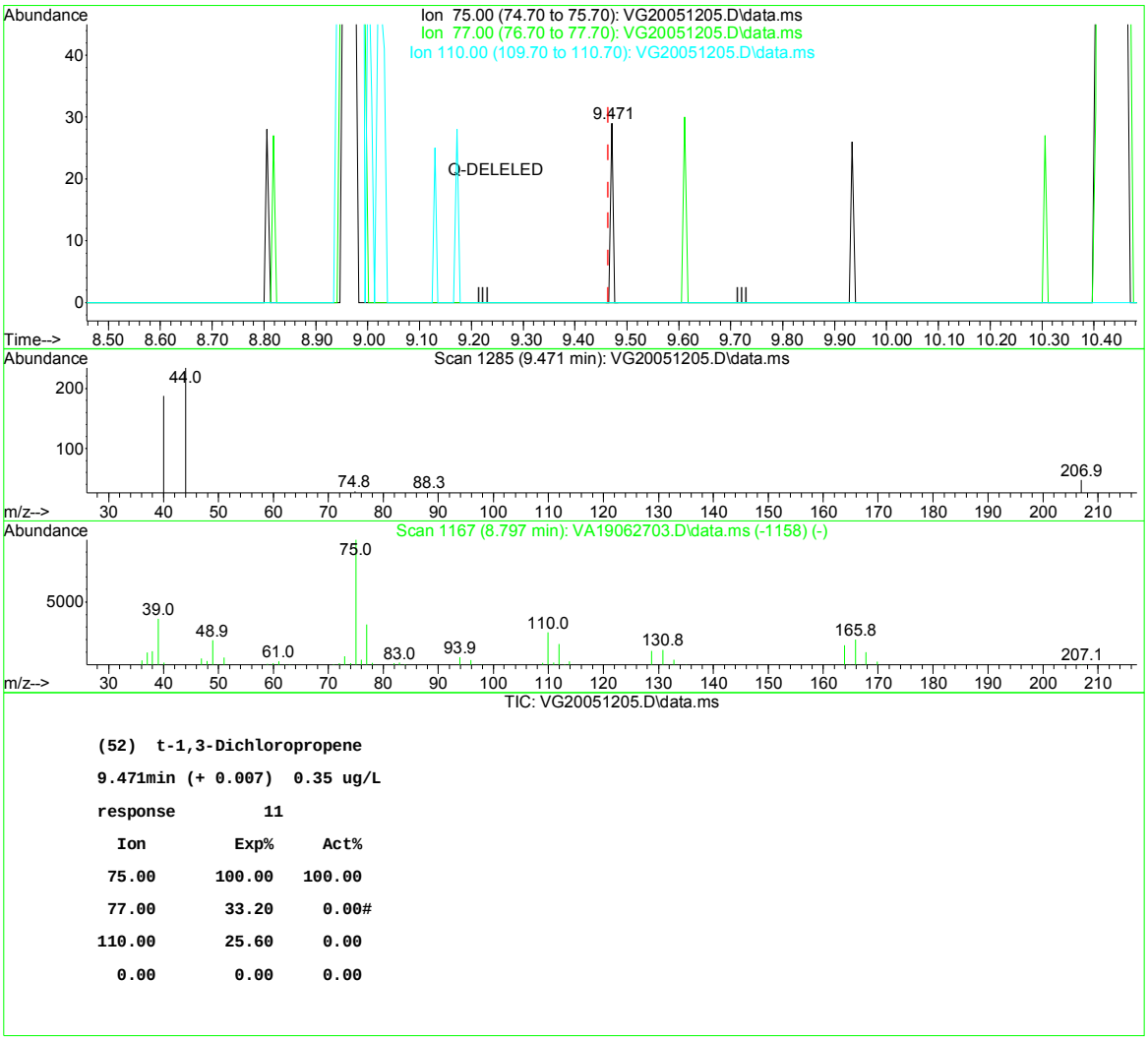
response 0

Ion	Exp%	Act%
75.00	100.00	0.00
39.00	50.30	0.00#
77.00	31.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051205.D
Acq On : 12 May 2020 9:36 am
Operator : PS
Sample : 0050413-BLK1
Misc : 1X 5mL DI
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 14:52:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



TIC: VG20051205.D\data.ms

(52) t-1,3-Dichloropropene

9.471min (+ 0.007) 0.35 ug/L

response 11

Ion	Exp%	Act%
75.00	100.00	100.00
77.00	33.20	0.00#
110.00	25.60	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051205.D
Acq On : 12 May 2020 9:36 am
Operator : PS
Sample : 0050413-BLK1
Misc : 1X 5mL DI
ALS Vial : 5 Sample Multiplier: 1

05/13/20 tnl

Quant Time: May 12 14:53:52 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

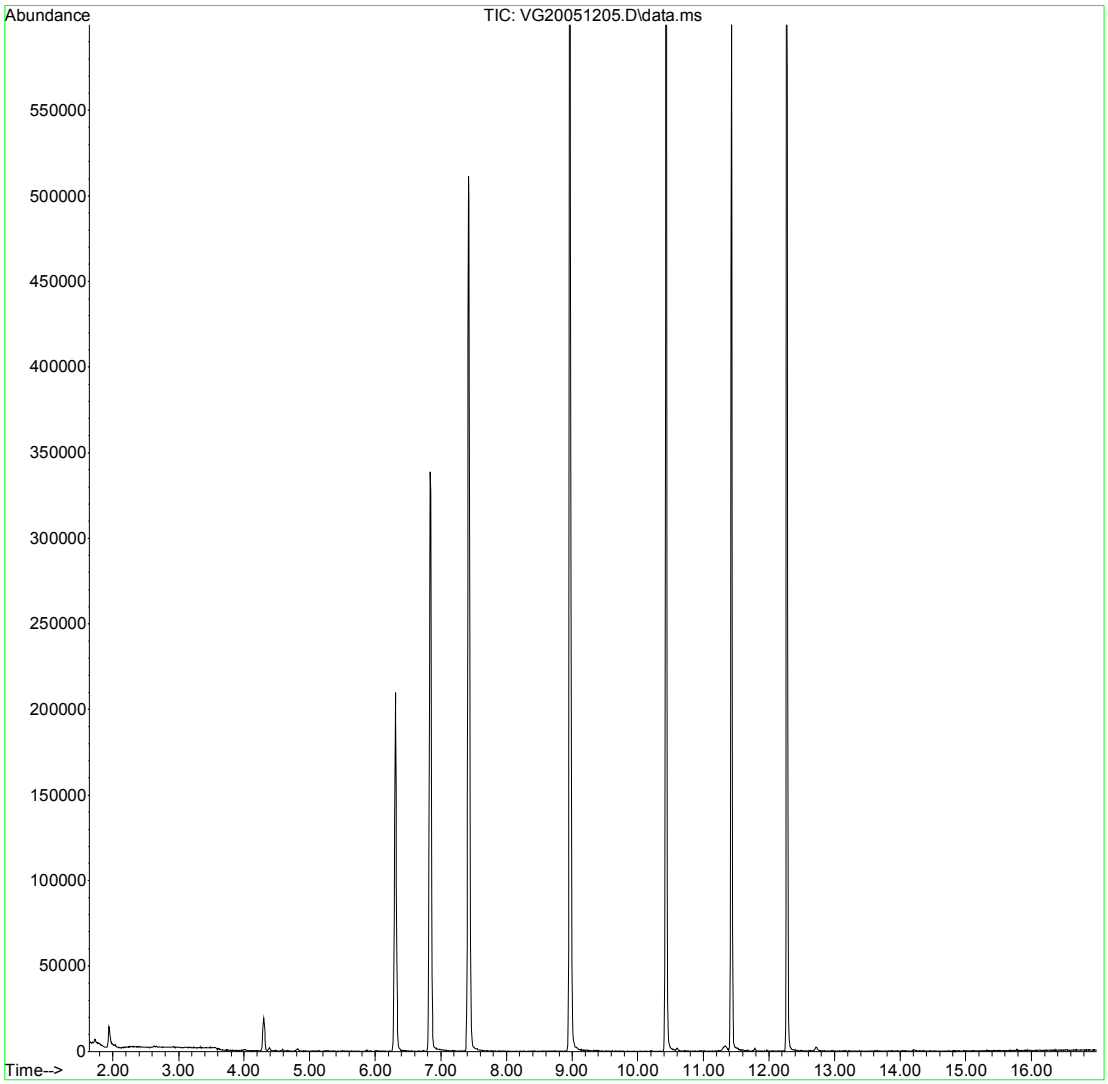
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	133806	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	391889	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	170758	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	145004	54.51	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	458051	53.21	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	533374	49.85	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	140274	51.21	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.978	50	372	0.11	ug/L	#	50
6) Chloroethane	2.728	64	150	Below Cal		#	47
8) Ethanol	3.612	45	419	6.05	ug/L		97
14) Methylene Chloride	4.301	84	8875	2.91	ug/L		94
15) Acetone	4.386	43	2057	1.50	ug/L		95
19) tert-Butanol (TBA)	4.813	59	943	2.33	ug/L	#	77
49) Toluene	9.026	91	1551	0.13	ug/L		92
61) m,p-Xylenes (2)	10.598	91	870	0.23	ug/L		84
62) o-Xylene	10.946	91	178	0.10	ug/L	#	35
65) Isopropylbenzene	11.196	105	72	0.19	ug/L		53
77) 1,2,4-Trimethylbenzene	11.970	105	299	0.19	ug/L		85
79) 4-Isopropyltoluene	12.153	119	110	0.17	ug/L		72
86) 1,2,4-Trichlorobenzene	13.872	180	43	0.27	ug/L		78
87) Naphthalene	14.195	128	151	0.91	ug/L		79

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051205.D
Acq On : 12 May 2020 9:36 am
Operator : PS
Sample : 0050413-BLK1
Misc : 1X 5mL DI
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 14:53:52 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051206.D
Acq On : 12 May 2020 10:03 am
Operator : PS
Sample : 0E12021-CRL1
Misc : 1X 5mL A20E056 5PPB CRL
ALS Vial : 6 Sample Multiplier: 1

05/13/20 tnl

Quant Time: May 12 14:54:38 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	153038	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	437424	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	207538	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	157673	51.82	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	496524	50.43	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	583234	48.84	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	165159	49.60	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	14464	4.55	ug/L		95
3) Chloromethane	1.978	50	15121	4.01	ug/L		99
4) Vinyl Chloride	2.100	62	16762	4.45	ug/L		98
5) Bromomethane	2.533	96	8719	3.87	ug/L		100
6) Chloroethane	2.710	64	8604	6.13	ug/L		94
7) Trichlorofluoromethane	2.911	101	19303	5.03	ug/L		95
8) Ethanol	3.612	45	23622	298.11	ug/L		89
9) 1,1-Dichloroethene	3.569	61	21647	5.08	ug/L		97
10) Carbon Disulfide	3.569	76	27153	5.10	ug/L		99
11) Freon 113	3.642	101	14615	5.43	ug/L		95
12) Iodomethane	3.728	142	1139	5.72	ug/L		84
13) Acrolein	4.014	56	3247	4.35	ug/L		98
14) Methylene Chloride	4.295	84	21947	6.29	ug/L		95
15) Acetone	4.380	43	15660	9.97	ug/L		98
16) t-1,2-Dichloroethene	4.484	61	19847	4.77	ug/L		96
17) n-Hexane	4.594	86	1597	4.12	ug/L	#	58
18) Methyl-tert-butyl-ether	4.642	73	33483	4.96	ug/L		98
19) tert-Butanol (TBA)	4.807	59	155592	335.68	ug/L	#	68
20) Diisopropyl ether (DIPE)	5.087	45	8961	1.18	ug/L		88
21) 1,1-Dichloroethane	5.197	63	27754	5.05	ug/L		96
22) Acrylonitrile	5.270	53	8300	4.79	ug/L		98
23) Vinyl Acetate	5.508	43	18119	4.35	ug/L		96
24) Ethyl-tert-butyl ether...	5.496	59	7013	1.19	ug/L		92
25) c-1,2-Dichloroethene	5.801	61	19037	4.76	ug/L		98
26) 2,2-Dichloropropane	5.910	77	14611	6.31	ug/L		77
27) Bromochloromethane	6.014	49	14540	4.83	ug/L		92

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051206.D
Acq On : 12 May 2020 10:03 am
Operator : PS
Sample : 0E12021-CRL1
Misc : 1X 5mL A20E056 5PPB CRL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 12 14:54:38 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Chloroform	6.112	83	26757	5.06	ug/L		98
29) Carbon Tetrachloride	6.233	117	13871	5.18	ug/L		98
30) Tetrahydrofuran	6.288	42	6424	4.31	ug/L		95
31) 1,1,1-Trichloroethane	6.313	97	20036	5.23	ug/L		94
33) 1,1-Dichloropropene	6.453	75	16389	4.60	ug/L		99
34) 2-Butanone (MEK)	6.459	43	22246	9.68	ug/L		100
35) Benzene	6.727	78	57954	4.77	ug/L		99
36) tert-Amyl methyl ether...	6.874	73	7628	1.31	ug/L		76
37) 1,2-Dichloroethane (EDC)	6.959	62	21367	5.17	ug/L		96
38) iso-Butyl Alcohol	7.020	43	30882	106.68	ug/L		83
40) Trichloroethene (TCE)	7.380	130	15581	4.64	ug/L		96
41) tert-Amyl ethyl ether ...	7.666	59	5025	1.29	ug/L		75
42) Dibromomethane	7.855	93	10294	5.00	ug/L		90
43) 1,2-Dichloropropane	7.971	63	16037	4.90	ug/L		95
44) Bromodichloromethane	8.050	83	16693	5.08	ug/L		97
46) 2-Chloroethyl Vinyl Ether	8.715	63	4546	3.94	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	16528	4.43	ug/L		98
49) Toluene	9.019	91	65925	4.77	ug/L		98
50) Tetrachloroethene (PCE)	9.410	166	14460	5.06	ug/L		92
51) 4-Methyl-2-Pentanone (...	9.416	43	39799	8.79	ug/L		95
52) t-1,3-Dichloropropene	9.446	75	16160	4.58	ug/L		96
53) 1,1,2-Trichloroethane	9.605	97	15563	4.99	ug/L		99
54) Dibromochloromethane	9.769	129	12156	4.48	ug/L		99
55) 1,3-Dichloropropane	9.855	76	23957	4.80	ug/L		94
56) 1,2-Dibromoethane (EDB)	9.983	107	14829	5.10	ug/L		93
57) 2-Hexanone	10.190	43	26666	7.94	ug/L		92
58) Chlorobenzene	10.446	112	43322	4.97	ug/L		97
59) Ethylbenzene	10.470	91	64349	4.71	ug/L		99
60) 1,1,1,2-Tetrachloroethane	10.501	131	12452	5.03	ug/L		92
61) m,p-Xylenes (2)	10.592	91	88372	8.59	ug/L		97
62) o-Xylene	10.946	91	37156	3.72	ug/L		96
63) Styrene	10.995	104	30071	3.90	ug/L		98
64) Bromoform	11.019	173	8205	4.27	ug/L		93
65) Isopropylbenzene	11.202	105	44075	3.87	ug/L		97
68) Bromobenzene	11.513	156	16796	4.94	ug/L		88
69) n-Propylbenzene	11.525	91	58730	4.35	ug/L		95
70) 1,1,2,2-Tetrachloroethane	11.586	83	22565	5.37	ug/L		99
71) 2-Chlorotoluene	11.647	126	12670	4.50	ug/L		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051206.D
Acq On : 12 May 2020 10:03 am
Operator : PS
Sample : 0E12021-CRL1
Misc : 1X 5mL A20E056 5PPB CRL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 12 14:54:38 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

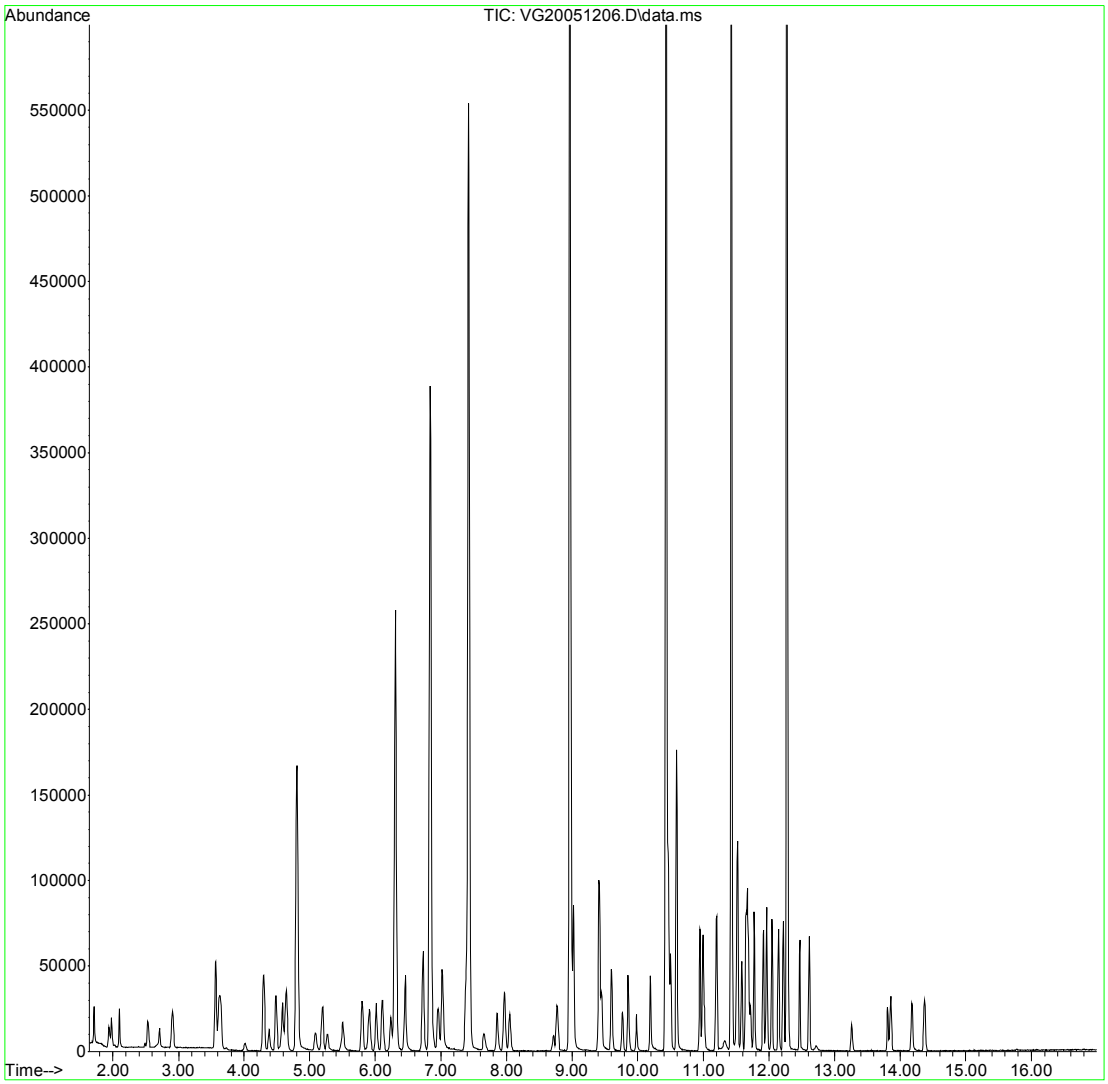
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
72) 1,3,5-Trimethylbenzene	11.671	105	38153	4.33	ug/L		95
73) 1,2,3-Trichloropropane	11.690	110	6812	5.15	ug/L	#	71
74) t-1,4-Dichloro-2-butene	11.720	88	1860	4.07	ug/L	#	76
75) 4-Chlorotoluene	11.775	91	38193	4.60	ug/L		97
76) tert-Butylbenzene	11.915	91	18667	4.13	ug/L		89
77) 1,2,4-Trimethylbenzene	11.964	105	37344	4.48	ug/L		98
78) sec-Butylbenzene	12.043	105	43424	4.26	ug/L		93
79) 4-Isopropyltoluene	12.147	119	32319	4.00	ug/L		96
80) 1,3-Dichlorobenzene	12.220	146	26077	4.84	ug/L		96
81) 1,4-Dichlorobenzene	12.287	146	29287	4.78	ug/L		96
82) n-Butylbenzene	12.470	91	30397	4.19	ug/L		95
83) 1,2-Dichlorobenzene	12.616	146	25948	5.06	ug/L		95
84) 1,2-Dibromo-3-Chloropr...	13.263	157	3775	4.60	ug/L		77
85) Hexachlorobutadiene	13.811	223	3200	5.08	ug/L		92
86) 1,2,4-Trichlorobenzene	13.854	180	10510	4.09	ug/L		96
87) Naphthalene	14.177	128	24972	3.58	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	10798	4.20	ug/L		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051206.D
Acq On : 12 May 2020 10:03 am
Operator : PS
Sample : 0E12021-CRL1
Misc : 1X 5mL A20E056 5PPB CRL
ALS Vial : 6 Sample Multiplier: 1

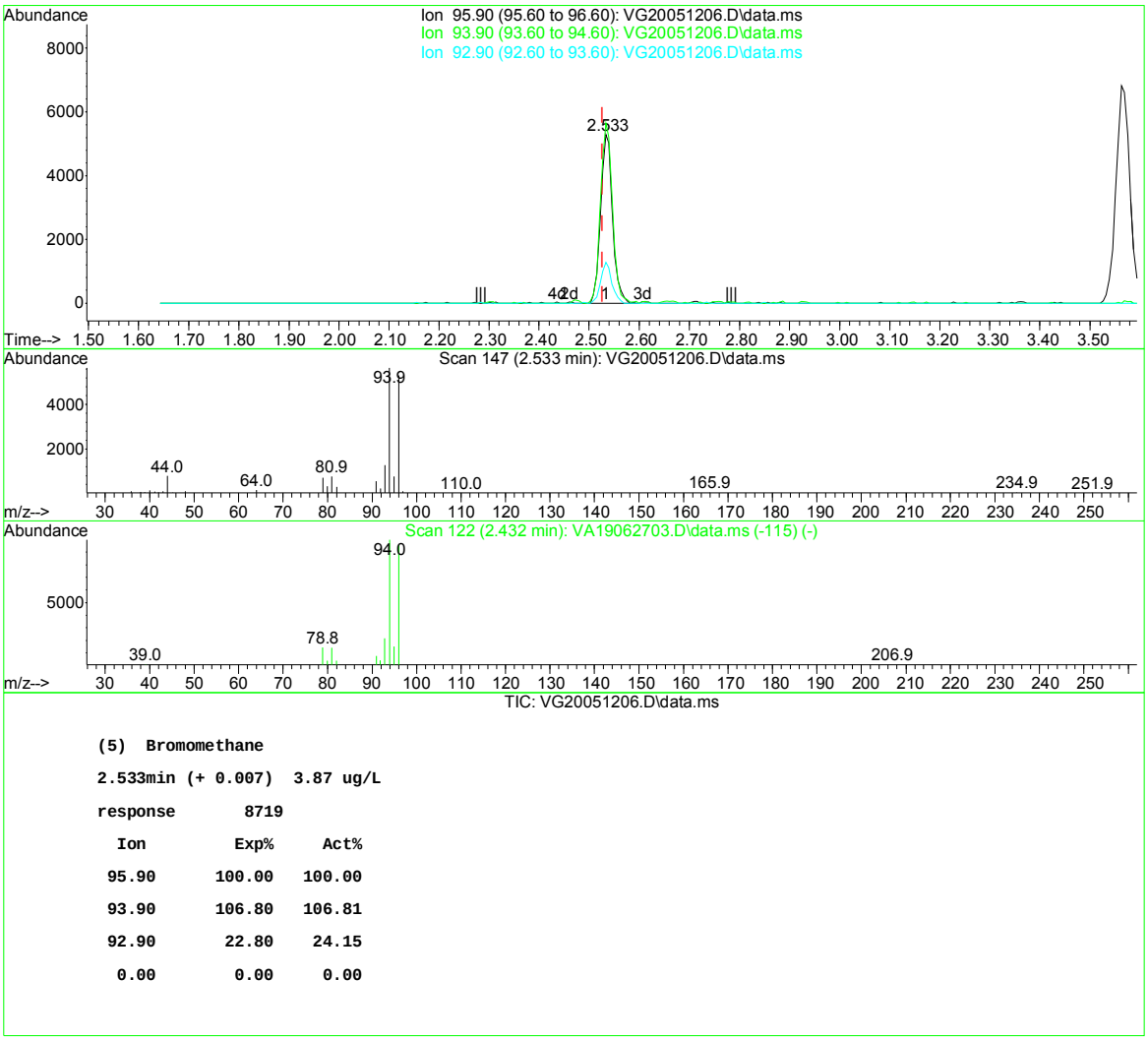
Quant Time: May 12 14:54:38 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051206.D
Acq On : 12 May 2020 10:03 am
Operator : PS
Sample : 0E12021-CRL1
Misc : 1X 5mL A20E056 5PPB CRL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 12 14:54:38 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



TIC: VG20051206.D\data.ms

(5) Bromomethane

2.533min (+ 0.007) 3.87 ug/L

response 8719

Ion	Exp%	Act%
95.90	100.00	100.00
93.90	106.80	106.81
92.90	22.80	24.15
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051226.D
Acq On : 12 May 2020 7:12 pm
Operator : PS
Sample : A0E0312-02
Misc : 1X 5mL 8260 BTEX+HALO6 TB
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 13 09:53:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

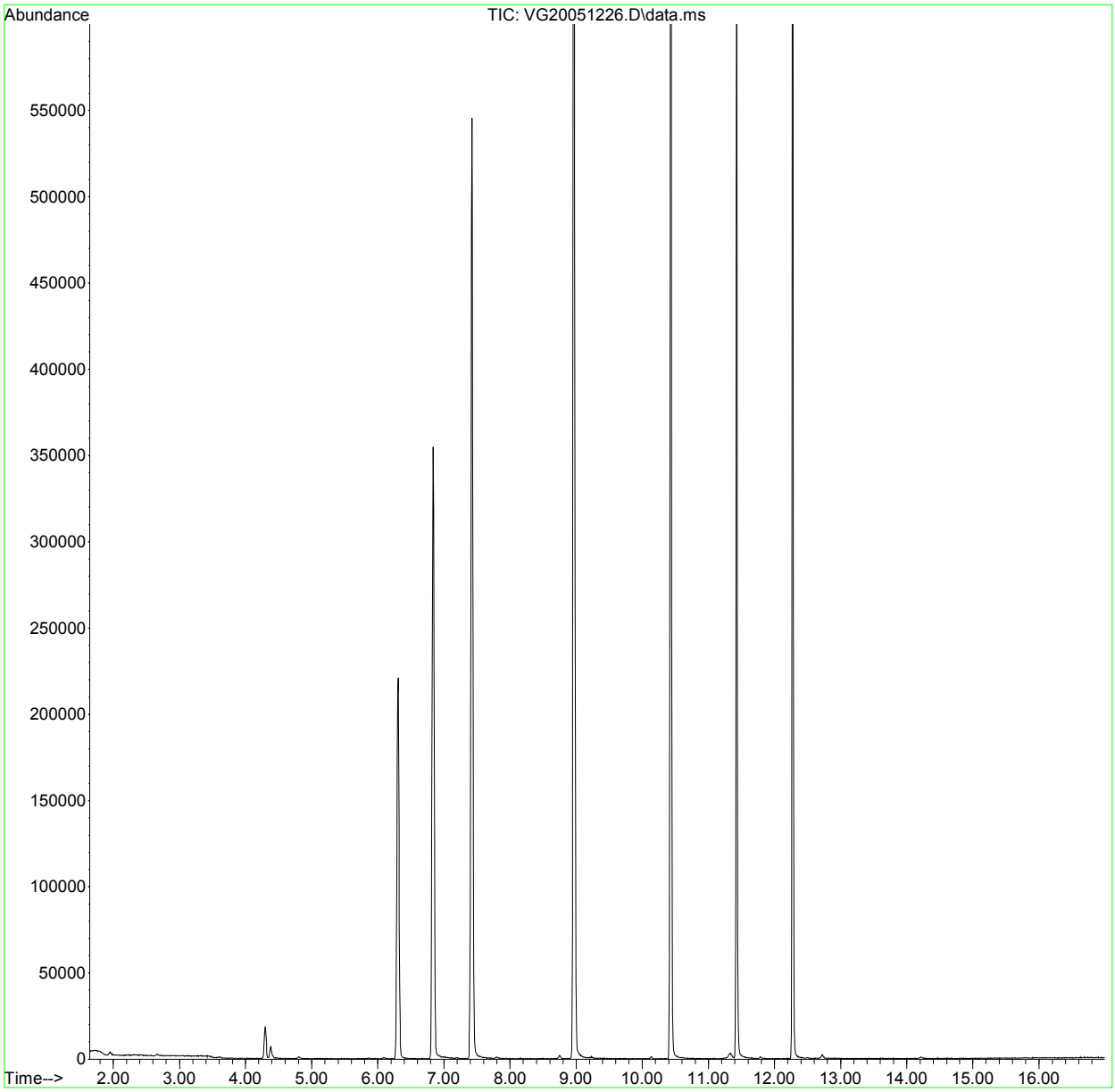
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	137386	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	414674	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	185055	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	153162	56.07	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	484767	54.84	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	565677	49.96	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	149362	50.31	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.972	50	381	0.11	ug/L		94
6) Chloroethane	2.710	64	142	Below Cal			75
8) Ethanol	3.612	45	561	7.89	ug/L		76
14) Methylene Chloride	4.295	84	7073	2.26	ug/L		99
15) Acetone	4.374	43	9533	6.76	ug/L		99
19) tert-Butanol (TBA)	4.813	59	906	2.18	ug/L	#	51
23) Vinyl Acetate	5.514	43	10	1.13	ug/L		74
38) iso-Butyl Alcohol	7.063	43	28	0.11	ug/L	#	22
61) m,p-Xylenes (2)	10.611	91	40	0.14	ug/L	#	34
77) 1,2,4-Trimethylbenzene	12.049	105	12	0.15	ug/L	#	36

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051226.D
Acq On : 12 May 2020 7:12 pm
Operator : PS
Sample : A0E0312-02
Misc : 1X 5mL 8260 BTEX+HALO6 TB
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 13 09:53:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051226.D
Acq On : 12 May 2020 7:12 pm 05/13/20 tnl
Operator : PS
Sample : A0E0312-02
Misc : 1X 5mL 8260 BTEX+HALO6 TB
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 13 09:53:51 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

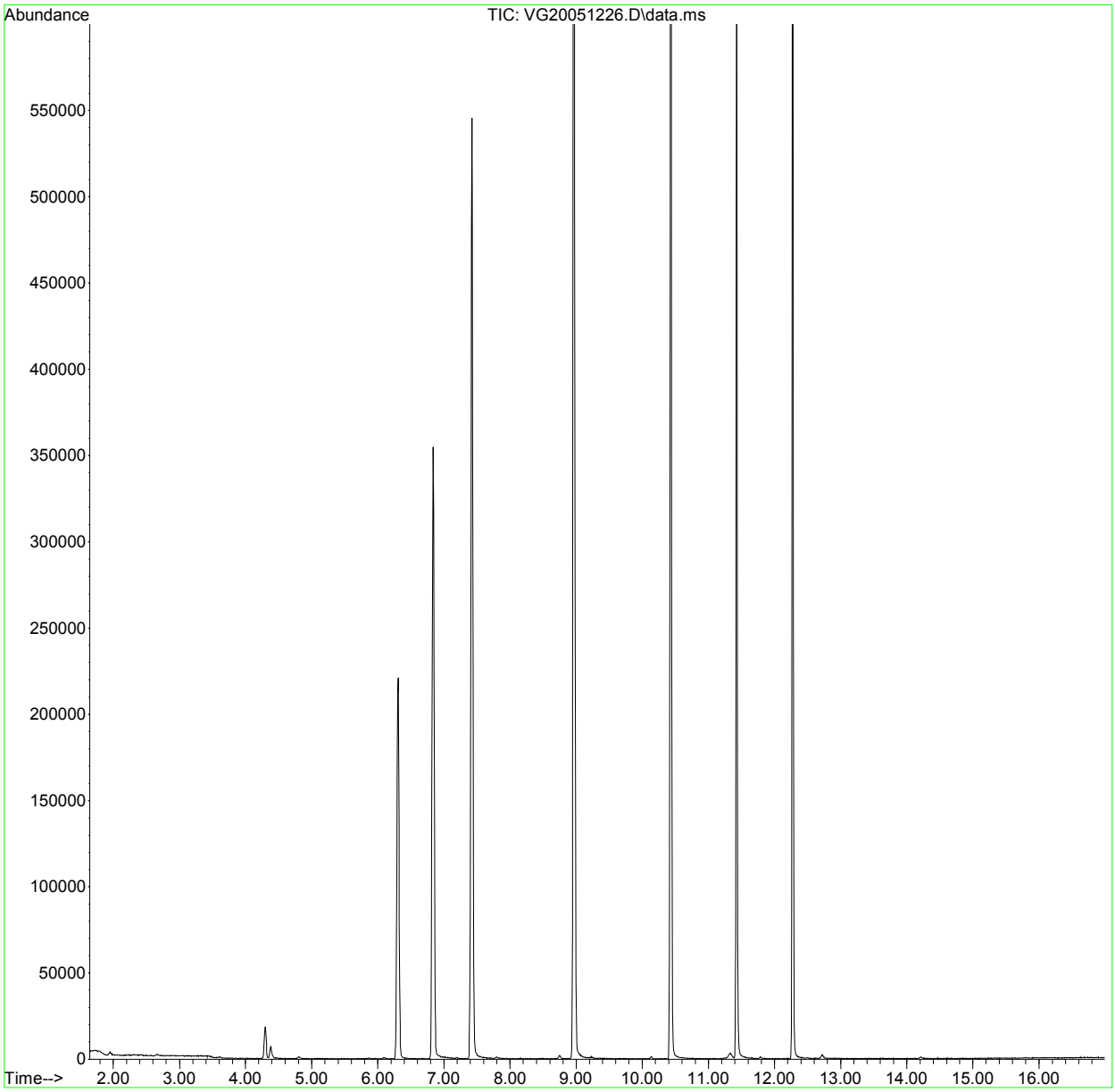
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	137386	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	414674	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	185055	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	153162	56.07	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	484767	54.84	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	565677	49.96	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	149362	50.31	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.972	50	381	0.11	ug/L		94
6) Chloroethane	2.710	64	142	Below Cal			75
8) Ethanol	3.612	45	561	7.89	ug/L		76
14) Methylene Chloride	4.295	84	7073	2.26	ug/L		99
15) Acetone	4.374	43	9533	6.76	ug/L		99
19) tert-Butanol (TBA)	4.813	59	906	2.18	ug/L	#	51

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E12021\
Data File : VG20051226.D
Acq On : 12 May 2020 7:12 pm
Operator : PS
Sample : A0E0312-02
Misc : 1X 5mL 8260 BTEX+HALO6 TB
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 13 09:53:51 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard OR 97223 phone 503-718-2323

Selected Volatile Organic Compounds by EPA 5035A/8260C
Benchsheet & Analysis Sequence Data

Batch 0050519
Sequence 0E14042 (A0E0312-01)

PREPARATION BENCH SHEET

Apex Laboratories

BATCH #: 0050519 (Soil)

Prep Method: EPA 5035A

Lab Number	Cont.	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	ClientID / Sample	Extraction Comments	pH*
0050519-BLK1		QC	05/14/20 09:00	7.5	5							
0050519-BS1		QC	05/14/20 09:00	5	5	A20E075		250				
0050519-BS2		QC	05/14/20 09:00	5	5	A20E074		250				
A0E0105-01RE1	B	8260C Full List	(Date Sampled)	4.4	5					S(OT)-71"	FP Added for BatchQC in: 0050519	
A0E0105-01RE1	B	8260C BTEX+Halo6	(Date Sampled)	4.4	5					S(OT)-71"	FP Added for BatchQC in: 0050519	
A0E0105-01RE1	B	8260D BTEX+N	(Date Sampled)	4.4	5					S(OT)-71"	FP	
0050519-MS1		QC	05/01/20 16:00	4.4	5	A20E075	A0E0105-01RE1	300			77.3%	
A0E0281-17	B	8260C BTEX+Halo6	(Date Sampled)	5.29	5					PDI-056SC-B-10-11.5-200510	FP	
A0E0281-18	B	8260C BTEX+Halo6	(Date Sampled)	3.38	5					PDI-1056SC-B-02-05-200510	FP	
A0E0281-20	B	8260C BTEX+Halo6	(Date Sampled)	4.48	5					PDI-091SC-B-00-02-200510	FP	
A0E0281-21	B	8260C BTEX+Halo6	(Date Sampled)	3.99	5					PDI-091SC-B-02-04-200510	FP	
A0E0281-22	B	8260C BTEX+Halo6	(Date Sampled)	4.63	5					PDI-091SC-B-04-06-200510	FP	
A0E0310-01	D	8260C Full List	(Date Sampled)	5.39	5					PDI-051SC-C-00-6.9-200511	FP	
A0E0310-02	D	8260C Full List	(Date Sampled)	5.88	5					PDI-060SC-C-00-6.8-200511	FP	
A0E0312-01	B	8260C Full List	(Date Sampled)	5.11	5					PDI-087SC-BB-05-07-200511	FP Added for BatchQC in: 0050519	
A0E0312-01	B	8260C BTEX+Halo6	(Date Sampled)	5.11	5					PDI-087SC-BB-05-07-200511	FP	
A0E0312-01	B	8260D BTEX+N	(Date Sampled)	5.11	5					PDI-087SC-BB-05-07-200511	FP Added for BatchQC in: 0050519	
0050519-DUP1		QC	05/11/20 13:10	4.95	5		A0E0312-01					
A0E0314-01	D	8260C Full List	(Date Sampled)	4.61	5					PDI-058SC-C-00-10.3-200512	FP	

*pH <2 verified_____

Standards/Reagents

IMA
5/15/20

Prepared By: Date

5/15/20

Reviewed By: Date

Printed: 5/15/2020 9:41:36AM

PREPARATION BENCH SHEET

Apex Laboratories

BATCH #: 0050519 (Soil)

Prep Method: EPA 5035A

Lab Number	Cont.	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	ClientID / Sample	Extraction Comments	pH*

Reagent(s)

Std ID	Exp. Date	Description
A18J327	11/30/23	Balance s/n 593312
A19J076	10/04/20	Methanol - Fisher (P/T) #191722

Analyte Spike(s)

Std ID	Exp. Date	Description
A20E074	09/13/20	Prim NWTPH-Gx Spike (500 ug/mL)
A20E075	10/05/20	8260 Cal. Std. B VOC+OXY Spike (20-40ug/mL

Surrogate(s)

Std ID	Exp. Date	Description

SOIL MS10

Prepared By: Date

Reviewed By: Date

Printed: 5/15/2020 9:41:36AM

Volatile Soils Matrix Spike Volume Calculation (Validated 5/3/2013)
Enter the Spike Amount value into the Bench Sheet to ensure correct MS/MSD recoveries.

Batch: 50519

Matrix Spike

Sample Weight	Final Volume	Dilution	Dry Weight
g	mL		%
4.400	5	50	77.3

Final Spike Level	**Spike Amount**
ug/kg	**ul**
1763.73	**300**

Assumptions:
Spiking Solution = 20ug/mL
Spike Amount into 50mL = 50ul
Dilution = 1mL of MeOH to 50mL of water
Initial Spike Concentration = 20ug/L

A0E0105-01RE1

IMA
5/14/20

Worksheet

5035 Field Prep Worksheet (Validated 7/11/16)

Sample ID	Container	Container Weight (g)	Tare Weight (g)	Net Sample Weight (g)	Formula Check
A0E0281-17	B	38.12	32.83	5.29	
18	B	36.31	32.93	3.38	
20	B	37.14	32.66	4.48	
21	B	36.85	32.86	3.99	
22	B	37.57	32.94	4.63	
A0E0310-01	D	38.6	33.21	5.39	
2	D	38.72	32.84	5.88	
A0E0312-01	B	37.96	32.85	5.11	
1	C	37.96	33.01	4.95	
A0E0314-01	D	37.41	32.8	4.61	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	

IMA
5/15/20

A0E0281

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0E0281-17		**PDI-056SC-B-10-11.5-200510**			Sampled: **05/10/20 08:30**
B Sediment	40 mL VOA - 5035 (MeOH)	Container Weight (g): 38.12	Tare Weight (g): 32.83	Volume MeOH (mL): (5) 10 15 Other	Notes:
C Sediment	40 mL VOA - 5035 (MeOH)	Container Weight (g): 41.78 (4) 5/11/20	Tare Weight (g): 33.19	Volume MeOH (mL): (5) 10 15 Other	Notes:
BTEX + HALO6		Due:	TAT:		
A0E0281-18		**PDI-1056SC-B-02-05-200510**			Sampled: **05/10/20 08:30**
B Sediment	40 mL VOA - 5035 (MeOH)	Container Weight (g): 36.31	Tare Weight (g): 32.93	Volume MeOH (mL): (5) 10 15 Other	Notes:
C Sediment	40 mL VOA - 5035 (MeOH)	Container Weight (g): 37.54	Tare Weight (g): 32.72	Volume MeOH (mL): (5) 10 15 Other	Notes:
		Due:	TAT:		
A0E0281-20		**PDI-091SC-B-00-02-200510**			Sampled: **05/10/20 12:45**
B Sediment	40 mL VOA - 5035 (MeOH)	Container Weight (g): 37.14	Tare Weight (g): 32.66	Volume MeOH (mL): (5) 10 15 Other	Notes:
C Sediment	40 mL VOA - 5035 (MeOH)	Container Weight (g): 34.97	Tare Weight (g): 32.91	Volume MeOH (mL): (5) 10 15 Other	Notes:
		Due:	TAT:		
A0E0281-21		**PDI-091SC-B-02-04-200510**			Sampled: **05/10/20 12:45**
B Sediment	40 mL VOA - 5035 (MeOH)	Container Weight (g): 36.85	Tare Weight (g): 32.86	Volume MeOH (mL): (5) 10 15 Other	Notes:
C Sediment	40 mL VOA - 5035 (MeOH)	Container Weight (g): 37.61	Tare Weight (g): 33.07	Volume MeOH (mL): (5) 10 15 Other	Notes:
		Due:	TAT:		
A0E0281-22		**PDI-091SC-B-04-06-200510**			Sampled: **05/10/20 12:45**
B Sediment	40 mL VOA - 5035 (MeOH)	Container Weight (g): 37.57	Tare Weight (g): 32.94	Volume MeOH (mL): (5) 10 15 Other	Notes:
C Sediment	40 mL VOA - 5035 (MeOH)	Container Weight (g): 36.90	Tare Weight (g): 32.55	Volume MeOH (mL): (5) 10 15 Other	Notes:
		Due:	TAT:		

Weighed by: (2) @ 5/11/20 1652

Methanol Reagent ID: A190076 Balance ID: A16J327

A0E0310

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0E0310-01 | **PDI-051SC-C-00-6.9-200511** | Sampled: **05/11/20 15:15**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	38.60	33.21	(5) 10 15 Other	
E Sediment	40 mL VOA - 5035 (MeOH)	37.23	33.02	(5) 10 15 Other	

8260 | Due: | TAT:

A0E0310-02 | **PDI-060SC-C-00-6.8-200511** | Sampled: **05/11/20 14:15**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	38.72	32.84	(5) 10 15 Other	
E Sediment	40 mL VOA - 5035 (MeOH)	39.22	32.91	(5) 10 15 Other	

8260 | Due: | TAT:

Weighed by: (8) @ 5/12/20 1527

Methanol Reagent Gas 19e676 | Balance ID: AB3023

A0E0312

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0E0312-01	PDI-087SC-BB-05-07-200511	Sampled: 05/11/20 13:10

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Sediment	40 mL VOA - 5035 (MeOH)	37.96	32.85	(5) 10 15 Other	
C Sediment	40 mL VOA - 5035 (MeOH)	37.96	33.01	(5) 10 15 Other	DUP

BTEX + HALO6 Due: TAT:

Weighed by: 8 @ 5/12/20 1528

Methanol Reagent ID: A19J076 Balance ID: A18J321

Print Date: 5/12/2020 3:22:26PM

A0E0314

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0E0314-01	PDI-058SC-C-00-10.3-200512	Sampled: 05/12/20 08:50

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	37.41	32.80	(5) 10 15 Other	
E Sediment	40 mL VOA - 5035 (MeOH)	37.66	33.02	(5) 10 15 Other	

8260 Due: TAT:

5/12/20

Weighed by: (SC) @ (SC) 5/12/20 1529

Methanol Reagent ID: A190676 Balance ID: A198327

Print Date: 5/12/2020 3:22:14PM

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**0E14042**	Instrument:	**VOA-GCMS10**
Date:	**05/14/20 09:31**	Calibration:	**A0D1605**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0E14042-IBL1	Soil	QC	QC			A19L200	
2	0E14042-TUN1	Soil	QC	QC			A19L200	
3	0E14042-CCV1	Soil	QC	QC			A19L200	
4	0050519-BS1	Soil	QC	QC		0050519	A19L200	
5	0E14042-CCV2	Soil	QC	QC			A19L200	
6	0050519-BS2	Soil	QC	QC		0050519	A19L200	
7	0050519-BLK1	Soil	QC	QC		0050519	A19L200	
8	A0E0105-01RE1	Soil	8260D BTEX+N		05/14/20	0050519	A19L200	
"	"	Soil	8260C Full List	(QC Source)		0050519	A19L200	
"	"	Soil	8260C BTEX+Halo6	(QC Source)		0050519	A19L200	
9	0050519-MS1	Soil	QC	QC		0050519	A19L200	
10	0E14042-IBL2	Soil	QC	QC			A19L200	
11	A0E0312-01	Soil	8260C BTEX+Halo6	Anchor QEA, LLC	05/26/20	0050519	A19L200	
"	"	Soil	8260C Full List	(QC Source)		0050519	A19L200	
"	"	Soil	8260D BTEX+N	(QC Source)		0050519	A19L200	
12	0050519-DUP1	Soil	QC	QC		0050519	A19L200	
13	A0E0281-17	Soil	8260C BTEX+Halo6	Anchor QEA, LLC	05/22/20	0050519	A19L200	
14	A0E0314-01	Soil	8260C Full List	Anchor QEA, LLC	05/26/20	0050519	A19L200	
15	A0E0281-22	Soil	8260C BTEX+Halo6	Anchor QEA, LLC	05/22/20	0050519	A19L200	
16	A0E0310-01	Soil	8260C Full List	Anchor QEA, LLC	05/26/20	0050519	A19L200	
17	A0E0281-21	Soil	8260C BTEX+Halo6	Anchor QEA, LLC	05/22/20	0050519	A19L200	
18	A0E0281-18	Soil	8260C BTEX+Halo6	Anchor QEA, LLC	05/22/20	0050519	A19L200	
19	A0E0281-20	Soil	8260C BTEX+Halo6	Anchor QEA, LLC	05/22/20	0050519	A19L200	
20	A0E0310-02	Soil	8260C Full List	Anchor QEA, LLC	05/26/20	0050519	A19L200	
21	0E14042-IBL3	Soil	QC	QC			A19L200	

IMA
5/15/20

Comments:

Data Entered By:_____

Data Reviewed By: dgj 5/15/20

Volatile Soils Matrix Spike Volume Calculation (Validated 5/3/2013)
Enter the Spike Amount value into the Bench Sheet to ensure correct MS/MSD recoveries.

Batch: 50519

Matrix Spike

Sample Weight	Final Volume	Dilution	Dry Weight
g	mL		%
4.400	5	50	77.3

Final Spike Level	**Spike Amount**
ug/kg	**ul**
1763.73	**300**

Assumptions:
Spiking Solution = 20ug/mL
Spike Amount into 50mL = 50ul
Dilution = 1mL of MeOH to 50mL of water
Initial Spike Concentration = 20ug/L

A0E0105-01RE1

IMA
5/14/20

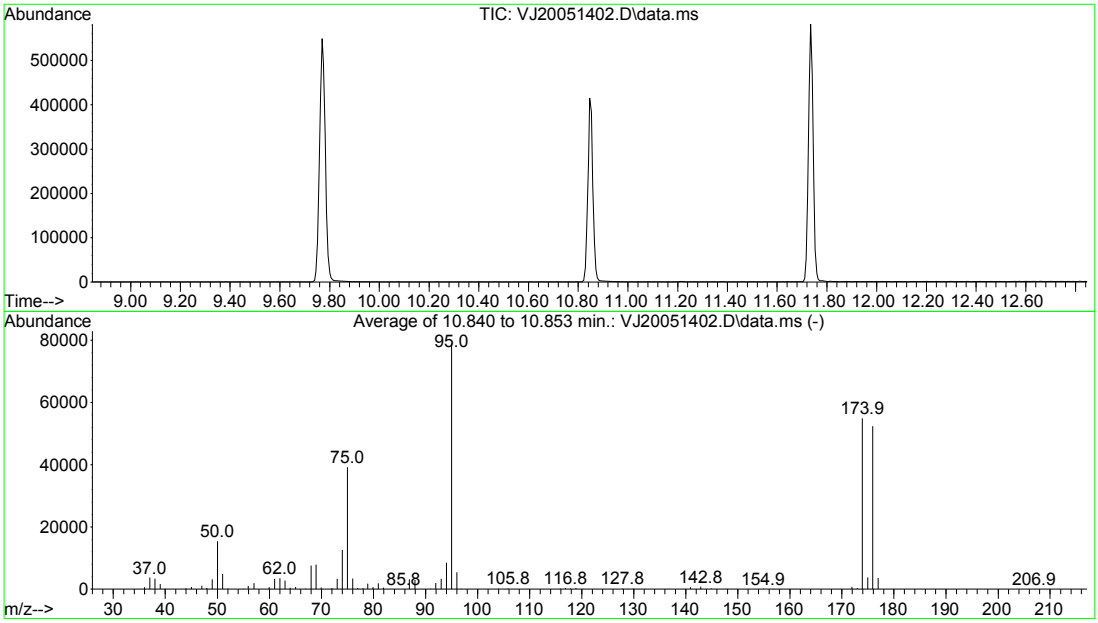
BFB

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051402.D
Acq On : 14 May 2020 10:53
Operator : IMA
Sample : 0E14042-TUN1
Misc : 1X 5mL A19L200 IS/SURR
ALS Vial : 2 Sample Multiplier: 1

IMA
5/14/20

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VJ200414S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Wed Apr 15 13:36:53 2020



AutoFind: Scans 1522, 1523, 1524; Background Corrected with Scan 1515

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	143.7	78952	PASS
96	95	5	9	6.9	5469	PASS
173	174	0.00	2	0.7	368	PASS
174	95	50	200	69.6	54925	PASS
175	174	5	9	7.0	3848	PASS
176	174	95	105	95.4	52384	PASS
177	176	5	10	6.8	3585	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051402.D
Acq On : 14 May 2020 10:53
Operator : IMA
Sample : 0E14042-TUN1
Misc : 1X 5mL A19L200 IS/SURR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 14 14:58:01 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

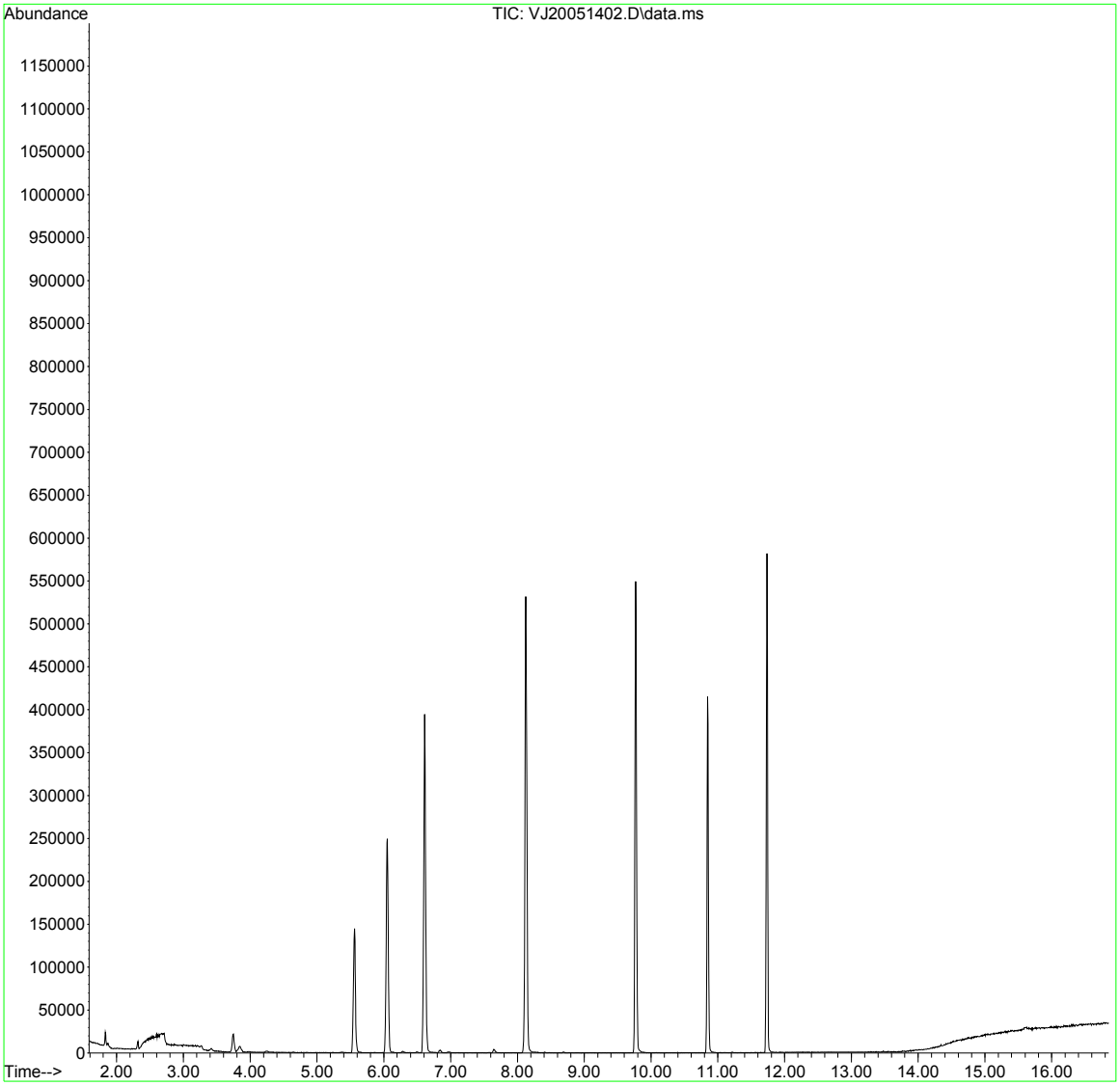
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	108877	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.770	117	290267	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.735	152	121781	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	98637	51.60	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.612	114	336722	49.36	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	400636	50.76	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	92066	49.77	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.873	50	3060	0.87	ug/L		93
5) Bromomethane	2.317	96	4323	Below Cal			96
6) Chloroethane	2.457	64	61	0.10	ug/L	#	1
8) Ethanol	3.352	45	197	2.91	ug/L	#	29
12) Iodomethane	3.254	142	770	4.73	ug/L		81
13) Methylene Chloride	3.747	84	10585	4.43	ug/L		96
14) Acetone	3.838	43	6310	4.66	ug/L		96
18) tert-Butanol (TBA)	4.240	59	2054	3.12	ug/L	#	74
36) iso-Butyl Alcohol	6.290	43	873	11.85	ug/L		82
39) tert-Amyl ethyl ether ...	6.831	59	535	0.09	ug/L	#	21
84) Naphthalene	13.481	128	842	0.13	ug/L	#	45

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051402.D
Acq On : 14 May 2020 10:53
Operator : IMA
Sample : 0E14042-TUN1
Misc : 1X 5mL A19L200 IS/SURR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 14 14:58:01 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051403.D
Acq On : 14 May 2020 11:20
Operator : IMA
Sample : 0050519-BS1
Misc : 50X A20E075 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

IMA
5/14/20

Quant Time: May 14 14:58:09 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene (I)	50.000	50.000	0.0	93	0.00
2		Dichlorodifluoromethane	20.000	16.660	16.7	88	0.00
3	P	Chloromethane	20.000	18.647	6.8	97	0.00
4	C	Vinyl Chloride	20.000	21.972	-9.9	119	0.00
5		Bromomethane	20.000	20.574	-2.9	92	-0.01
6		Chloroethane	20.000	16.945	15.3	86	-0.02
7		Trichlorofluoromethane	20.000	14.843	25.8#	74	-0.02
8		Ethanol	1250.000	1790.420	-43.2#	144	-0.04
9	C	1,1-Dichloroethene	20.000	19.064	4.7	109	-0.02
10		Carbon Disulfide	20.000	18.017	9.9	95	-0.02
11		Freon 113	20.000	19.372	3.1	91	-0.02
12		Iodomethane	20.000	16.938	15.3	89	-0.02
13		Methylene Chloride	20.000	20.839	-4.2	104	-0.01
14		Acetone	40.000	49.356	-23.4#	121	0.00
15		t-1,2-Dichloroethene	20.000	20.806	-4.0	103	-0.01
16		n-Hexane	20.000	20.838	-4.2	100	-0.02
17		Methyl-tert-butyl-ether	20.000	21.302	-6.5	105	0.00
18		tert-Butanol (TBA)	1250.000	1716.977	-37.4#	133	-0.03
19		Diisopropyl ether (DIPE)	5.000	5.247	-4.9	103	0.00
20	P	1,1-Dichloroethane	20.000	21.150	-5.7	103	-0.01
21		Acrylonitrile	20.000	23.874	-19.4	109	0.00
22		Ethyl-tert-butyl ether (ETB	5.000	5.110	-2.2	97	0.00
23		c-1,2-Dichloroethene	20.000	21.036	-5.2	102	0.00
24		2,2-Dichloropropane	20.000	21.585	-7.9	111	0.00
25		Bromochloromethane	20.000	22.497	-12.5	109	0.00
26	C	Chloroform	20.000	20.799	-4.0	100	0.00
27		Carbon Tetrachloride	20.000	21.575	-7.9	98	-0.01
28		Tetrahydrofuran	20.000	22.366	-11.8	110	0.00
29		1,1,1-Trichloroethane	20.000	21.775	-8.9	103	-0.01
30	S	Dibromofluoromethane (S)	50.000	50.451	-0.9	95	0.00
31		1,1-Dichloropropene	20.000	21.443	-7.2	99	0.00
32		2-Butanone (MEK)	40.000	47.885	-19.7	117	0.00
33		Benzene	20.000	20.300	-1.5	101	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.925	1.5	99	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051403.D
Acq On : 14 May 2020 11:20
Operator : IMA
Sample : 0050519-BS1
Misc : 50X A20E075 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 14 14:58:09 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
35		1,2-Dichloroethane (EDC)	20.000	21.773	-8.9	106	0.00
36		iso-Butyl Alcohol	500.000	636.545	-27.3#	131	-0.02
37	S	1,4-Difluorobenzene (S)	50.000	48.795	2.4	92	0.00
38		Trichloroethene (TCE)	20.000	18.723	6.4	90	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	4.609	7.8	95	0.00
40		Dibromomethane	20.000	21.717	-8.6	101	0.00
41	C	1,2-Dichloropropane	20.000	21.441	-7.2	104	0.00
42		Bromodichloromethane	20.000	22.121	-10.6	102	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	94	0.00
44		c-1,3-Dichloropropene	20.000	20.612	-3.1	97	0.00
45	S	Toluene-d8 (S)	50.000	49.320	1.4	93	0.00
46	C	Toluene	20.000	19.675	1.6	98	0.00
47		Tetrachloroethene (PCE)	20.000	20.659	-3.3	95	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	49.981	-25.0#	115	0.00
49		t-1,3-Dichloropropene	20.000	23.942	-19.7	105	0.00
50		1,1,2-Trichloroethane	20.000	21.509	-7.5	100	0.00
51		Dibromochloromethane	20.000	19.972	0.1	97	0.00
52		1,3-Dichloropropane	20.000	20.926	-4.6	99	0.00
53		1,2-Dibromoethane (EDB)	20.000	21.297	-6.5	98	0.00
54		2-Hexanone	40.000	44.391	-11.0	116	0.00
55	P	Chlorobenzene	20.000	19.774	1.1	98	0.00
56	C	Ethylbenzene	20.000	21.008	-5.0	99	0.00
57		1,1,1,2-Tetrachloroethane	20.000	22.048	-10.2	100	0.00
58		m,p-Xylenes (2)	40.000	41.222	-3.1	100	0.00
59		o-Xylene	20.000	19.150	4.3	95	0.00
60		Styrene	20.000	19.651	1.7	100	0.00
61	P	Bromoform	20.000	22.530	-12.7	103	0.00
62		Isopropylbenzene	20.000	20.991	-5.0	94	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	96	0.00
64	S	4-Bromofluorobenzene (S)	50.000	49.882	0.2	94	0.00
65		Bromobenzene	20.000	20.202	-1.0	97	0.00
66		n-Propylbenzene	20.000	21.138	-5.7	99	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051403.D
Acq On : 14 May 2020 11:20
Operator : IMA
Sample : 0050519-BS1
Misc : 50X A20E075 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 14 14:58:09 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
67 P	1,1,2,2-Tetrachloroethane	20.000	23.459	-17.3	110	0.00
68	2-Chlorotoluene	20.000	20.333	-1.7	94	0.00
69	1,3,5-Trimethylbenzene	20.000	22.184	-10.9	98	0.00
70	1,2,3-Trichloropropane	20.000	22.581	-12.9	106	0.00
71	t-1,4-Dichloro-2-butene	20.000	21.772	-8.9	117	0.00
72	4-Chlorotoluene	20.000	22.154	-10.8	103	0.00
73	tert-Butylbenzene	20.000	21.805	-9.0	98	0.00
74	1,2,4-Trimethylbenzene	20.000	22.331	-11.7	97	0.00
75	sec-Butylbenzene	20.000	22.277	-11.4	97	0.00
76	4-Isopropyltoluene	20.000	20.925	-4.6	94	0.00
77	1,3-Dichlorobenzene	20.000	20.746	-3.7	98	0.00
78	1,4-Dichlorobenzene	20.000	19.763	1.2	100	0.00
79	n-Butylbenzene	20.000	20.484	-2.4	96	0.00
80	1,2-Dichlorobenzene	20.000	20.458	-2.3	97	0.00
81	1,2-Dibromo-3-Chloropropane	20.000	20.995	-5.0	105	0.00
82	Hexachlorobutadiene	20.000	20.076	-0.4	97	0.00
83	1,2,4-Trichlorobenzene	20.000	18.565	7.2	85	0.00
84	Naphthalene	20.000	20.612	-3.1	91	0.00
85	1,2,3-Trichlorobenzene	20.000	19.318	3.4	91	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051403.D
Acq On : 14 May 2020 11:20
Operator : IMA
Sample : 0050519-BS1
Misc : 50X A20E075 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 14 14:58:09 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	112638	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.770	117	306654	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.735	152	135069	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	99777	50.45	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.612	114	344344	48.80	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	411264	49.32	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	102341	49.88	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	38579	16.66	ug/L		96
3) Chloromethane	1.879	50	67932	18.65	ug/L		99
4) Vinyl Chloride	1.977	62	55921	21.97	ug/L		94
5) Bromomethane	2.317	96	24351	20.57	ug/L		99
6) Chloroethane	2.439	64	10285	16.95	ug/L		73
7) Trichlorofluoromethane	2.573	101	10206	14.84	ug/L		96
8) Ethanol	3.279	45	125281	1790.42	ug/L		91
9) 1,1-Dichloroethene	3.108	61	65022	19.06	ug/L		99
10) Carbon Disulfide	3.121	76	99304	18.02	ug/L		98
11) Freon 113	3.163	101	41433	19.37	ug/L		97
12) Iodomethane	3.254	142	6991	16.94	ug/L		93
13) Methylene Chloride	3.747	84	51524	20.84	ug/L		90
14) Acetone	3.844	43	69205	49.36	ug/L		97
15) t-1,2-Dichloroethene	3.911	61	80016	20.81	ug/L		96
16) n-Hexane	3.997	86	11039	20.84	ug/L	#	81
17) Methyl-tert-butyl-ether	4.082	73	181461	21.30	ug/L		99
18) tert-Butanol (TBA)	4.252	59	1169738	1716.98	ug/L	#	88
19) Diisopropyl ether (DIPE)	4.477	45	45088	5.25	ug/L		97
20) 1,1-Dichloroethane	4.538	63	97550	21.15	ug/L		99
21) Acrylonitrile	4.605	53	37187	23.87	ug/L		98
22) Ethyl-tert-butyl ether...	4.842	59	38078	5.11	ug/L		94
23) c-1,2-Dichloroethene	5.092	61	75478	21.04	ug/L		97
24) 2,2-Dichloropropane	5.201	77	83772	21.59	ug/L		94
25) Bromochloromethane	5.292	49	50121	22.50	ug/L		83
26) Chloroform	5.378	83	93802	20.80	ug/L		97
27) Carbon Tetrachloride	5.511	117	61984	21.57	ug/L		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051403.D
Acq On : 14 May 2020 11:20
Operator : IMA
Sample : 0050519-BS1
Misc : 50X A20E075 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 14 14:58:09 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
28) Tetrahydrofuran	5.560	42	36571	22.37 ug/L	96
29) 1,1,1-Trichloroethane	5.578	97	85681	21.77 ug/L	94
31) 1,1-Dichloropropene	5.712	75	73385	21.44 ug/L	95
32) 2-Butanone (MEK)	5.700	43	108974	47.89 ug/L	96
33) Benzene	5.962	78	234678	20.30 ug/L	99
34) tert-Amyl methyl ether...	6.114	73	36751	4.92 ug/L	96
35) 1,2-Dichloroethane (EDC)	6.168	62	81049	21.77 ug/L	98
36) iso-Butyl Alcohol	6.247	43	174727	636.55 ug/L	98
38) Trichloroethene (TCE)	6.582	130	52857	18.72 ug/L	95
39) tert-Amyl ethyl ether ...	6.868	59	28169	4.61 ug/L	88
40) Dibromomethane	7.020	93	34475	21.72 ug/L	84
41) 1,2-Dichloropropane	7.130	63	60387	21.44 ug/L	99
42) Bromodichloromethane	7.209	83	66236	22.12 ug/L	97
44) c-1,3-Dichloropropene	7.908	75	77269	20.61 ug/L	98
46) Toluene	8.188	91	231123	19.68 ug/L	98
47) Tetrachloroethene (PCE)	8.638	166	48307	20.66 ug/L	85
48) 4-Methyl-2-Pentanone (...	8.626	43	173296	49.98 ug/L	97
49) t-1,3-Dichloropropene	8.663	75	87336	23.94 ug/L	96
50) 1,1,2-Trichloroethane	8.839	97	52978	21.51 ug/L	99
51) Dibromochloromethane	9.028	129	42923	19.97 ug/L	98
52) 1,3-Dichloropropane	9.125	76	92970	20.93 ug/L	96
53) 1,2-Dibromoethane (EDB)	9.265	107	51598	21.30 ug/L	99
54) 2-Hexanone	9.508	43	120955	44.39 ug/L	97
55) Chlorobenzene	9.788	112	141397	19.77 ug/L	95
56) Ethylbenzene	9.825	91	241629	21.01 ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.849	131	48766	22.05 ug/L	98
58) m,p-Xylenes (2)	9.958	91	360377	41.22 ug/L	95
59) o-Xylene	10.342	91	163516	19.15 ug/L	94
60) Styrene	10.390	104	121131	19.65 ug/L	97
61) Bromoform	10.403	173	29534	22.53 ug/L	93
62) Isopropylbenzene	10.622	105	198088	20.99 ug/L	96
65) Bromobenzene	10.932	156	50269	20.20 ug/L #	75
66) n-Propylbenzene	10.962	91	246323	21.14 ug/L	94
67) 1,1,2,2-Tetrachloroethane	11.017	83	68055	23.46 ug/L	99
68) 2-Chlorotoluene	11.090	126	46079	20.33 ug/L	86
69) 1,3,5-Trimethylbenzene	11.127	105	168049	22.18 ug/L	95
70) 1,2,3-Trichloropropane	11.120	110	24897	22.58 ug/L	89
71) t-1,4-Dichloro-2-butene	11.157	88	10288	21.77 ug/L	95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051403.D
Acq On : 14 May 2020 11:20
Operator : IMA
Sample : 0050519-BS1
Misc : 50X A20E075 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 14 14:58:09 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

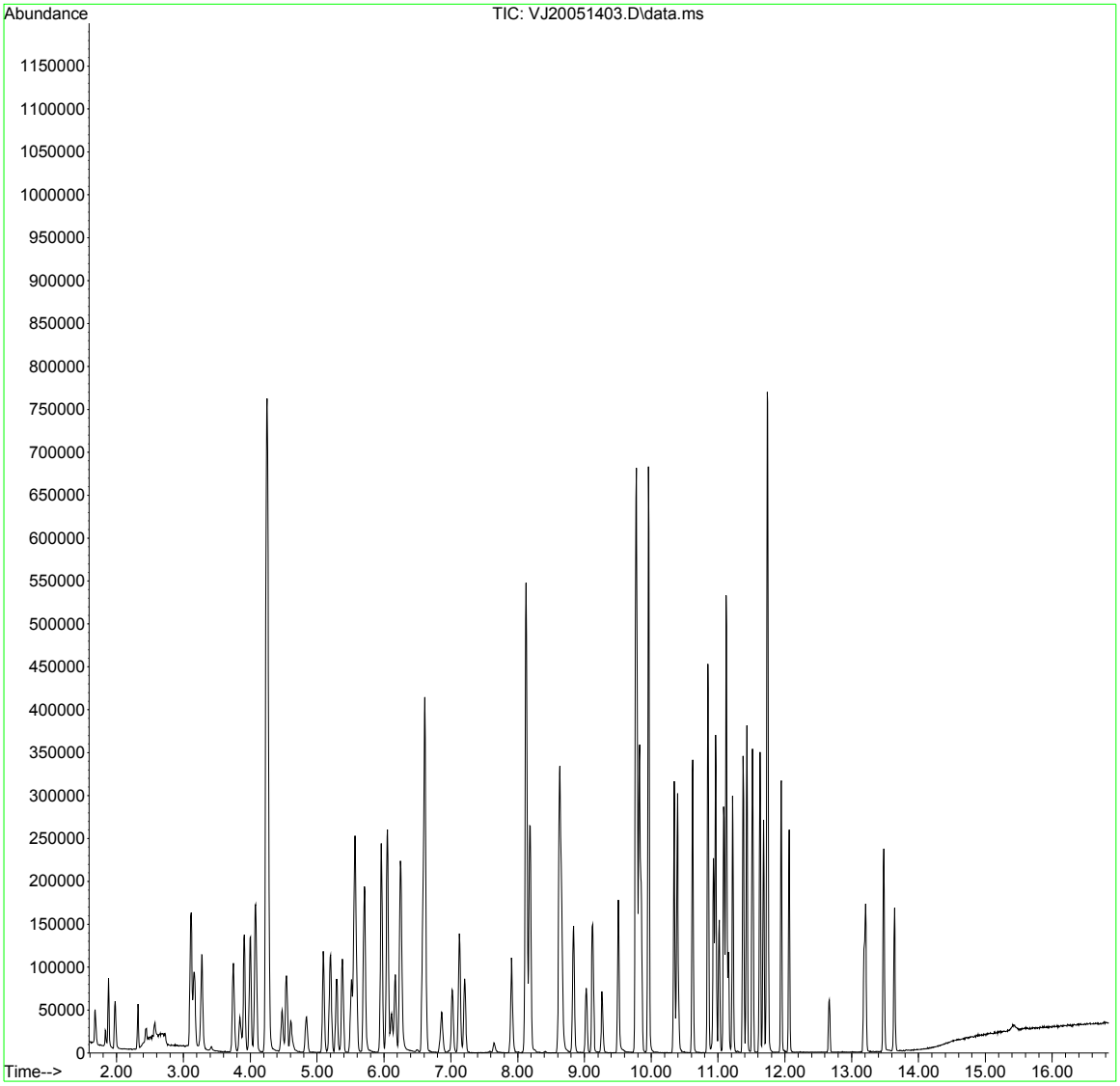
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
72) 4-Chlorotoluene	11.218	91	154809	22.15	ug/L		93
73) tert-Butylbenzene	11.376	91	93042	21.80	ug/L		87
74) 1,2,4-Trimethylbenzene	11.431	105	168234	22.33	ug/L		96
75) sec-Butylbenzene	11.516	105	202393	22.28	ug/L		97
76) 4-Isopropyltoluene	11.625	119	158316	20.93	ug/L		96
77) 1,3-Dichlorobenzene	11.680	146	90444	20.75	ug/L		96
78) 1,4-Dichlorobenzene	11.747	146	91532	19.76	ug/L		95
79) n-Butylbenzene	11.948	91	146483	20.48	ug/L		96
80) 1,2-Dichlorobenzene	12.063	146	81448	20.46	ug/L		96
81) 1,2-Dibromo-3-Chloropr...	12.666	157	12572	20.99	ug/L	#	59
82) Hexachlorobutadiene	13.183	223	12361	20.08	ug/L		93
83) 1,2,4-Trichlorobenzene	13.207	180	44793	18.56	ug/L		93
84) Naphthalene	13.481	128	168147	20.61	ug/L		98
85) 1,2,3-Trichlorobenzene	13.639	180	46207	19.32	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051403.D
Acq On : 14 May 2020 11:20
Operator : IMA
Sample : 0050519-BS1
Misc : 50X A20E075 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 14 14:58:09 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051404.D
Acq On : 14 May 2020 11:47
Operator : IMA
Sample : 0050519-BS2
Misc : 50X A20E074 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 4 Sample Multiplier: 1

IMA
5/14/20

Quant Time: May 14 14:58:19 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene (IS)	50.000	50.000	0.0	91	0.00
2	S	1,4-Difluorobenzene (Sur)	50.000	52.625	-5.3	96	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	50.707	-1.4	95	0.00
4	H	NWTPH-Gx (TPH)	500.000	523.832	-4.8	95	0.00
5	H	TPHg (C5-C9)	500.000	552.191	-10.4	101	0.00
6	H	TPHg (C6-C10)	500.000	565.066	-13.0	102	0.00
7	H	CA-LUFT (C5-C12)	500.000	539.026	-7.8	99	0.00
8		Benzene (NR)	-1.000	0.000	0.0	94	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	97	0.00
10		Toluene (NR)	-1.000	0.000	0.0	100	0.00
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	98	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	94	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	91	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051404.D
Acq On : 14 May 2020 11:47
Operator : IMA
Sample : 0050519-BS2
Misc : 50X A20E074 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 4 Sample Multiplier: 1

IMA
5/14/20

Quant Time: May 14 14:58:19 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

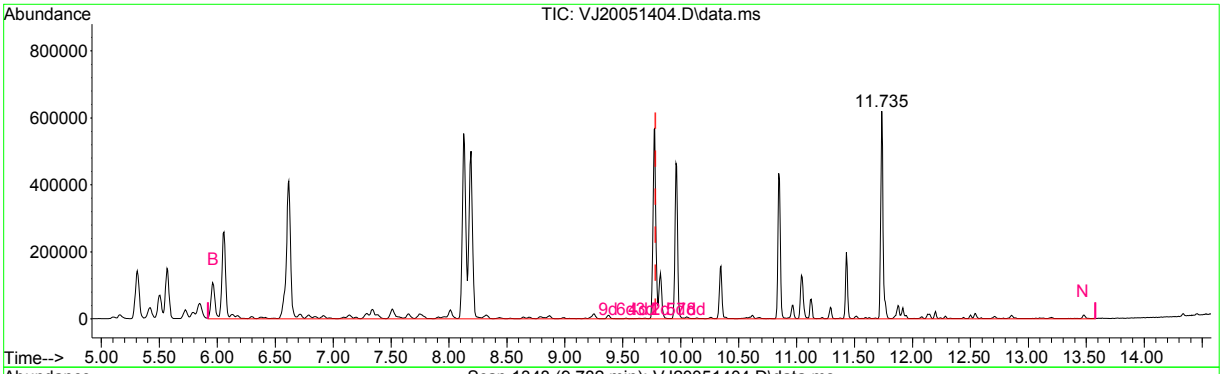
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.059	168	182191	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.618	114	348734	52.62	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	97431	50.71	ug/L	0.00
9) Toluene-d8 (NR)	8.127	98	417679	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	304219	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.735	150	201502	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	4426001m	523.83	ug/L	
5) TPHg (C5-C9)	9.780	TIC	5900426m	552.19	ug/L	
6) TPHg (C6-C10)	9.780	TIC	5286022m	565.07	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	6916326m	539.03	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051404.D
Acq On : 14 May 2020 11:47
Operator : IMA
Sample : 0050519-BS2
Misc : 50X A20E074 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 14 14:58:19 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



TIC: VJ20051404.D\data.ms

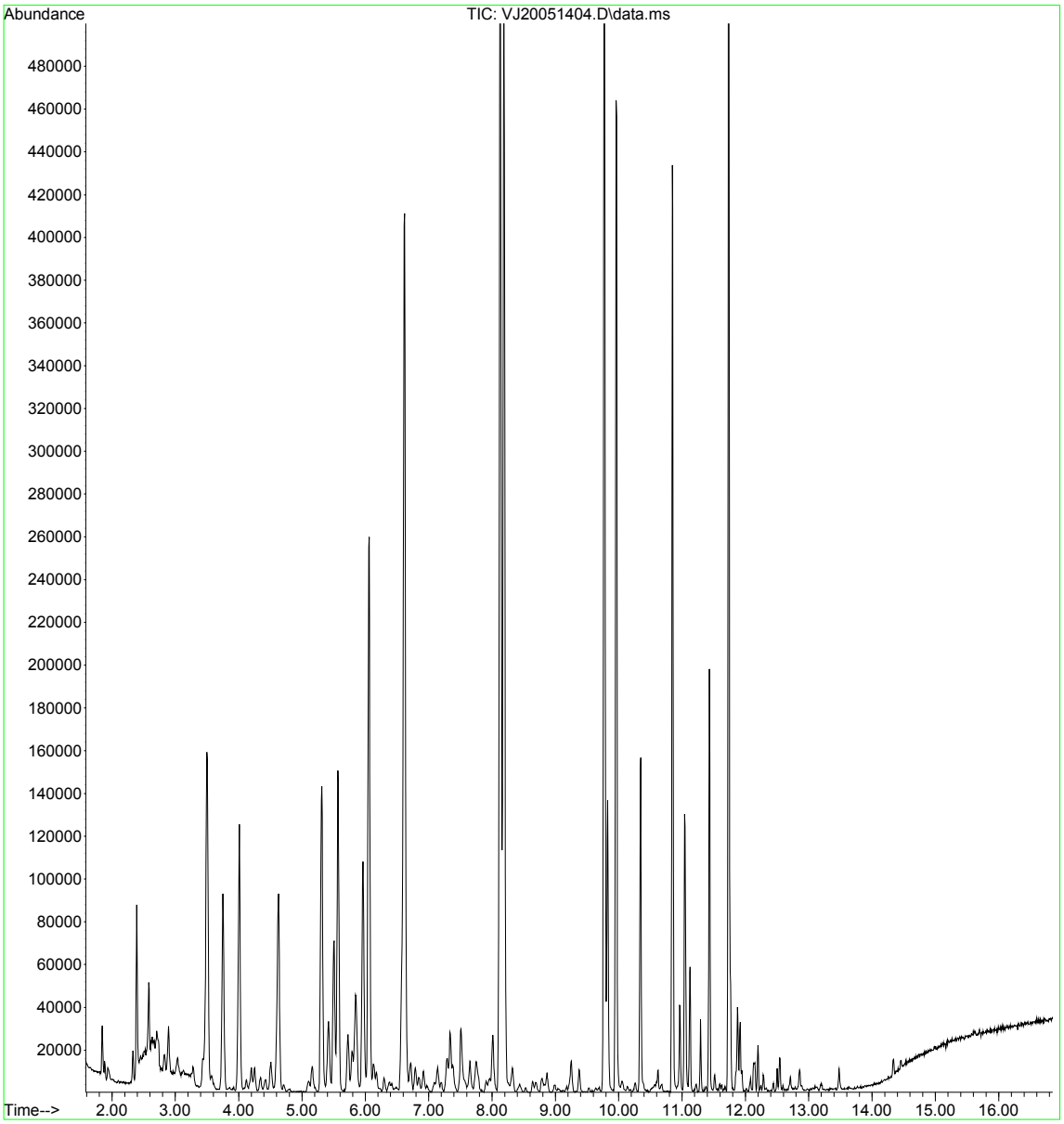
(4) NWTPH-Gx (TPH) (H)

9.780min (0.000) 523.83 ug/L_m

response 4426001

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.01#
0.00	0.00	0.02#
0.00	0.00	0.00

File :C:\msdchem\1\data\2020-05\0E14042\VJ20051404.D
Operator : IMA
Acquired : 14 May 2020 11:47 using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0050519-BS2
Misc Info : 50X A20E074 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051405.D
Acq On : 14 May 2020 12:14
Operator : IMA
Sample : 0050519-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

IMA
5/14/20

Quant Time: May 14 14:58:47 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.053	168	161412	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.612	114	316171	53.85	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	85159	50.03	ug/L	0.00
9) Toluene-d8 (NR)	8.127	98	381966	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.770	117	274949	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.735	150	182378	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	61615m	19.52	ug/L	
5) TPHg (C5-C9)	9.780	TIC	398527m	10.04	ug/L	
6) TPHg (C6-C10)	9.780	TIC	338079m	17.90	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	417936m	15.70	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051405.D
Acq On : 14 May 2020 12:14
Operator : IMA
Sample : 0050519-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

IMA
5/14/20

Quant Time: May 14 14:58:52 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

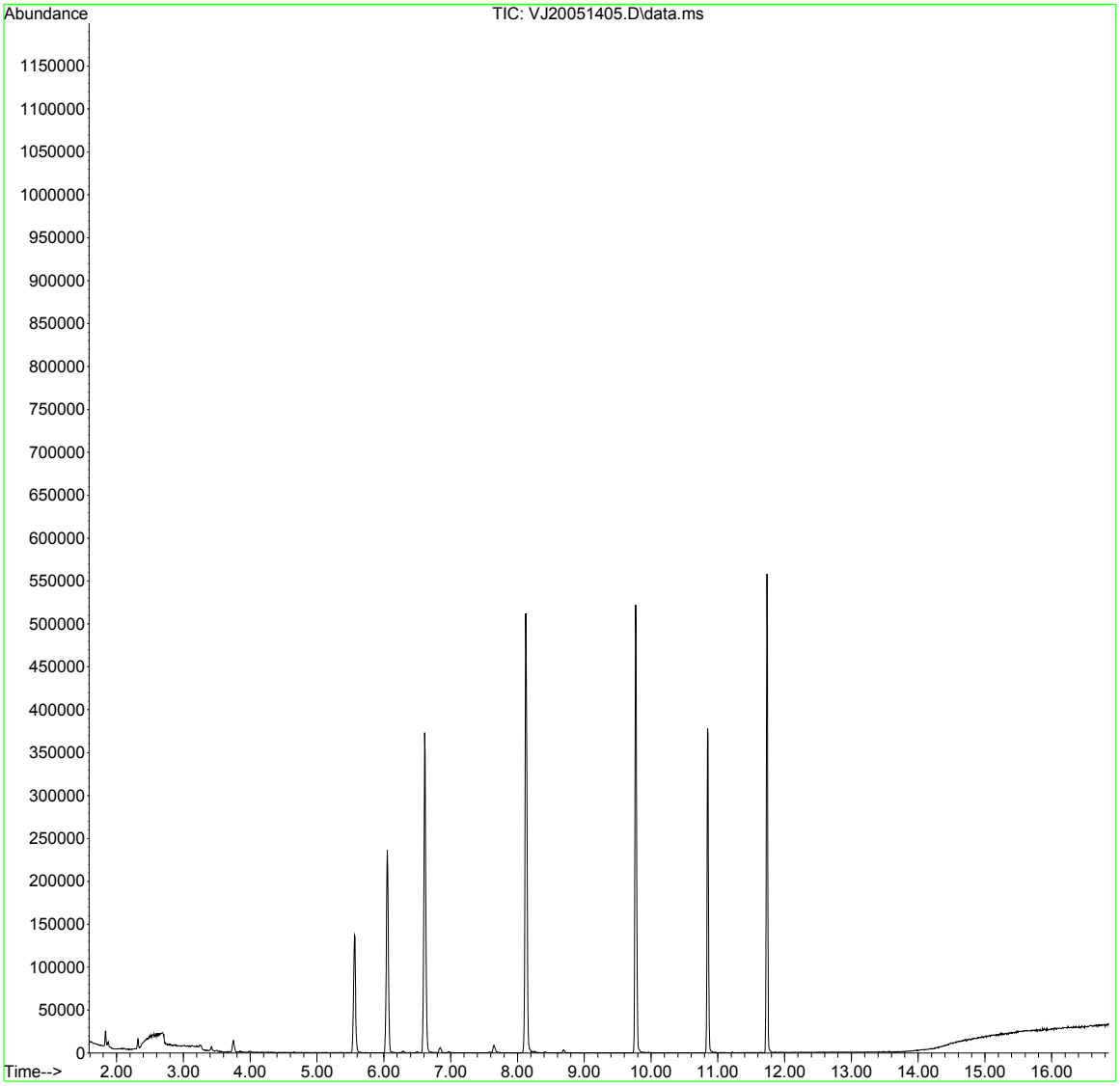
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	102628	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.770	117	274949	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.735	152	115116	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	95987	53.27	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.612	114	315098	49.01	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	380684	50.92	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	85159	48.70	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.873	50	4116	1.24	ug/L		97
5) Bromomethane	2.317	96	5261	1.09	ug/L		97
6) Chloroethane	2.463	64	64	0.12	ug/L	#	1
8) Ethanol	3.352	45	316	4.96	ug/L	#	29
10) Carbon Disulfide	3.126	76	462	0.09	ug/L	#	1
12) Iodomethane	3.260	142	1162	5.72	ug/L		76
13) Methylene Chloride	3.747	84	6485	2.88	ug/L		92
14) Acetone	3.844	43	2110	1.65	ug/L		91
36) iso-Butyl Alcohol	6.284	43	960	12.40	ug/L		87
39) tert-Amyl ethyl ether ...	6.850	59	1000	0.18	ug/L	#	75
58) m,p-Xylenes (2)	9.958	91	578	0.16	ug/L		96
84) Naphthalene	13.481	128	588	0.09	ug/L	#	48

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051405.D
Acq On : 14 May 2020 12:14
Operator : IMA
Sample : 0050519-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 14 14:58:52 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

IMA
5/15/20

Quant Time: May 15 09:42:50 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

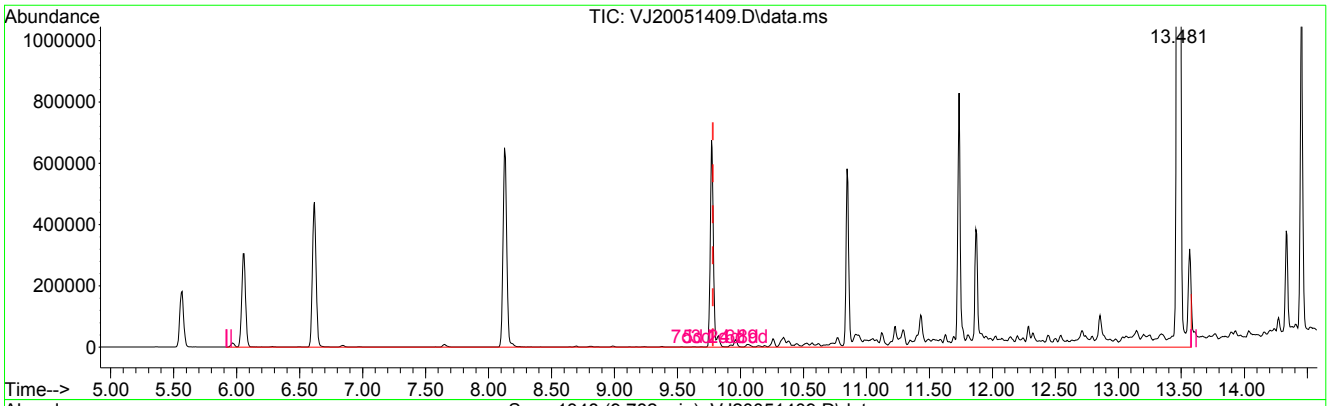
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.059	168	220323	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.618	114	417757	52.13	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.846	174	129544	55.75	ug/L	0.00
9) Toluene-d8 (NR)	8.127	98	498672	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	368623	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.735	150	266046	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	14562152m	1389.94	ug/L	
5) TPHg (C5-C9)	9.780	TIC	1317792m	73.91	ug/L	
6) TPHg (C6-C10)	9.780	TIC	978644m	65.80	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	2979215m	177.95	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:42:50 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



TIC: VJ20051409.D\data.ms

(4) NWTPH-Gx (TPH) (H)

9.780min (0.000) 1389.94 ug/L m

response 14562152

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	3.58#
0.00	0.00	2.71#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

IMA
5/15/20

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	131242	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	368623	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.735	152	170895	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	128081	55.58	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.618	114	417080	50.72	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	497386	49.62	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.846	174	129544	49.90	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.879	50	3050	0.72	ug/L		98
5) Bromomethane	2.323	96	3760	Below Cal			92
8) Ethanol	3.303	45	354	4.34	ug/L		96
10) Carbon Disulfide	3.151	76	17462	2.72	ug/L		95
12) Iodomethane	3.285	142	1176	5.18	ug/L		75
13) Methylene Chloride	3.759	84	5344	1.85	ug/L		87
14) Acetone	3.856	43	2424	1.48	ug/L		96
33) Benzene	5.967	78	12753	0.95	ug/L		99
36) iso-Butyl Alcohol	6.284	43	856	11.22	ug/L		86
39) tert-Amyl ethyl ether ...	6.843	59	1080	0.15	ug/L	#	58
46) Toluene	8.188	91	7071	0.50	ug/L		97
48) 4-Methyl-2-Pentanone (...	8.644	43	426	0.10	ug/L	#	43
56) Ethylbenzene	9.824	91	23086	1.67	ug/L		98
58) m,p-Xylenes (2)	9.958	91	12688	1.29	ug/L		94
59) o-Xylene	10.342	91	9873	1.06	ug/L		94
60) Styrene	10.384	104	525	0.27	ug/L	#	48
62) Isopropylbenzene	10.615	105	3841	0.34	ug/L		92
66) n-Propylbenzene	10.962	91	2983	0.20	ug/L		90
67) 1,1,2,2-Tetrachloroethane	11.023	83	3916	1.07	ug/L	#	38
69) 1,3,5-Trimethylbenzene	11.120	105	13279	1.39	ug/L		91
70) 1,2,3-Trichloropropane	11.151	110	123	0.09	ug/L	#	1
73) tert-Butylbenzene	11.382	91	798	0.15	ug/L	#	38
74) 1,2,4-Trimethylbenzene	11.431	105	28385	2.98	ug/L		95
75) sec-Butylbenzene	11.516	105	3824	0.33	ug/L		88
76) 4-Isopropyltoluene	11.625	119	11061	1.16	ug/L		93
83) 1,2,4-Trichlorobenzene	13.213	180	286	0.09	ug/L	#	34

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

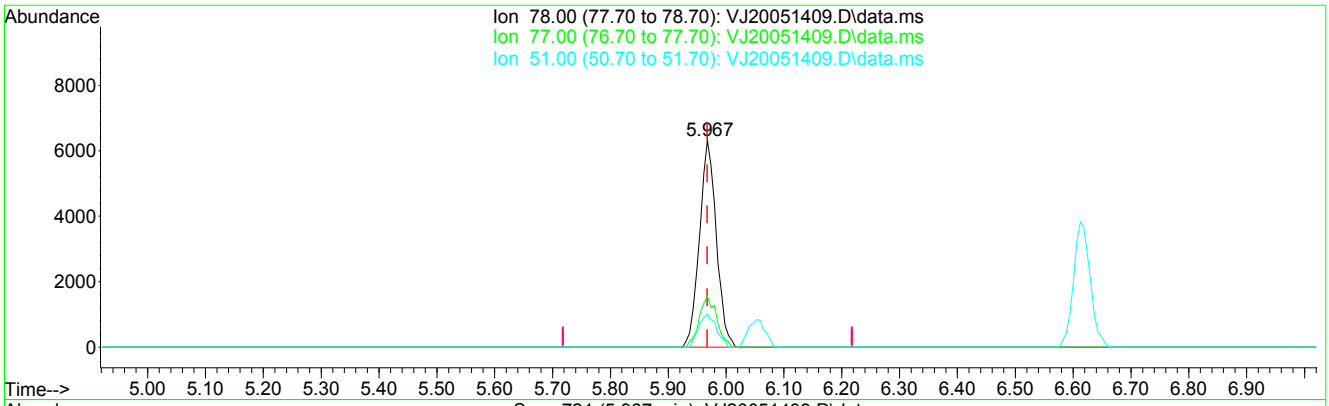
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Naphthalene	13.481	128	5718240	334.87 ug/L	98
85) 1,2,3-Trichlorobenzene	13.663	180	700	0.23 ug/L #	1

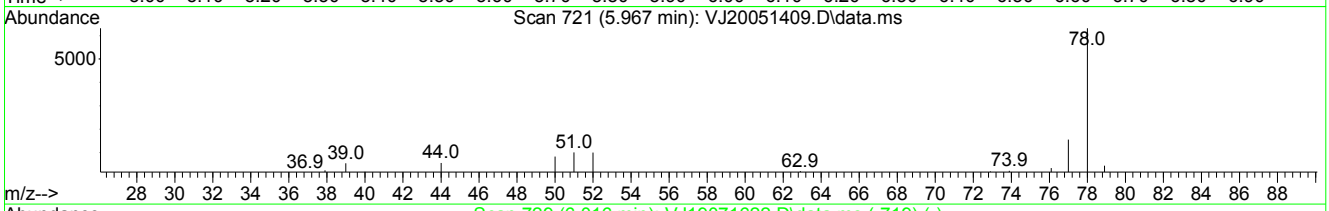
(#) = qualifier out of range (m) = manual integration (+) = signals summed

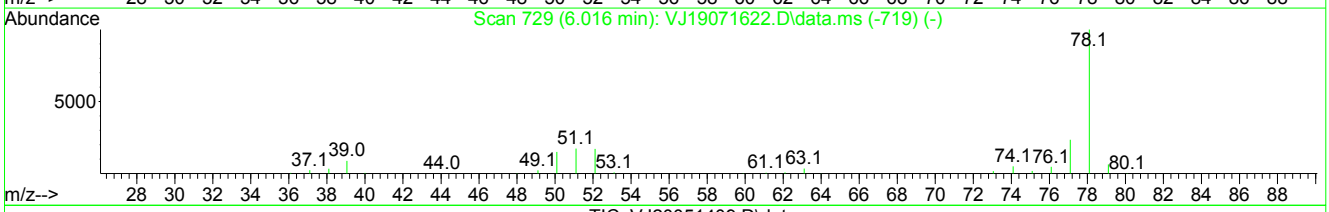
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051409.D\data.ms

(33) Benzene

5.967min (-0.000) 0.95 ug/L

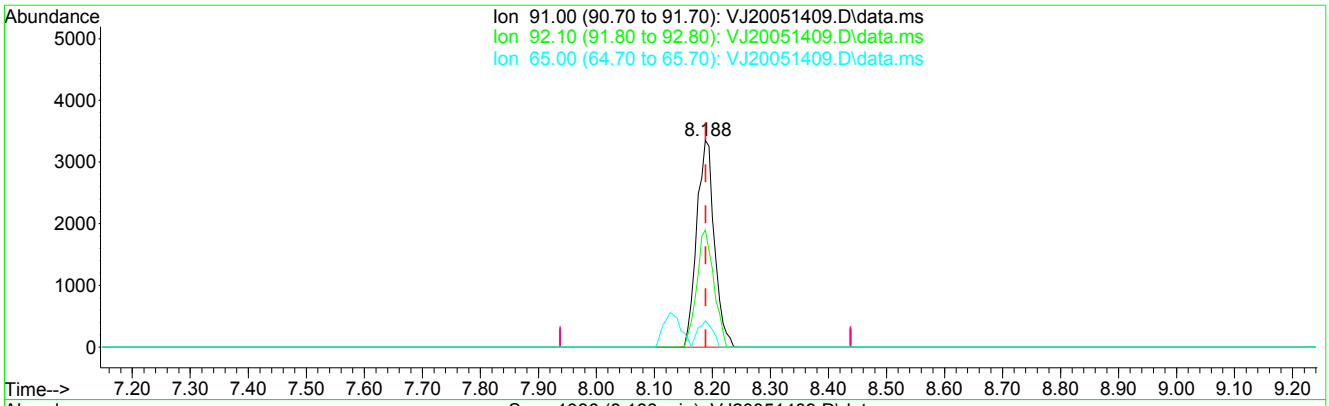
response 12753

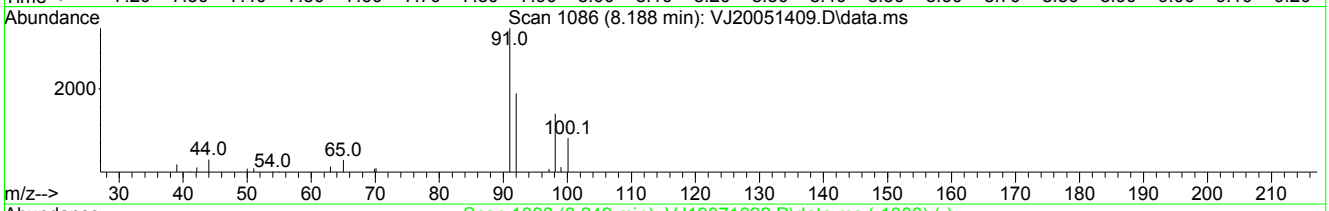
Ion	Exp%	Act%
78.00	100.00	100.00
77.00	23.60	24.59
51.00	16.20	16.00
0.00	0.00	0.00

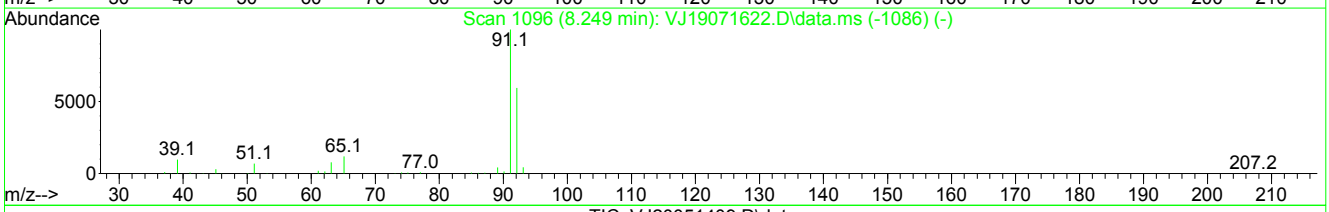
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051409.D\data.ms

(46) Toluene (C)

8.188min (-0.000) 0.50 ug/L

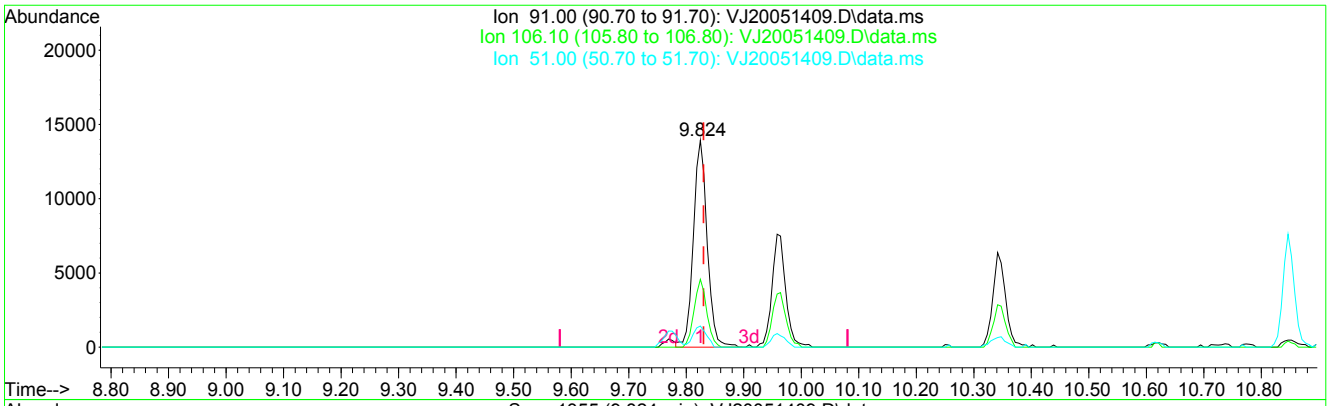
response 7071

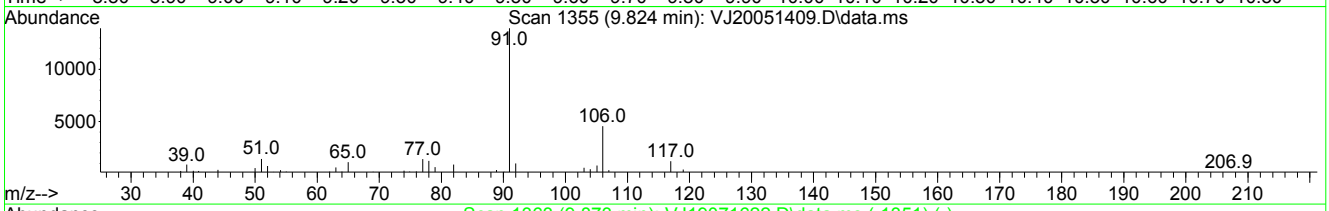
Ion	Exp%	Act%
91.00	100.00	100.00
92.10	58.30	56.67
65.00	11.00	12.74
0.00	0.00	0.00

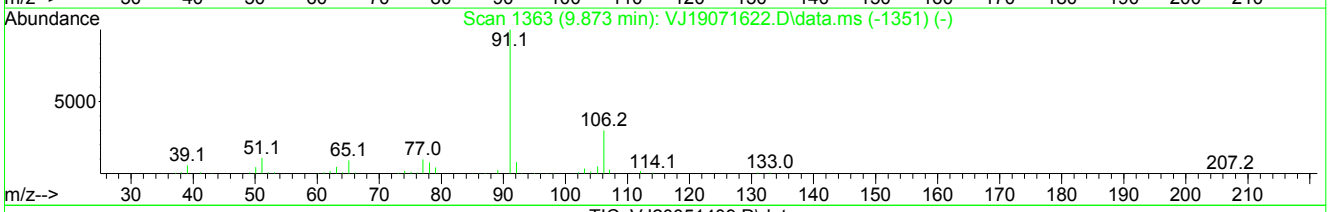
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051409.D\data.ms

(56) Ethylbenzene (C)

9.824min (-0.006) 1.67 ug/L

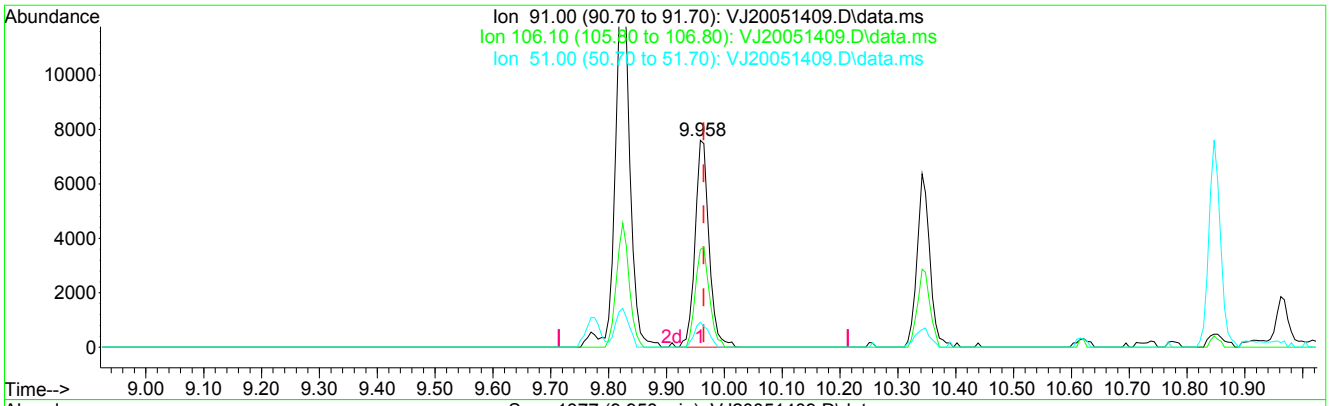
response 23086

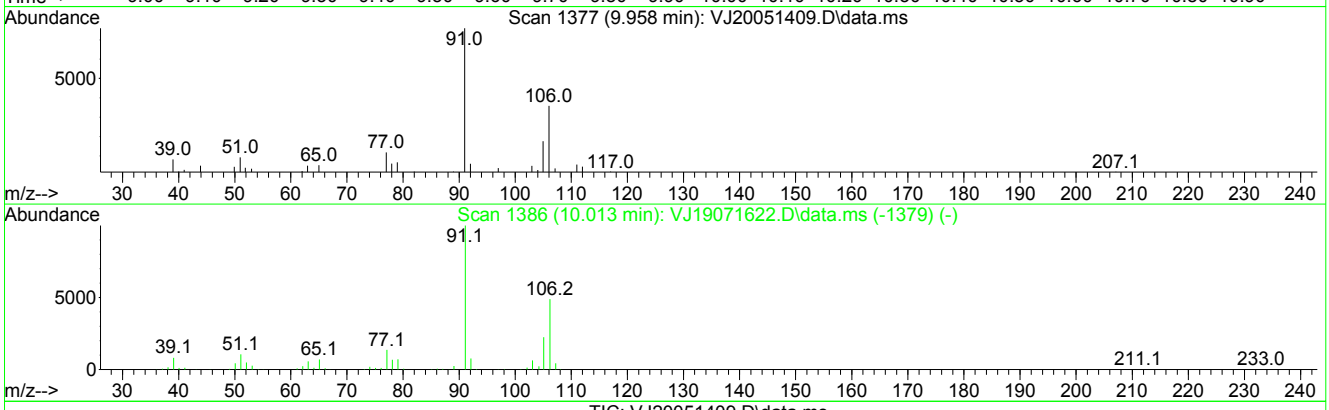
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	31.80	32.78
51.00	9.80	10.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration





TIC: VJ20051409.D\data.ms

(58) m,p-Xylenes (2)

9.958min (-0.006) 1.29 ug/L

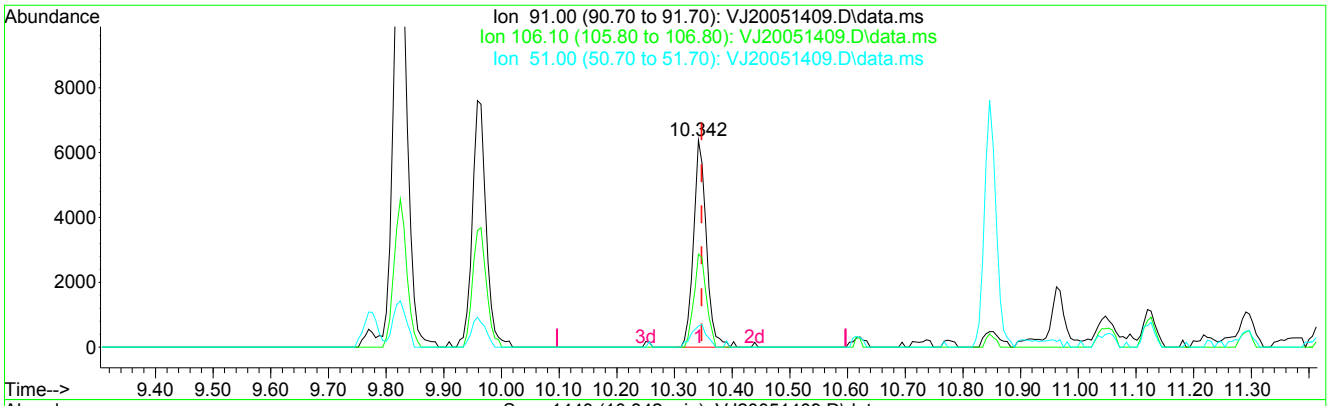
response 12688

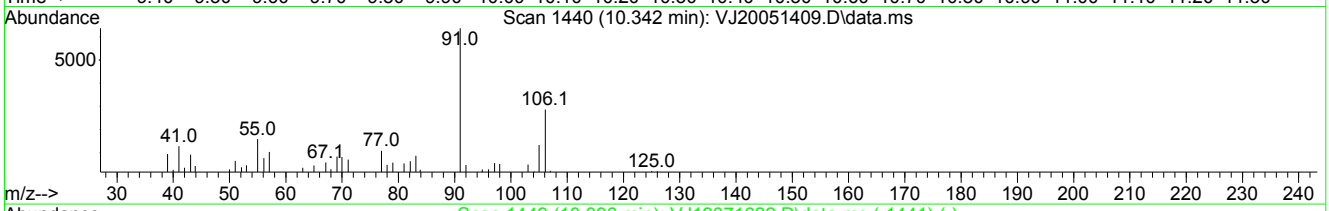
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	51.80	47.24
51.00	9.80	12.11
0.00	0.00	0.00

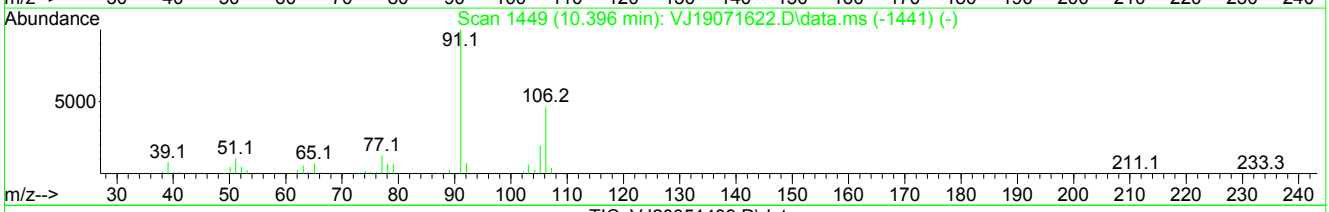
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051409.D\data.ms

(59) o-Xylene

10.342min (-0.005) 1.06 ug/L

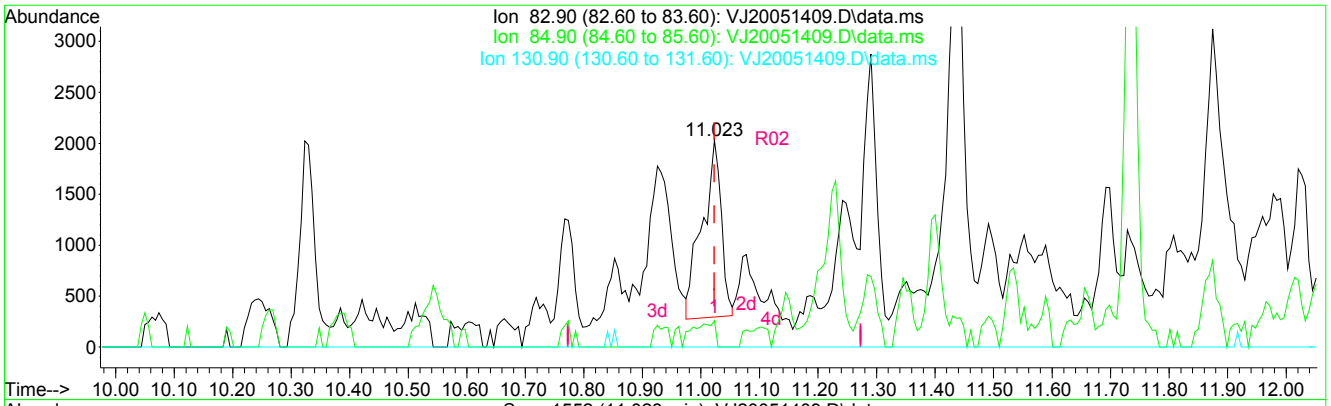
response 9873

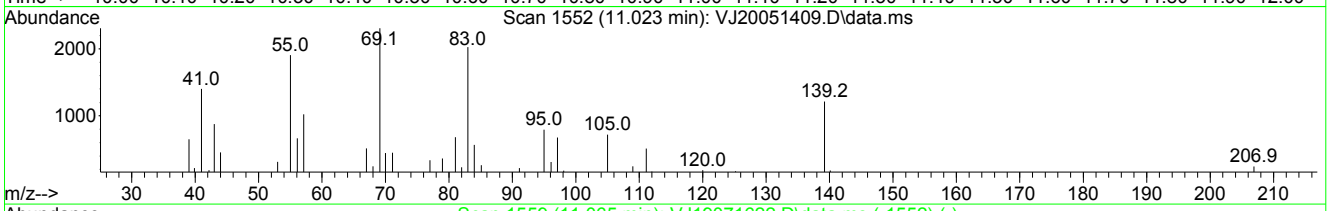
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	49.80	45.02
51.00	9.70	10.18
0.00	0.00	0.00

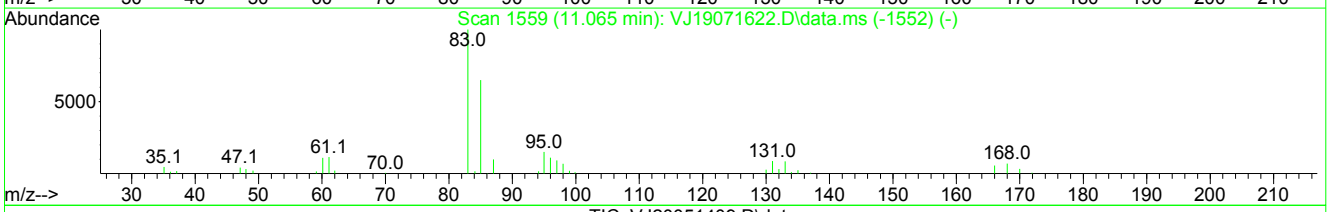
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051409.D\data.ms

(67) 1,1,2,2-Tetrachloroethane (P)

11.023min (-0.000) 1.07 ug/L

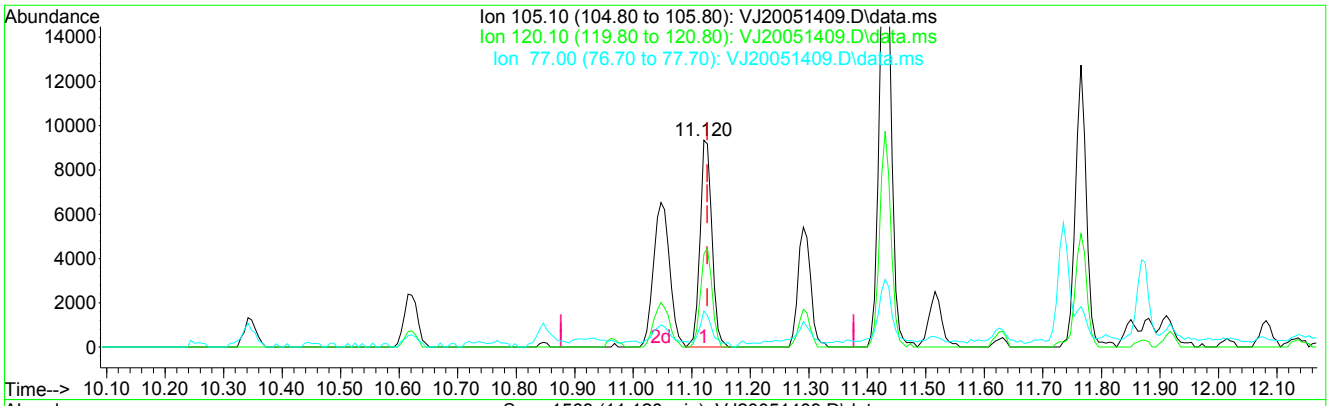
response 3916

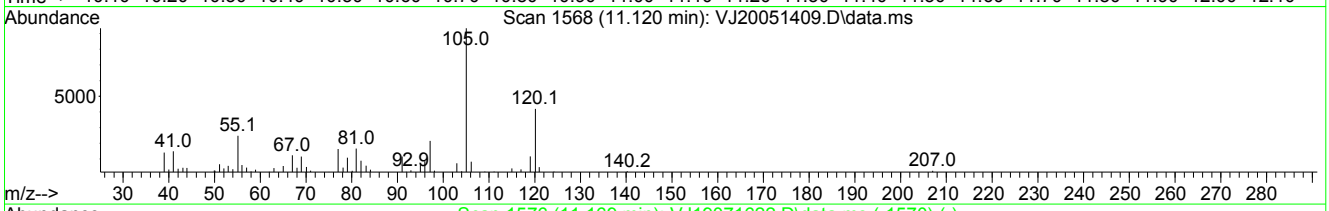
Ion	Exp%	Act%
82.90	100.00	100.00
84.90	66.40	12.87#
130.90	10.70	0.00
0.00	0.00	0.00

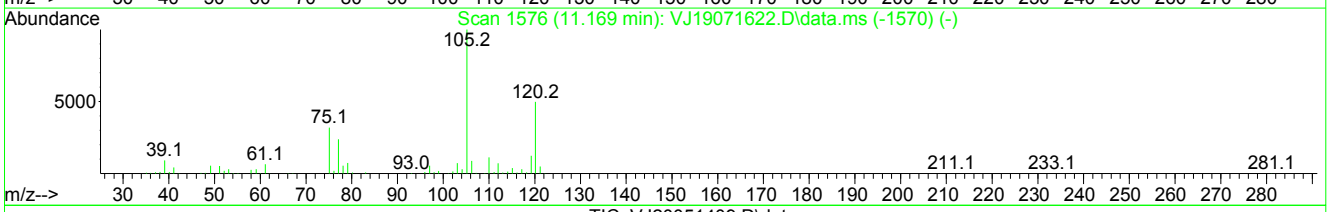
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051409.D\data.ms

(69) 1,3,5-Trimethylbenzene

11.120min (-0.006) 1.39 ug/L

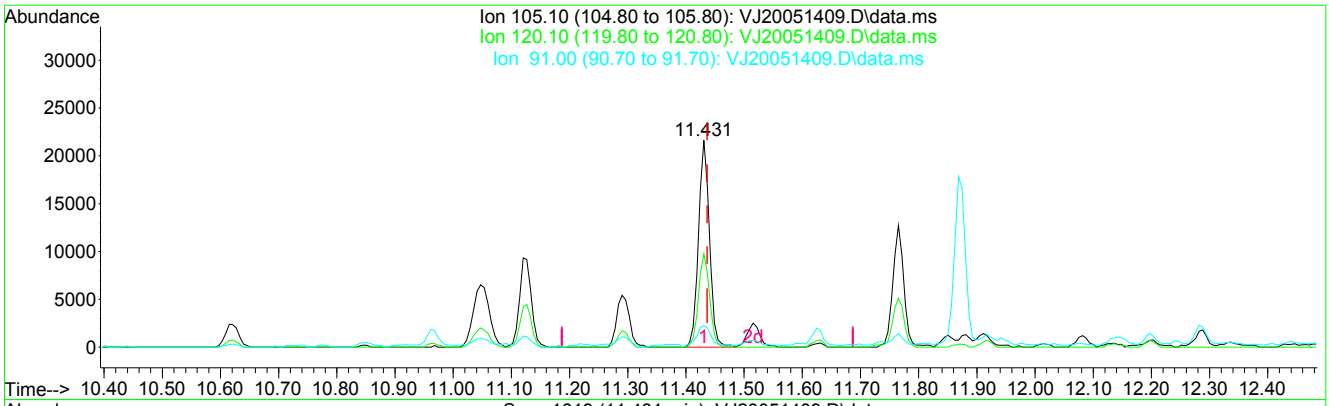
response 13279

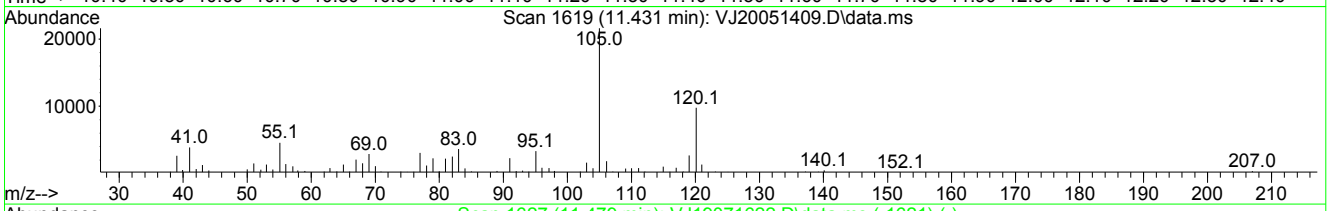
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	52.80	44.94
77.00	19.20	17.45
0.00	0.00	0.00

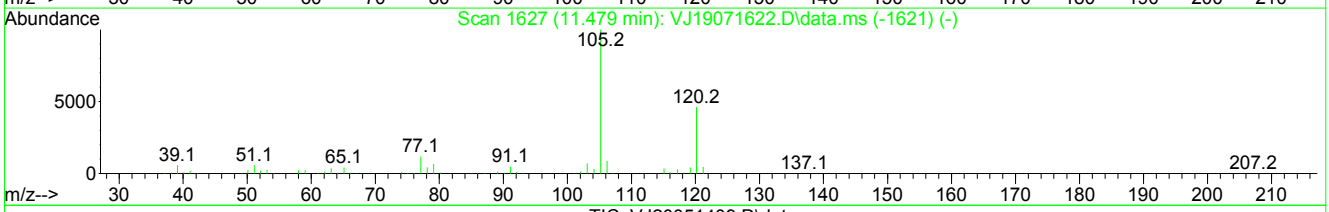
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051409.D\data.ms

(74) 1,2,4-Trimethylbenzene

11.431min (-0.006) 2.98 ug/L

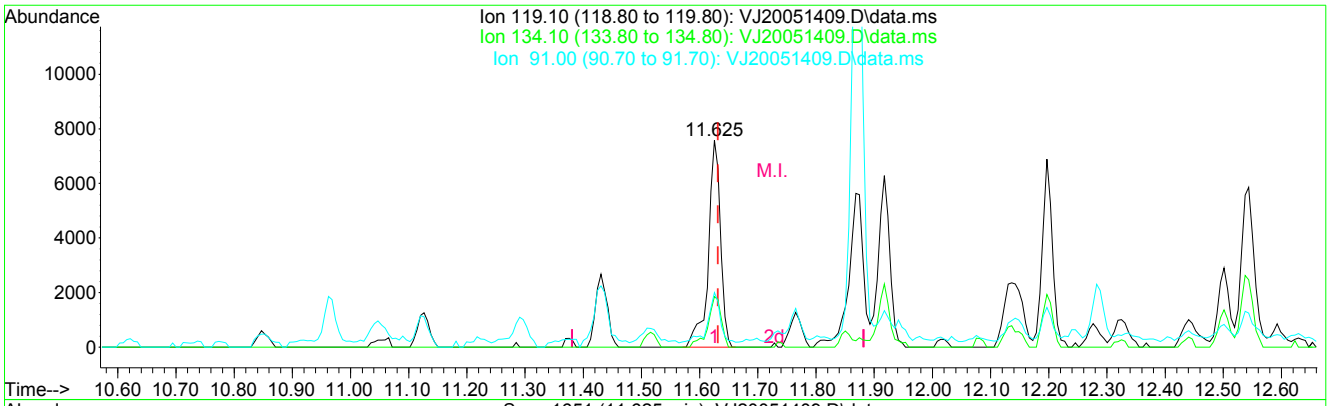
response 28385

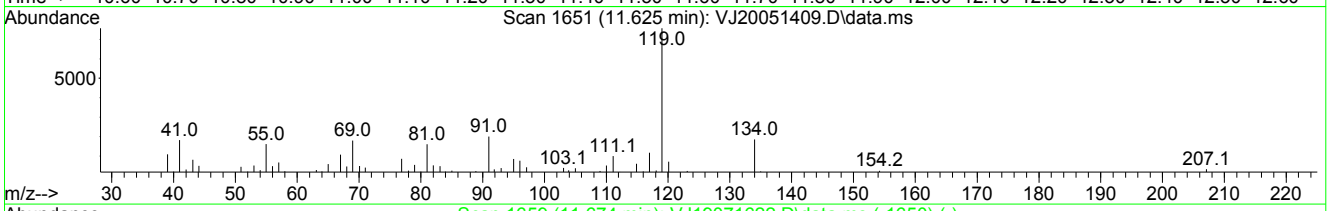
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	48.60	45.11
91.00	9.80	10.39
0.00	0.00	0.00

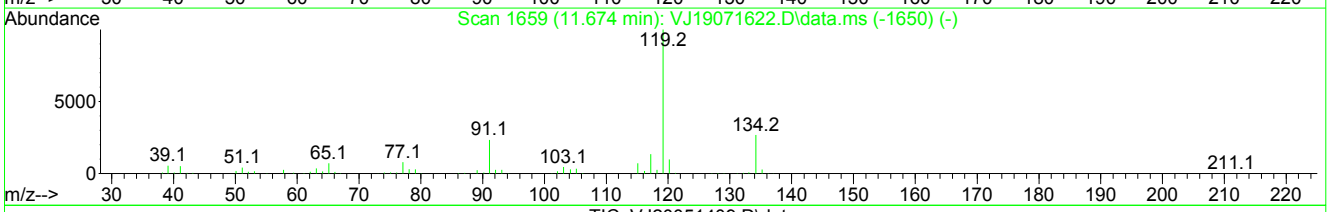
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051409.D\data.ms

(76) 4-Isopropyltoluene

11.625min (-0.006) 1.16 ug/L

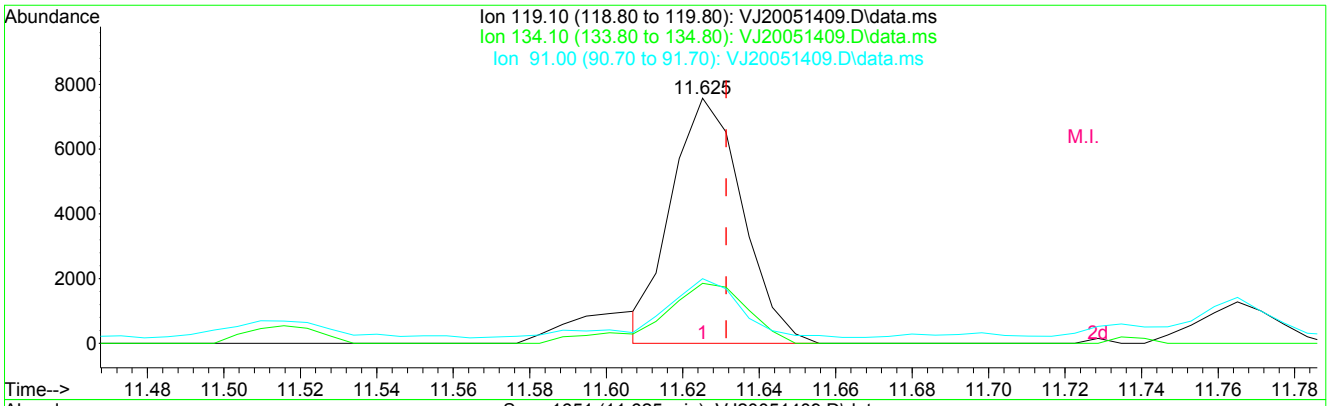
response 11061

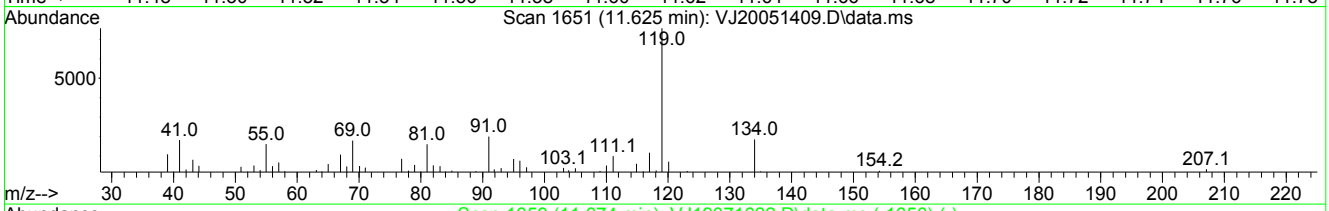
Ion	Exp%	Act%
119.10	100.00	100.00
134.10	26.60	24.47
91.00	21.70	26.39
0.00	0.00	0.00

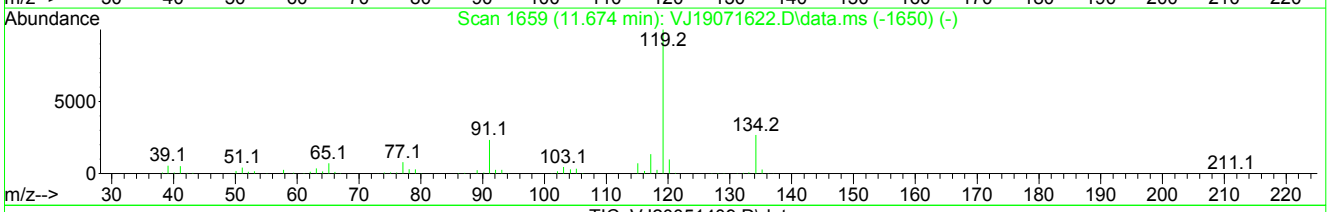
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051409.D\data.ms

(76) 4-Isopropyltoluene

11.625min (-0.006) 1.02 ug/L m

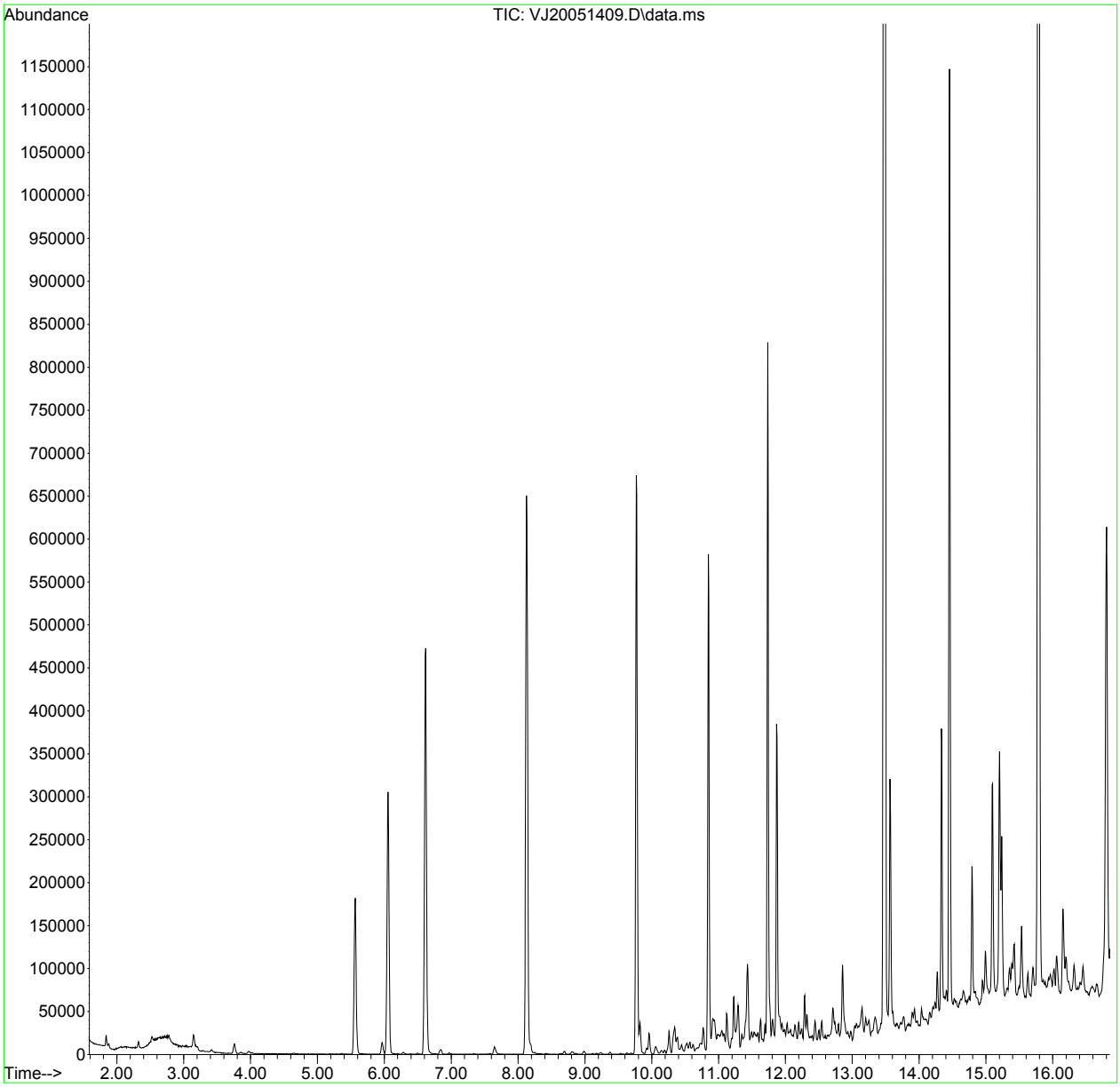
response 9742

Ion	Exp%	Act%
119.10	100.00	100.00
134.10	26.60	24.47
91.00	21.70	26.39
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051409.D
Acq On : 14 May 2020 14:02
Operator : IMA
Sample : A0E0312-01
Misc : 50X 5g/5mL 1000uL/50mL BTEX+HALO6 (QC)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 15 09:43:23 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

IMA
5/15/20

Quant Time: May 15 09:45:19 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

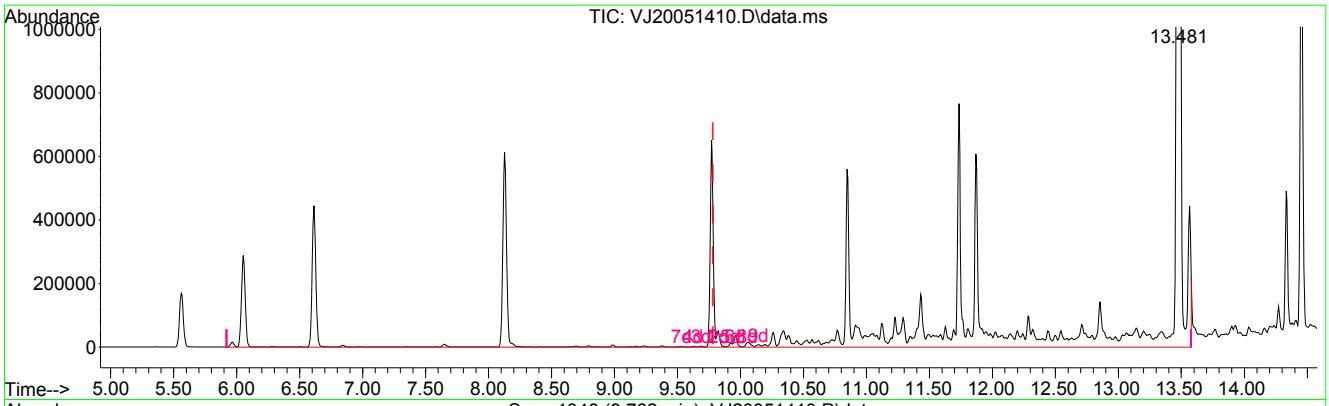
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.053	168	203436	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.612	114	387212	52.33	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	124677	58.11	ug/L	0.00
9) Toluene-d8 (NR)	8.127	98	465211	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.770	117	351594	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.735	150	253504	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	19778635m	2022.74	ug/L	
5) TPHg (C5-C9)	9.780	TIC	1460017m	95.64	ug/L	
6) TPHg (C6-C10)	9.780	TIC	1161066m	91.60	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	4133682m	278.60	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:19 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



TIC: VJ20051410.D\data.ms

(4) NWTPH-Gx (TPH) (H)

9.780min (0.000) 2022.74 ug/L m

response 19778635

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	3.60#
0.00	0.00	2.65#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

IMA
5/15/20

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	121626	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.770	117	351088	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.735	152	158243	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	119377	55.90	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.612	114	386963	50.78	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	463504	48.55	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	124080	51.62	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.873	50	3311	0.84	ug/L		96
5) Bromomethane	2.317	96	4139	Below Cal			98
6) Chloroethane	2.463	64	183	0.28	ug/L	#	1
8) Ethanol	3.315	45	206	2.73	ug/L	#	29
10) Carbon Disulfide	3.133	76	16153	2.71	ug/L		97
12) Iodomethane	3.266	142	1078	5.15	ug/L		84
13) Methylene Chloride	3.747	84	4775	1.79	ug/L		81
14) Acetone	3.838	43	3646	2.41	ug/L		98
18) tert-Butanol (TBA)	4.246	59	415	0.56	ug/L	#	46
33) Benzene	5.968	78	15049	1.21	ug/L		99
36) iso-Butyl Alcohol	6.290	43	881	11.52	ug/L		81
39) tert-Amyl ethyl ether ...	6.844	59	1110	0.17	ug/L	#	67
46) Toluene	8.182	91	6653	0.49	ug/L		96
48) 4-Methyl-2-Pentanone (...	8.638	43	865	0.22	ug/L	#	43
54) 2-Hexanone	9.624	43	58	0.44	ug/L	#	32
56) Ethylbenzene	9.825	91	32563	2.47	ug/L		98
58) m,p-Xylenes (2)	9.958	91	19288	2.01	ug/L		95
59) o-Xylene	10.342	91	15779	1.71	ug/L		95
60) Styrene	10.396	104	686	0.30	ug/L		77
62) Isopropylbenzene	10.621	105	6175	0.57	ug/L		92
66) n-Propylbenzene	10.962	91	3554	0.26	ug/L		85
67) 1,1,2,2-Tetrachloroethane	11.023	83	6537	1.92	ug/L	#	37
69) 1,3,5-Trimethylbenzene	11.126	105	20440	2.30	ug/L		96
70) 1,2,3-Trichloropropane	11.126	110	237	0.18	ug/L	#	6
72) 4-Chlorotoluene	11.218	91	789	0.10	ug/L		66
73) tert-Butylbenzene	11.382	91	620	0.12	ug/L	#	35

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

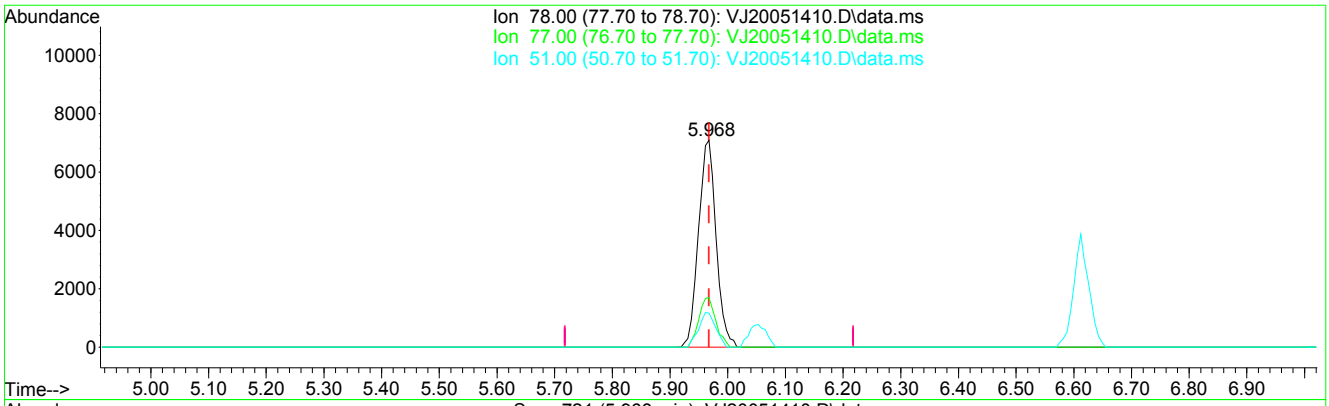
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
74) 1,2,4-Trimethylbenzene	11.431	105	44473	5.04 ug/L	95
75) sec-Butylbenzene	11.516	105	5427	0.51 ug/L	82
76) 4-Isopropyltoluene	11.625	119	16319	1.84 ug/L	91
79) n-Butylbenzene	11.917	91	2147	0.26 ug/L #	1
84) Naphthalene	13.481	128	7574473	428.53 ug/L	97

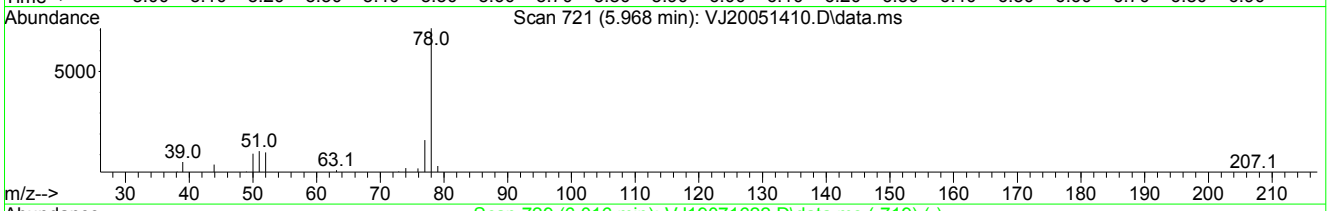
(#) = qualifier out of range (m) = manual integration (+) = signals summed

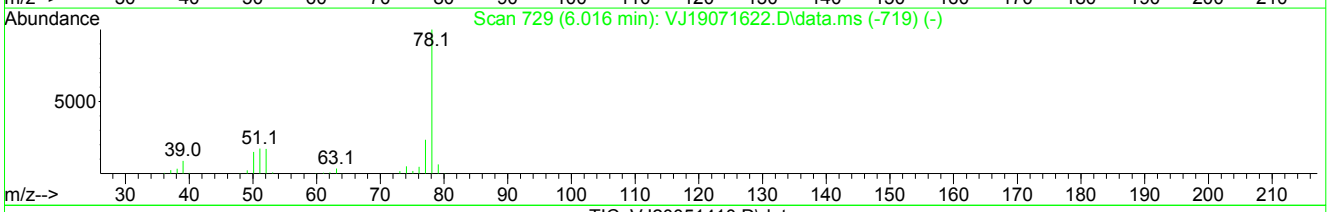
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051410.D\data.ms

(33) Benzene

5.968min (-0.000) 1.21 ug/L

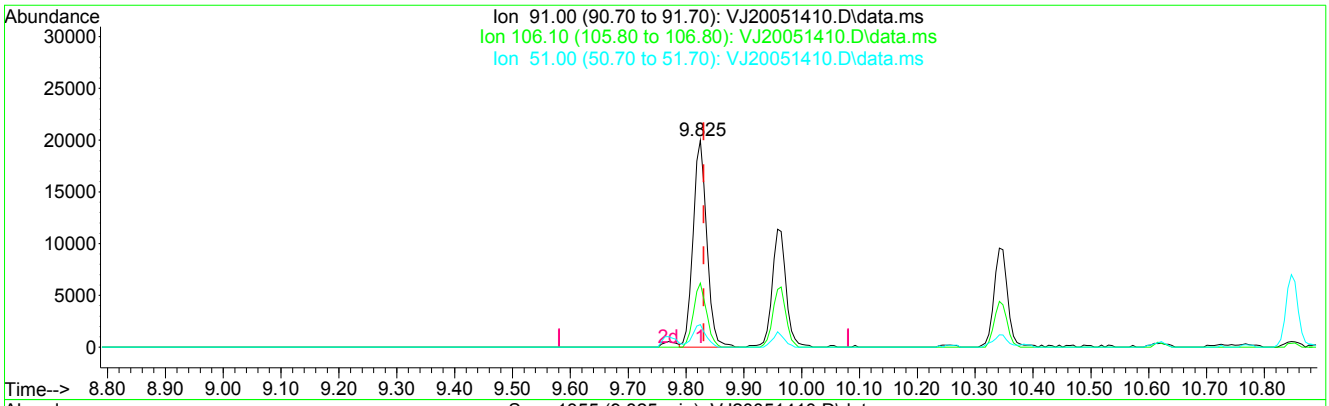
response 15049

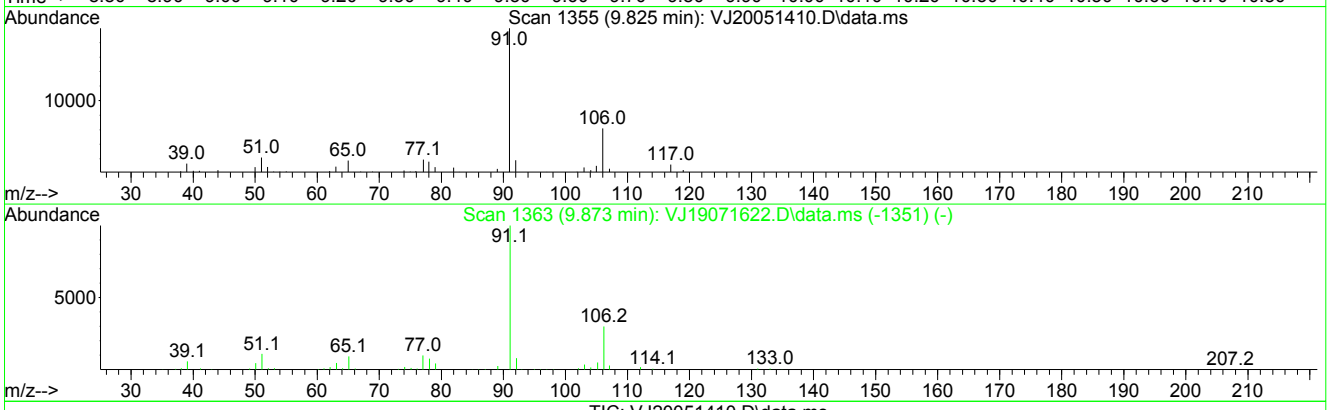
Ion	Exp%	Act%
78.00	100.00	100.00
77.00	23.60	24.10
51.00	16.20	16.47
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration





TIC: VJ20051410.D\data.ms

(56) Ethylbenzene (C)

9.825min (-0.006) 2.47 ug/L

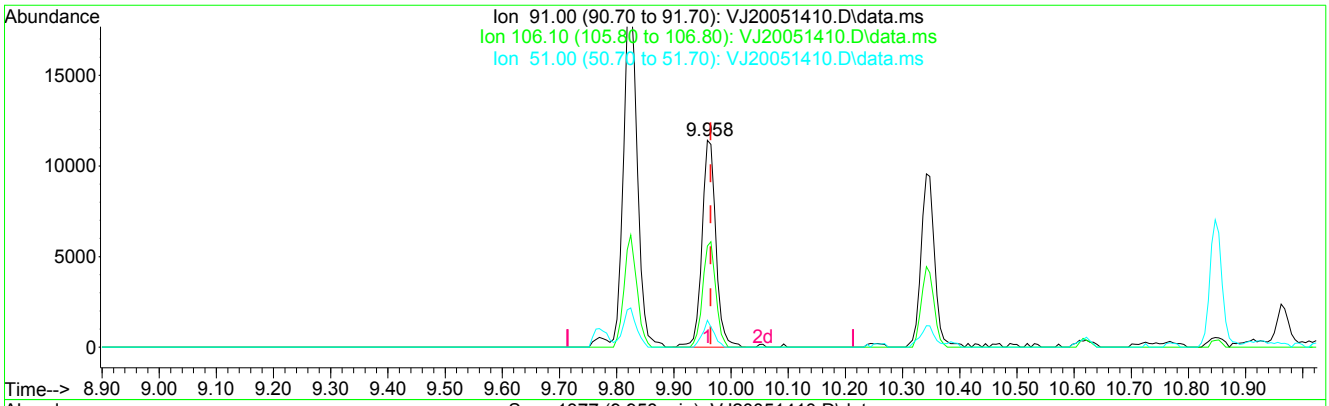
response 32563

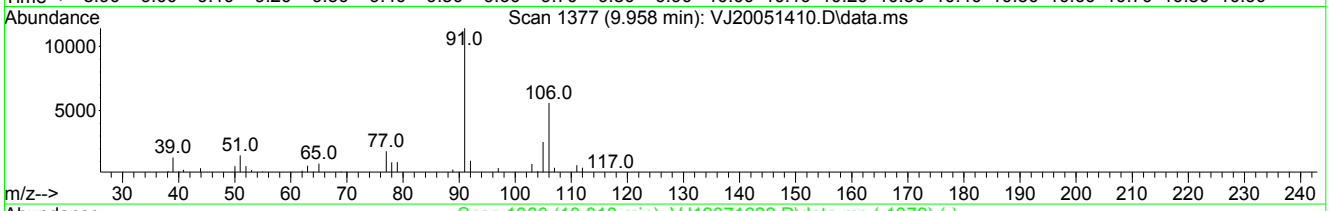
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	31.80	30.98
51.00	9.80	10.86
0.00	0.00	0.00

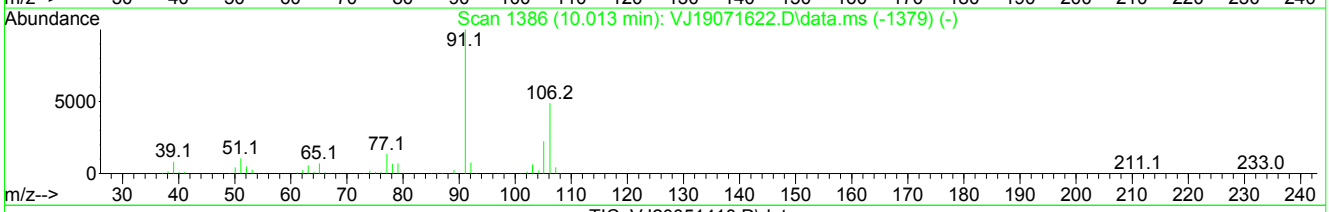
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051410.D\data.ms

(58) m,p-Xylenes (2)

9.958min (-0.006) 2.01 ug/L

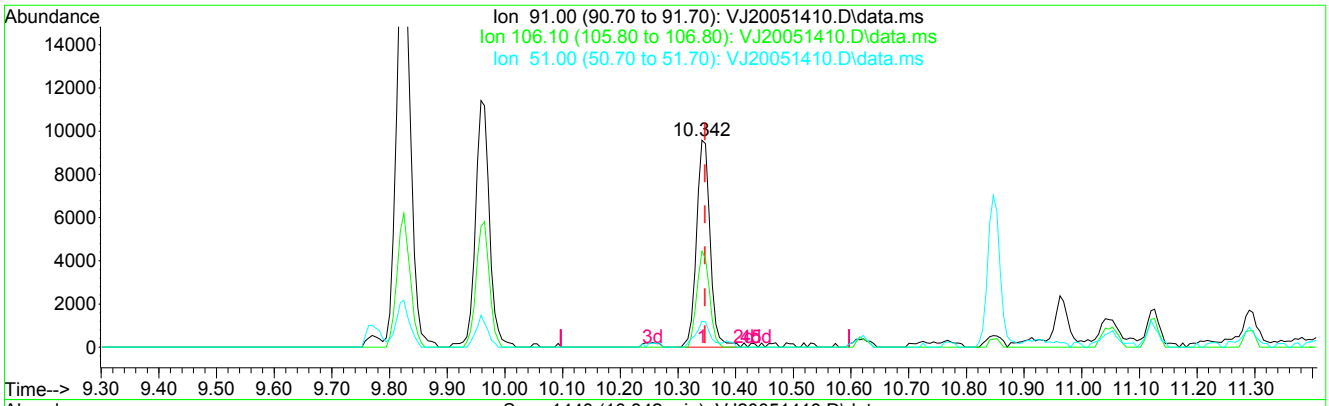
response 19288

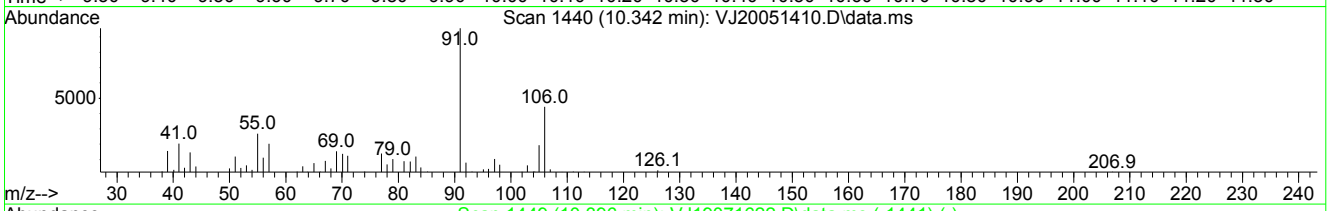
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	51.80	48.94
51.00	9.80	13.00
0.00	0.00	0.00

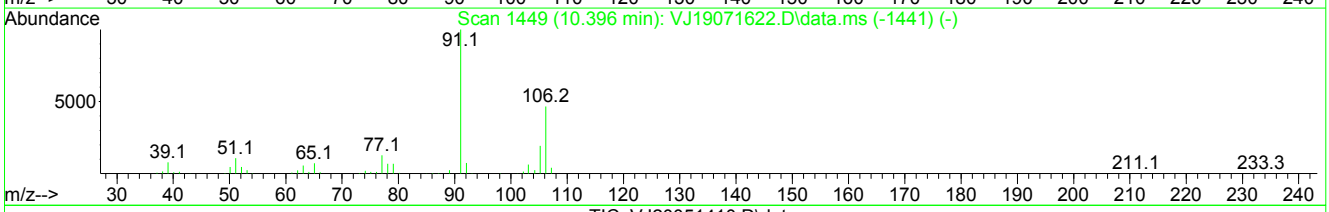
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051410.D\data.ms

(59) o-Xylene

10.342min (-0.005) 1.71 ug/L

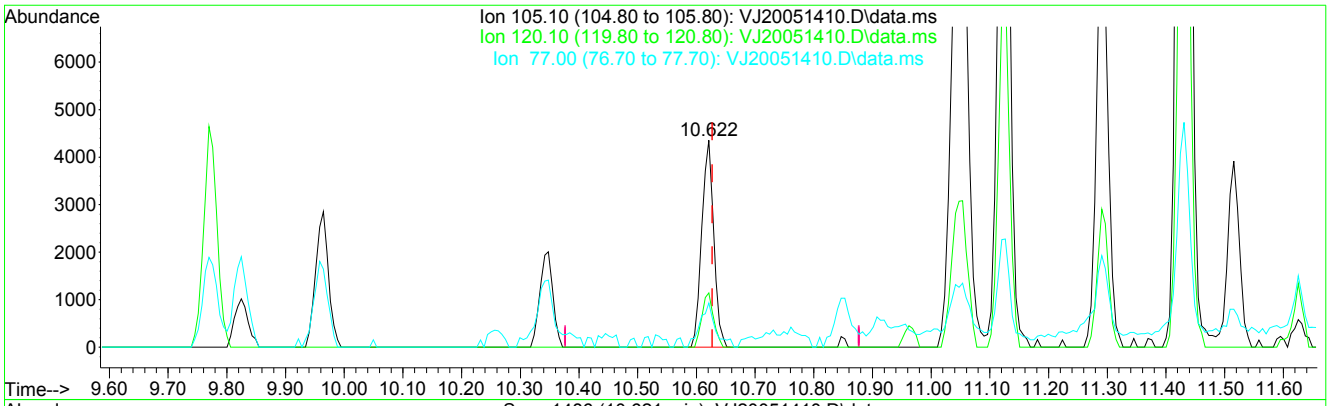
response 15779

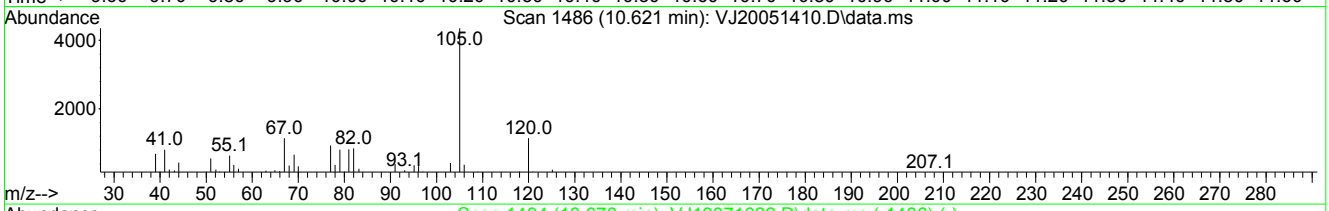
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	49.80	46.42
51.00	9.70	12.45
0.00	0.00	0.00

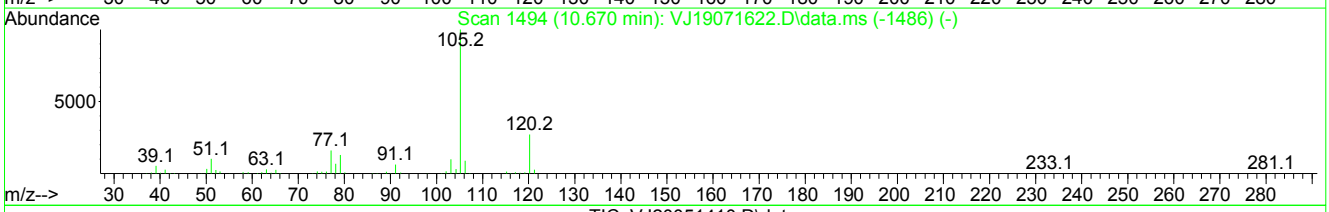
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051410.D\data.ms

(62) Isopropylbenzene

10.621min (-0.006) 0.57 ug/L

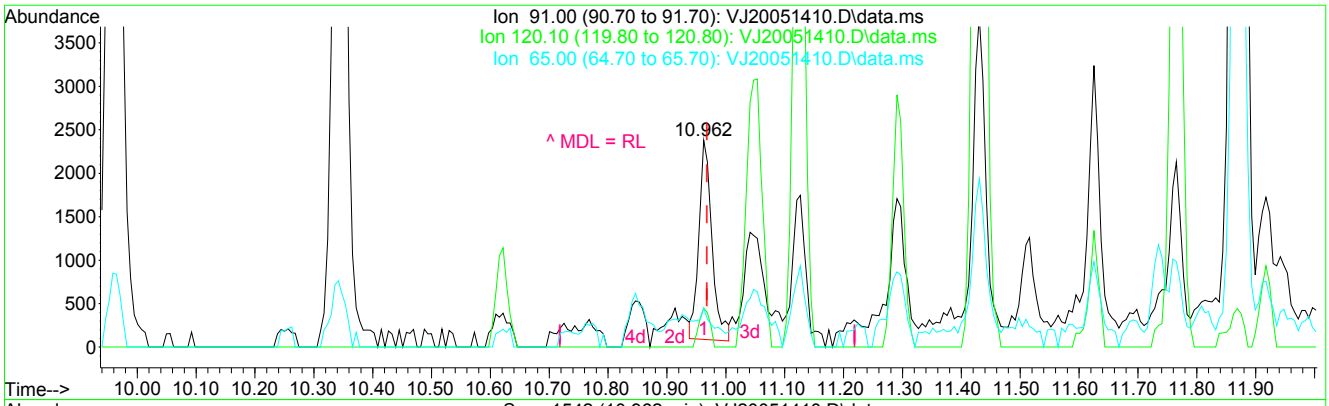
response 6175

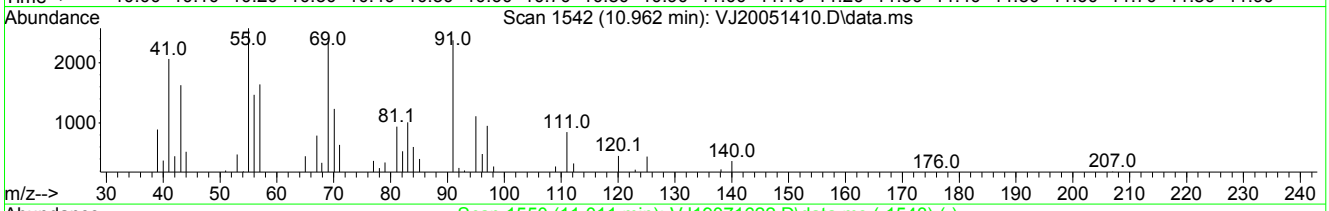
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	27.80	26.26
77.00	14.50	21.32
0.00	0.00	0.00

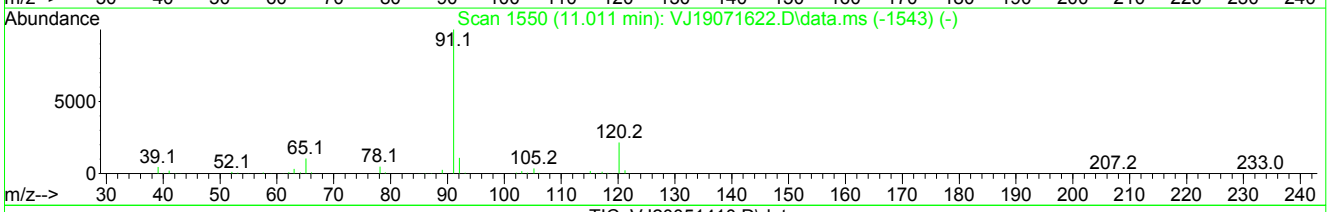
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051410.D\data.ms

(66) n-Propylbenzene

10.962min (-0.006) 0.26 ug/L

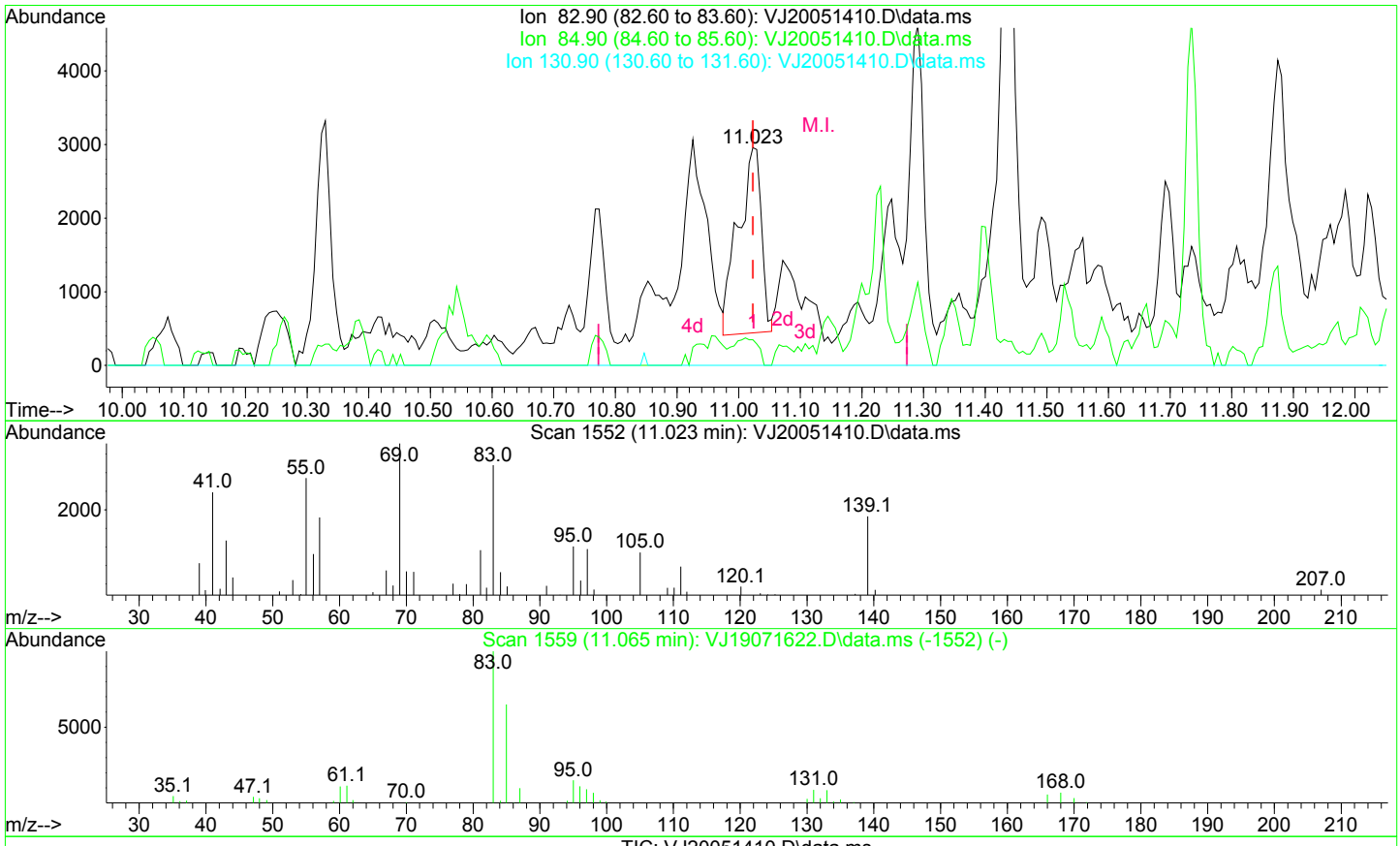
response 3554

Ion	Exp%	Act%
91.00	100.00	100.00
120.10	25.20	19.01
65.00	10.10	18.80
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:46:58 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



TIC: VJ20051410.D\data.ms

(67) 1,1,2,2-Tetrachloroethane (P)

11.023min (-0.000) 1.92 ug/L

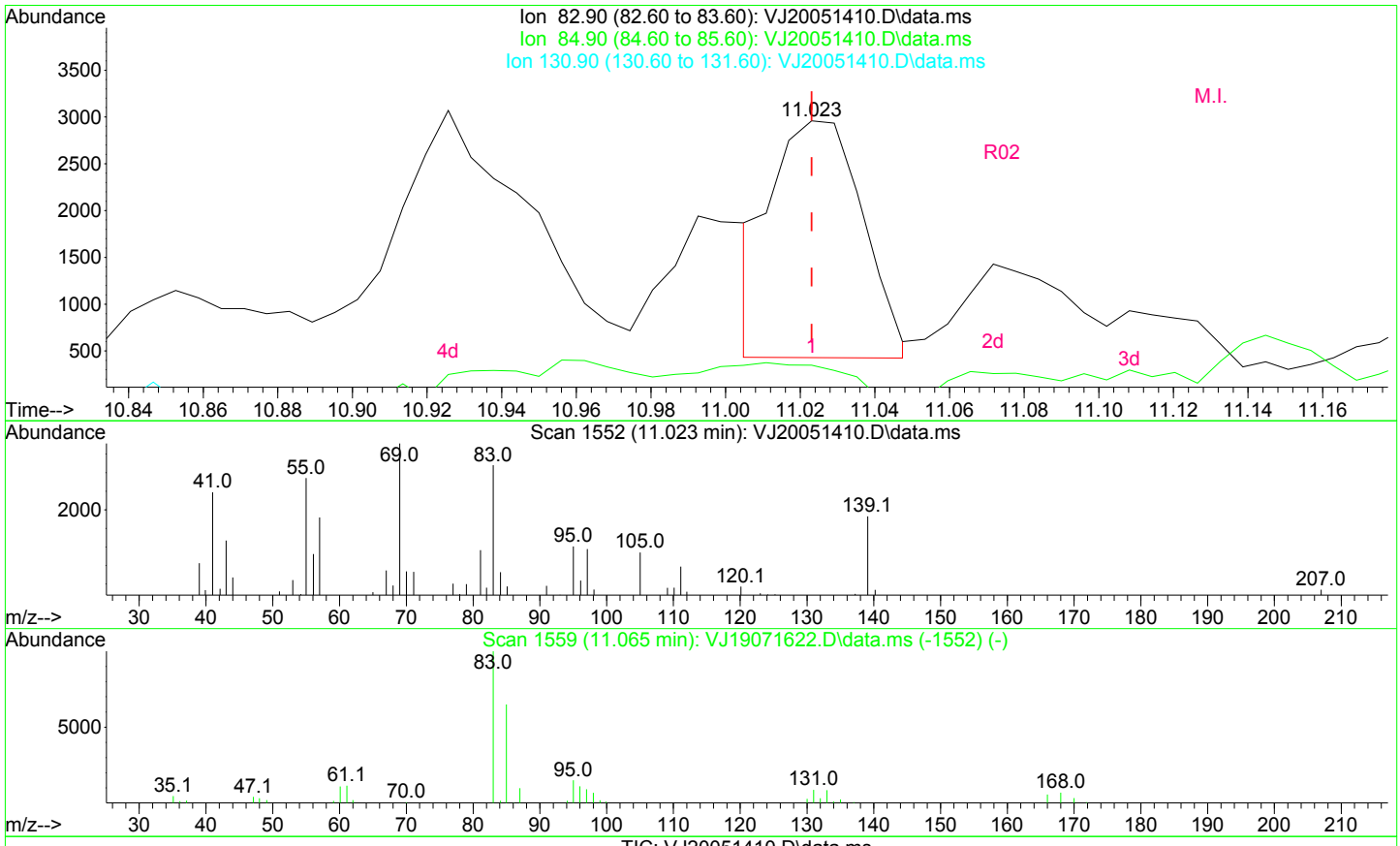
response 6537

Ion	Exp%	Act%
82.90	100.00	100.00
84.90	66.40	11.83#
130.90	10.70	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:46:58 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



TIC: VJ20051410.D\data.ms

(67) 1,1,2,2-Tetrachloroethane (P)

11.023min (-0.000) 1.26 ug/L m

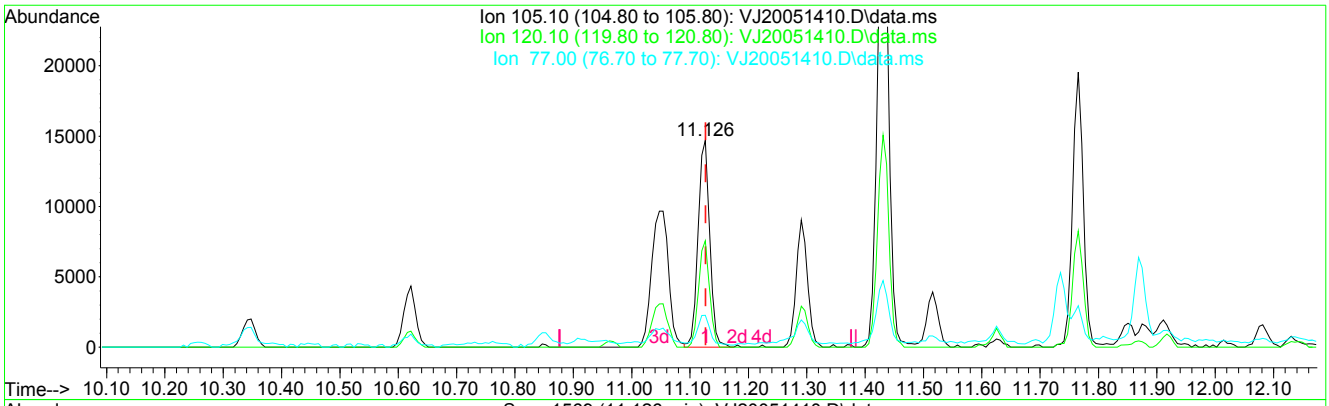
response 4275

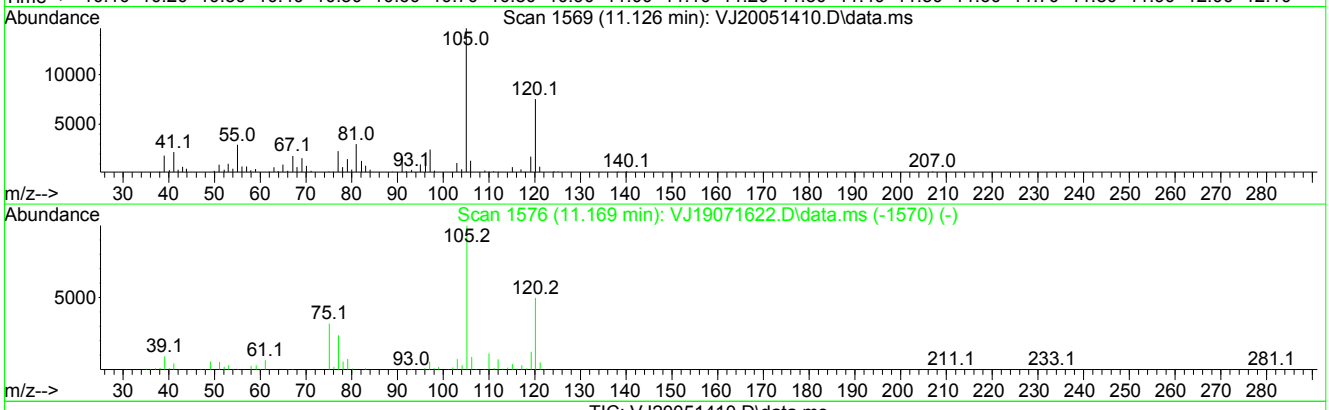
Ion	Exp%	Act%
82.90	100.00	100.00
84.90	66.40	11.83#
130.90	10.70	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration





TIC: VJ20051410.D\data.ms

(69) 1,3,5-Trimethylbenzene

11.126min (-0.000) 2.30 ug/L

response 20440

Ion	Exp%	Act%
105.10	100.00	100.00
120.10	52.80	51.46
77.00	19.20	15.50
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
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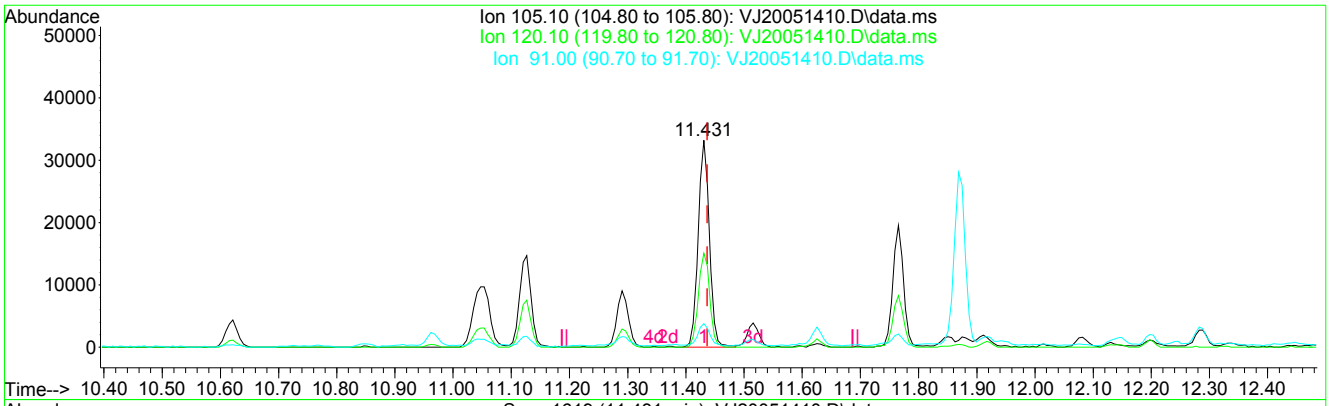

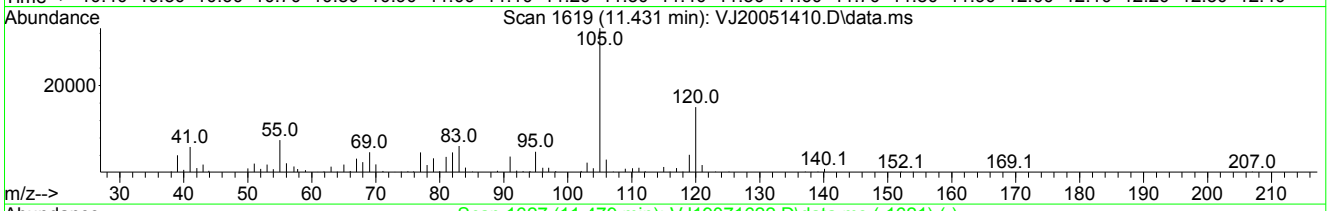

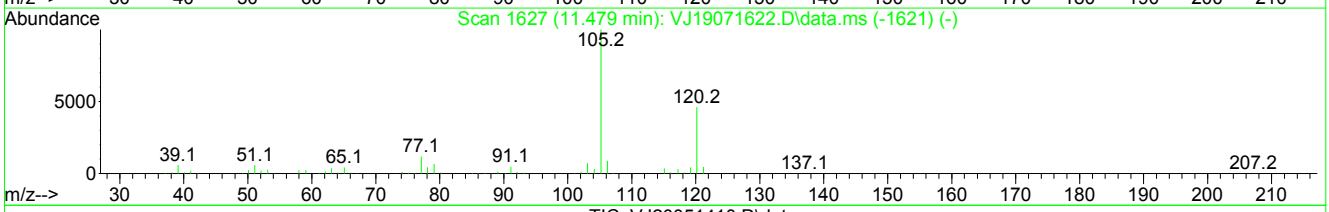

TIC: VJ20051410.D\data.ms

(74) 1,2,4-Trimethylbenzene

11.431min (-0.006) 5.04 ug/L

response 44473

Ion	Exp%	Act%
105.10	100.00	100.00
120.10	48.60	45.44
91.00	9.80	11.44
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
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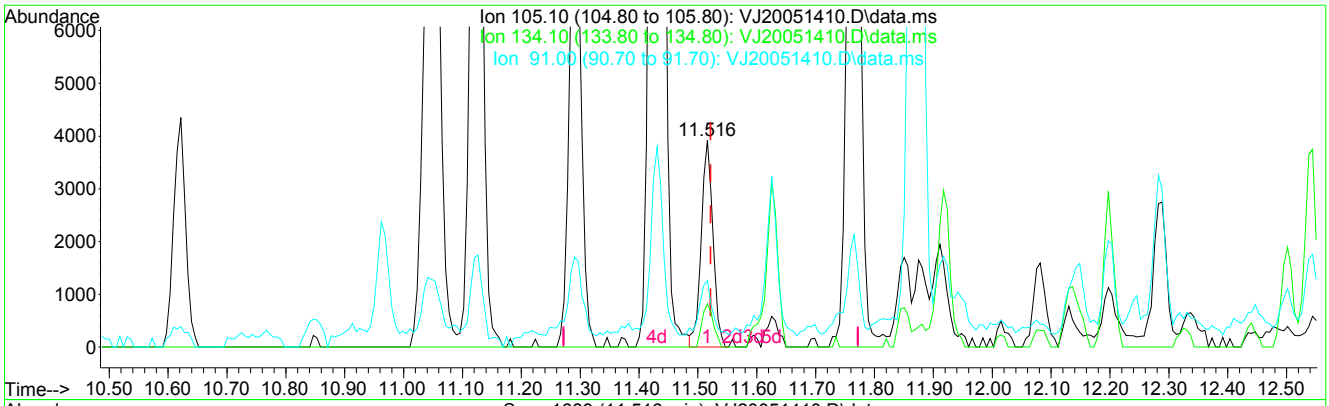

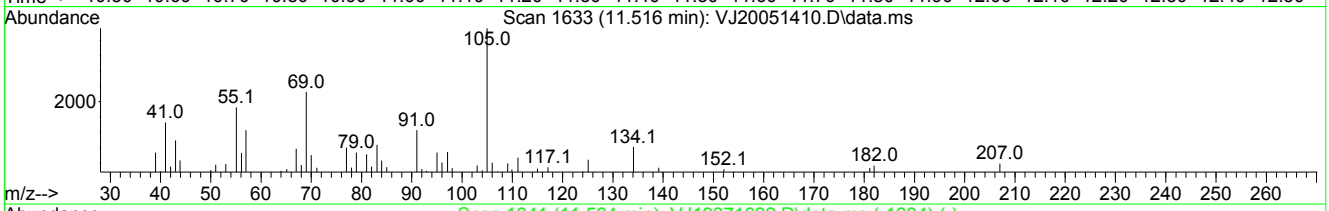

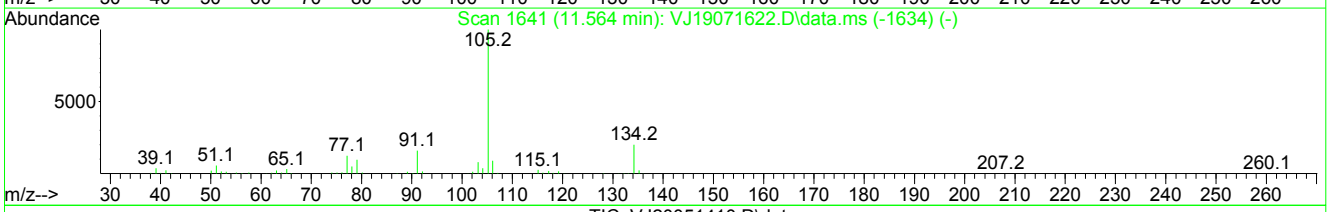

TIC: VJ20051410.D\data.ms

(75) sec-Butylbenzene

11.516min (-0.006) 0.51 ug/L

response 5427

Ion	Exp%	Act%
105.10	100.00	100.00
134.10	21.70	20.93
91.00	14.90	32.17
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
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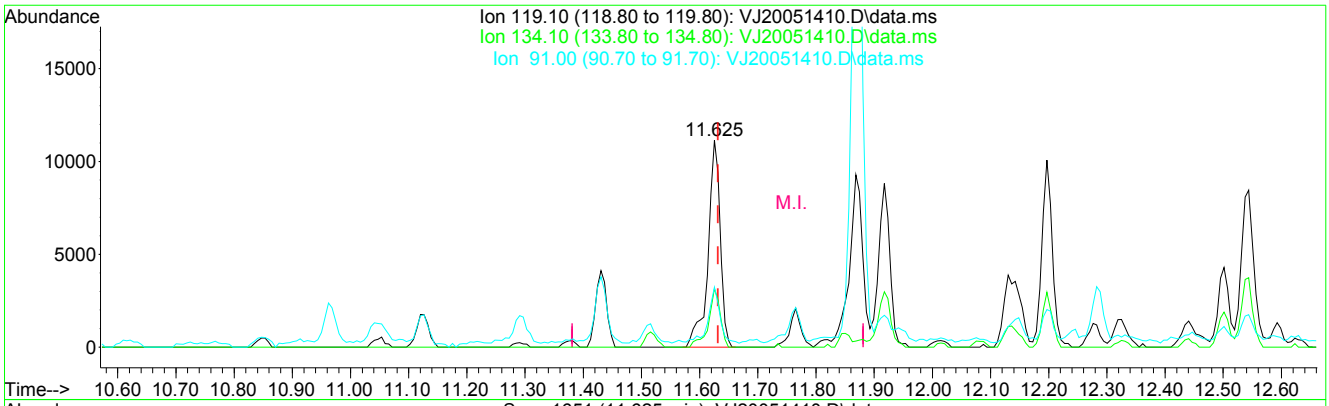
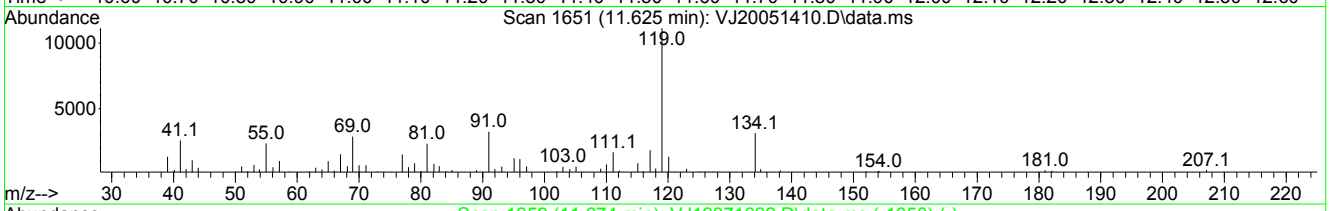
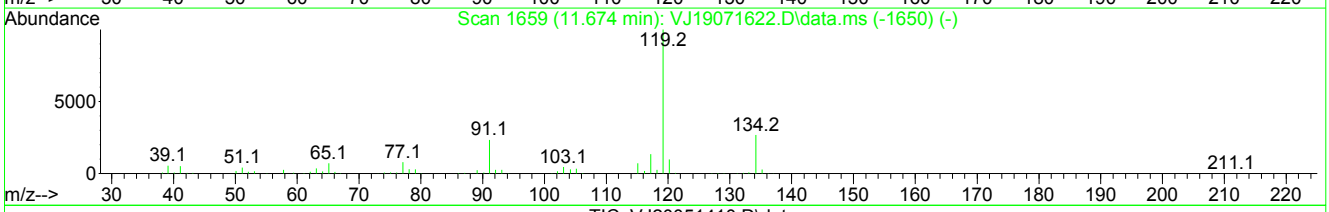






TIC: VJ20051410.D\data.ms

(76) 4-Isopropyltoluene

11.625min (-0.006) 1.84 ug/L

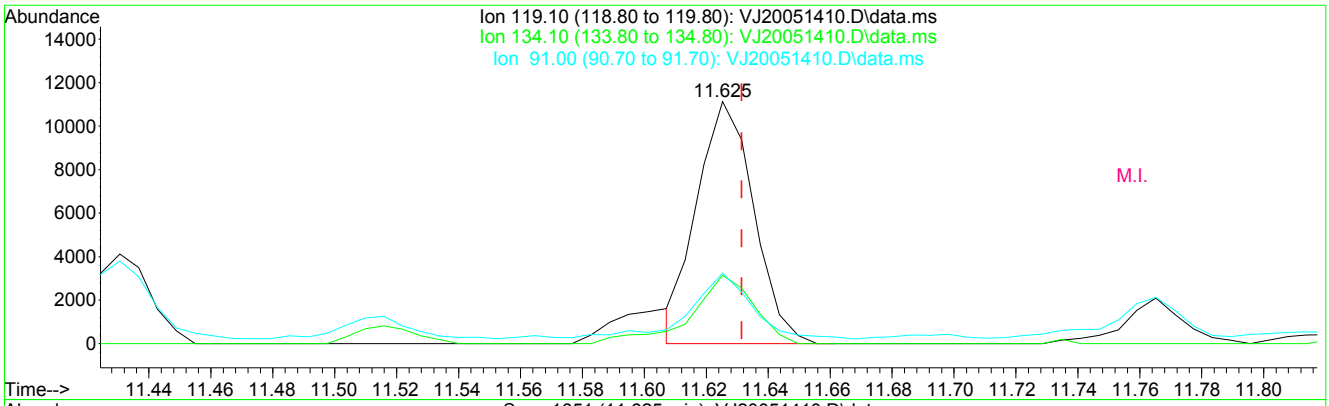
response 16319

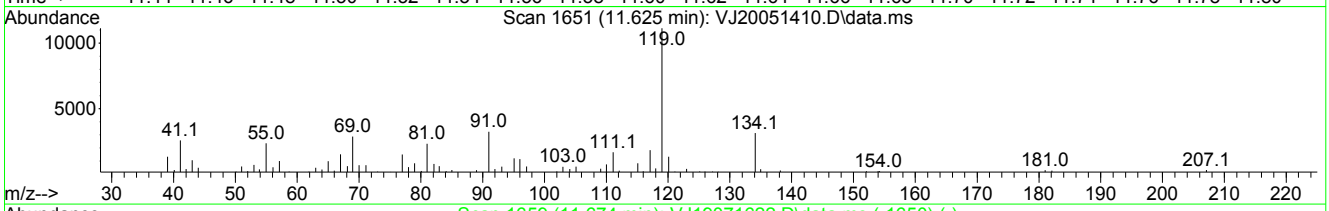
Ion	Exp%	Act%
119.10	100.00	100.00
134.10	26.60	28.24
91.00	21.70	29.08
0.00	0.00	0.00

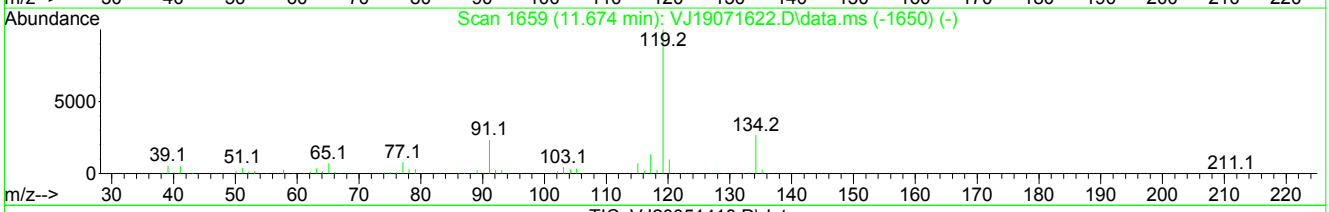
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20051410.D\data.ms

(76) 4-Isopropyltoluene

11.625min (-0.006) 1.60 ug/L m

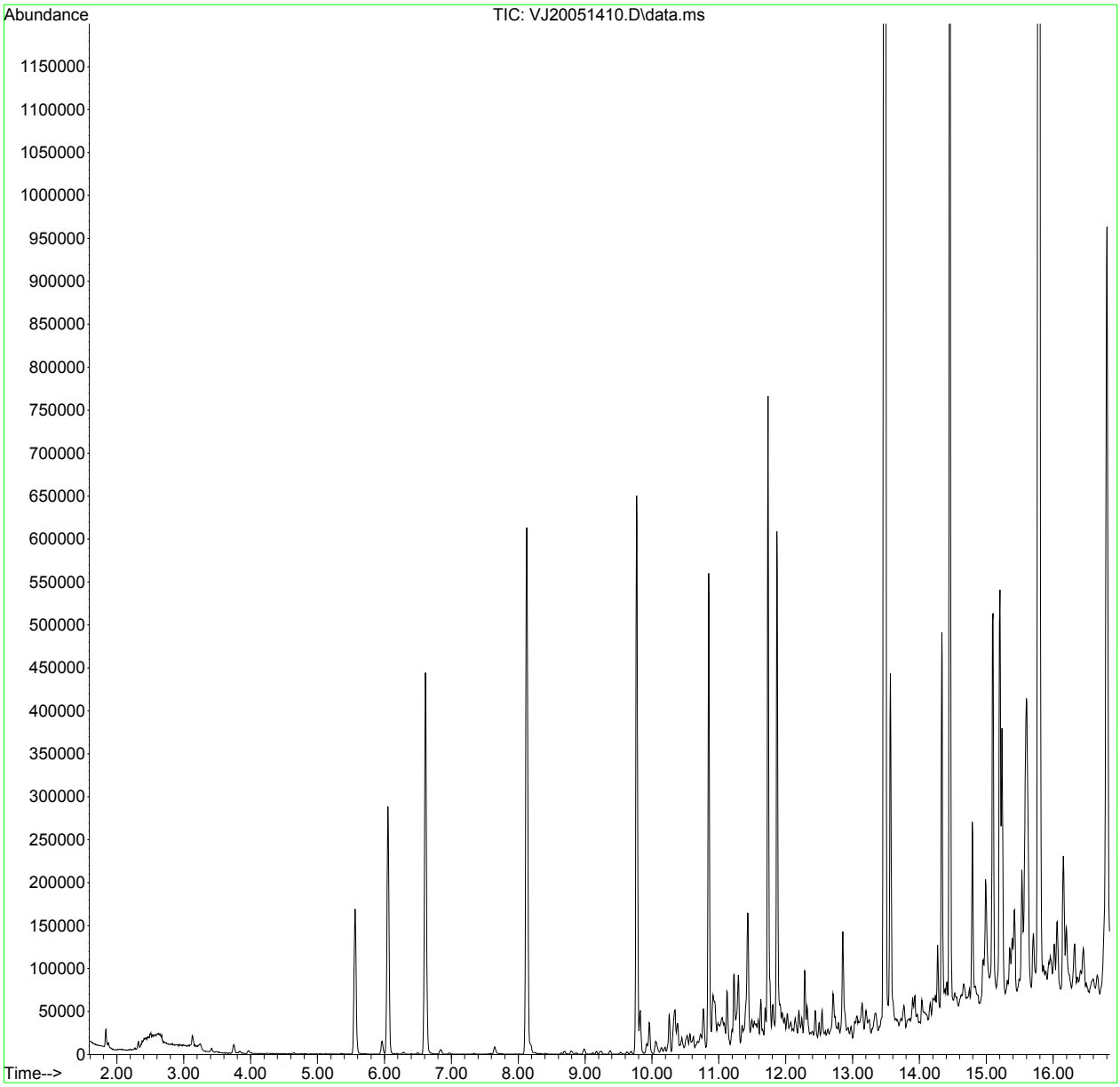
response 14196

Ion	Exp%	Act%
119.10	100.00	100.00
134.10	26.60	28.24
91.00	21.70	29.08
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-05\0E14042\
Data File : VJ20051410.D
Acq On : 14 May 2020 14:29
Operator : IMA
Sample : 0050519-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0E0312-01)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 15 09:45:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard OR 97223 phone 503-718-2323

Selected Volatile Organic Compounds by EPA 5035A/8260C
Calibration Data

Sequence 0D14058 (Cal ID A0D1605) VOA-GCMS10

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **0D14058** Instrument: **VOA-GCMS10**

Date: **04/14/20 16:56** Calibration: **A0D1605**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0D14058-IBL1	Soil	QC	QC			A19L200	
2	0D14058-TUN1	Soil	QC	QC			A19L200	
3	0D14058-ICB1	Soil	QC	QC			A19L200	
4	0D14058-CAL1	Soil	QC	QC			A19L200	A20D151
5	0D14058-CAL2	Soil	QC	QC			A19L200	A20D152
6	0D14058-CAL3	Soil	QC	QC			A19L200	A20D153
7	0D14058-CAL4	Soil	QC	QC			A19L200	A20D154
8	0D14058-CAL5	Soil	QC	QC			A19L200	A20D155
9	0D14058-CAL6	Soil	QC	QC			A19L200	A20D156
10	0D14058-CAL7	Soil	QC	QC			A19L200	A20D157
11	0D14058-CAL8	Soil	QC	QC			A19L200	A20D158
12	0D14058-CAL9	Soil	QC	QC			A19L200	A20D159
13	0D14058-IBL2	Soil	QC	QC			A19L200	
14	0D14058-CALA	Soil	QC	QC			A19L200	A20D160
15	0D14058-IBL3	Soil	QC	QC			A19L200	
16	0D14058-CALB	Soil	QC	QC			A19L200	A20D161
17	0D14058-IBL4	Soil	QC	QC			A19L200	
18	0D14058-IBL5	Soil	QC	QC			A19L200	
19	0D14058-ICV1	Soil	QC	QC			A19L200	A20D127
20	0D14058-IBL6	Soil	QC	QC			A19L200	
21	0D14058-TUN2	Soil	QC	QC			A19L200	
22	0D14058-IBL7	Soil	QC	QC			A19L200	
23	0D14058-ICB2	Soil	QC	QC			A19L200	
24	0D14058-CALC	Soil	QC	QC			A19L200	A20B402
25	0D14058-CALD	Soil	QC	QC			A19L200	A20B403
26	0D14058-CALE	Soil	QC	QC			A19L200	A20B404
27	0D14058-CALF	Soil	QC	QC			A19L200	A20B405
28	0D14058-CALG	Soil	QC	QC			A19L200	A20B406
29	0D14058-CALH	Soil	QC	QC			A19L200	A20B407
30	0D14058-CALI	Soil	QC	QC			A19L200	A20B408
31	0D14058-CALJ	Soil	QC	QC			A19L200	A20B409
32	0D14058-IBL8	Soil	QC	QC			A19L200	
33	0D14058-IBL9	Soil	QC	QC			A19L200	
34	0D14058-ICV2	Soil	QC	QC			A19L200	A20A357
35	0D14058-IBLA	Soil	QC	QC			A19L200	

Needs date MKJ 4/22/20

Data Entered By: 4/22/20

Data Reviewed By: 4/22/20

Comments: Iodomethane EOS

Calibration Status Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200414S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Wed Apr 15 13:36:53 2020
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	0	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041404.D
2	2	0	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041405.D
3	3	0	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041406.D
4	4	1	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041407.D
5	5	2	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041408.D
6	6	5	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041409.D
7	7	10	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041410.D
8	8	20	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041411.D
9	9	50	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041412.D
10	10	100	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041414.D
11	1a	200	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041416.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Apr 15 13:36 2020	Apr 15 12:55 2020	14 Apr 2020 18:32
2	2	Apr 15 13:36 2020	Apr 15 12:59 2020	14 Apr 2020 18:59
3	3	Apr 15 13:36 2020	Apr 15 13:31 2020	14 Apr 2020 19:26
4	4	Apr 15 13:36 2020	Apr 15 13:04 2020	14 Apr 2020 19:52
5	5	Apr 15 13:36 2020	Apr 15 13:07 2020	14 Apr 2020 20:19
6	6	Apr 15 13:36 2020	Apr 15 13:08 2020	14 Apr 2020 20:46
7	7	Apr 15 13:36 2020	Apr 15 12:40 2020	14 Apr 2020 21:13
8	8	Apr 15 13:36 2020	Apr 15 12:40 2020	14 Apr 2020 21:40
9	9	Apr 15 13:36 2020	Apr 15 12:40 2020	14 Apr 2020 22:07
10	10	Apr 15 13:36 2020	Apr 15 13:15 2020	14 Apr 2020 23:00
11	1a	Apr 15 13:36 2020	Apr 15 13:17 2020	14 Apr 2020 23:54

VJ200414S.M Wed Apr 15 14:24:33 2020

Iodo methane EOS

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0D14058

Analysis Included
8260D Oxygenates
QC - 624x/8260x All Cpds for Studies

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
0D14058-TUN1	MS Tune	Soil		A19L200	4/14/2020 5:38:00PM
0D14058-ICB1	Initial Cal Blank	Soil		A19L200	4/14/2020 6:05:00PM
0D14058-CAL1	Cal Standard	Soil	A20D151	"	4/14/2020 6:32:00PM
0D14058-CAL2	Cal Standard	Soil	A20D152	"	4/14/2020 6:59:00PM
0D14058-CAL3	Cal Standard	Soil	A20D153	"	4/14/2020 7:26:00PM
0D14058-CAL4	Cal Standard	Soil	A20D154	"	4/14/2020 7:52:00PM
0D14058-CAL5	Cal Standard	Soil	A20D155	"	4/14/2020 8:19:00PM
0D14058-CAL6	Cal Standard	Soil	A20D156	"	4/14/2020 8:46:00PM
0D14058-CAL7	Cal Standard	Soil	A20D157	"	4/14/2020 9:13:00PM
0D14058-CAL8	Cal Standard	Soil	A20D158	"	4/14/2020 9:40:00PM
0D14058-CAL9	Cal Standard	Soil	A20D159	"	4/14/2020 10:07:00PM
0D14058-CALA	Cal Standard	Soil	A20D160	"	4/14/2020 11:00:00PM
0D14058-CALB	Cal Standard	Soil	A20D161	"	4/14/2020 11:54:00PM
0D14058-ICV1	Initial Cal Check	Soil	A20D127	"	4/15/2020 1:15:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: A0D1605 Instrument: VOA-GCMS10

8260D Oxygenates Sequence: 0D14058 Matrix: Soil

0D14058-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CALB	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0D14058

Compounds listed above have recalculated recoveries outside 70-130% of the true values, and the calibration levels are above the reporting level. If no compounds are listed, all are OK. Please see the next section for quadatic fit compounds.

Analytes With Quadratic Curve Fits

Qualifier	iMDL	iMRL	Spike Amt	%Difference	OK?	Raise MRL to ?
				———	☐	☐ ———

Analytes listed above have quadratic curve fits. If they are using a weighting otpion, they must be checked against the requanted curve points to determine if the recalculated results are within limits (70-130 or as specified).

ICV RECOVERIES

Calibration: **A0D1605** Instrument: **VOA-GCMS10**

QC - 624x/8260x All Cpds for Sequence: **0D14058** Matrix: **Soil**

0D14058-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual
Iodomethane	20	20.0	**27.32**	137	E-05

Compounds listed above have Initial Calibration Verification standard recoveries outside 70-130% of the true values. If no compounds are listed, all have passing recoveries.

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:35:21 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

4/15/20

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene (I)	50.000	50.000	0.0	93	0.00
2		Dichlorodifluoromethane	20.000	20.539	-2.7	108	0.00
3	P	Chloromethane	20.000	22.357	-11.8	116	0.00
4	C	Vinyl Chloride	20.000	21.406	-7.0	115	0.00
5		Bromomethane	20.000	25.097	-25.5	108	-0.01
6		Chloroethane	20.000	17.562	12.2	88	-0.02
7		Trichlorofluoromethane	20.000	17.997	10.0	88	-0.02
8		Ethanol	1250.000	1305.279	-4.4	105	-0.07
9	C	1,1-Dichloroethene	20.000	21.924	-9.6	124	-0.01
10		Carbon Disulfide	20.000	21.591	-8.0	113	-0.01
11		Freon 113	20.000	20.772	-3.9	97	-0.01
12		Iodomethane	20.000	27.316	-36.6#	161	-0.01
13		Methylene Chloride	20.000	20.482	-2.4	101	-0.01
14		Acetone	40.000	38.786	3.0	94	-0.01
15		t-1,2-Dichloroethene	20.000	19.584	2.1	96	0.00
16		n-Hexane	20.000	19.846	0.8	94	0.00
17		Methyl-tert-butyl-ether	20.000	20.516	-2.6	101	0.00
18		tert-Butanol (TBA)	1250.000	1476.816	-18.1	114	-0.06
19		Diisopropyl ether (DIPE)	5.000	5.295	-5.9	103	0.00
20	P	1,1-Dichloroethane	20.000	20.257	-1.3	98	0.00
21		Acrylonitrile	20.000	23.444	-17.2	107	0.00
22		Ethyl-tert-butyl ether (ETB	5.000	5.699	-14.0	108	0.00
23		c-1,2-Dichloroethene	20.000	20.656	-3.3	99	0.00
24		2,2-Dichloropropane	20.000	17.609	12.0	90	0.00
25		Bromochloromethane	20.000	19.881	0.6	96	0.00
26	C	Chloroform	20.000	20.188	-0.9	97	0.00
27		Carbon Tetrachloride	20.000	21.389	-6.9	96	0.00
28		Tetrahydrofuran	20.000	21.332	-6.7	104	0.00
29		1,1,1-Trichloroethane	20.000	20.293	-1.5	95	0.00
30	S	Dibromofluoromethane (S)	50.000	50.190	-0.4	94	0.00
31		1,1-Dichloropropene	20.000	21.311	-6.6	97	0.00
32		2-Butanone (MEK)	40.000	43.328	-8.3	105	0.00
33		Benzene	20.000	19.918	0.4	98	0.00
34		tert-Amyl methyl ether (TAM	5.000	5.066	-1.3	101	0.00
35		1,2-Dichloroethane (EDC)	20.000	20.095	-0.5	97	0.00
36		iso-Butyl Alcohol	500.000	546.896	-9.4	111	-0.03
37	S	1,4-Difluorobenzene (S)	50.000	50.942	-1.9	95	0.00
38		Trichloroethene (TCE)	20.000	20.153	-0.8	97	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	4.802	4.0	98	0.00
40		Dibromomethane	20.000	21.076	-5.4	97	0.00
41	C	1,2-Dichloropropane	20.000	20.604	-3.0	99	0.00
42		Bromodichloromethane	20.000	20.895	-4.5	96	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	96	0.00
44		c-1,3-Dichloropropene	20.000	21.734	-8.7	105	0.00
45	S	Toluene-d8 (S)	50.000	49.464	1.1	95	0.00
46	C	Toluene	20.000	19.172	4.1	98	0.00
47		Tetrachloroethene (PCE)	20.000	20.966	-4.8	99	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	44.999	-12.5	106	0.00
49		t-1,3-Dichloropropene	20.000	21.828	-9.1	98	0.00
50		1,1,2-Trichloroethane	20.000	20.685	-3.4	98	0.00

-E05

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:35:21 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51		Dibromochloromethane	20.000	19.839	0.8	99	0.00
52		1,3-Dichloropropane	20.000	20.466	-2.3	99	0.00
53		1,2-Dibromoethane (EDB)	20.000	21.099	-5.5	100	0.00
54		2-Hexanone	40.000	40.792	-2.0	109	0.00
55	P	Chlorobenzene	20.000	19.434	2.8	99	0.00
56	C	Ethylbenzene	20.000	20.392	-2.0	99	0.00
57		1,1,1,2-Tetrachloroethane	20.000	20.623	-3.1	96	0.00
58		m,p-Xylenes (2)	40.000	39.439	1.4	98	0.00
59		o-Xylene	20.000	19.578	2.1	99	0.00
60		Styrene	20.000	18.972	5.1	99	0.00
61	P	Bromoform	20.000	21.420	-7.1	100	0.00
62		Isopropylbenzene	20.000	21.769	-8.8	100	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	101	0.00
64	S	4-Bromofluorobenzene (S)	50.000	49.640	0.7	99	0.00
65		Bromobenzene	20.000	20.057	-0.3	101	0.00
66		n-Propylbenzene	20.000	20.120	-0.6	100	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	21.194	-6.0	105	0.00
68		2-Chlorotoluene	20.000	20.776	-3.9	101	0.00
69		1,3,5-Trimethylbenzene	20.000	21.469	-7.3	100	0.00
70		1,2,3-Trichloropropane	20.000	21.095	-5.5	104	0.00
71		t-1,4-Dichloro-2-butene	20.000	18.387	8.1	104	0.00
72		4-Chlorotoluene	20.000	20.615	-3.1	101	0.00
73		tert-Butylbenzene	20.000	21.185	-5.9	100	0.00
74		1,2,4-Trimethylbenzene	20.000	21.885	-9.4	100	0.00
75		sec-Butylbenzene	20.000	22.030	-10.2	101	0.00
76		4-Isopropyltoluene	20.000	21.460	-7.3	102	0.00
77		1,3-Dichlorobenzene	20.000	20.422	-2.1	102	0.00
78		1,4-Dichlorobenzene	20.000	19.128	4.4	102	0.00
79		n-Butylbenzene	20.000	20.272	-1.4	100	0.00
80		1,2-Dichlorobenzene	20.000	20.682	-3.4	104	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	20.779	-3.9	110	0.00
82		Hexachlorobutadiene	20.000	19.933	0.3	102	0.00
83		1,2,4-Trichlorobenzene	20.000	21.198	-6.0	102	0.00
84		Naphthalene	20.000	22.323	-11.6	105	0.00
85		1,2,3-Trichlorobenzene	20.000	20.960	-4.8	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200414S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Wed Apr 15 13:36:53 2020
Response Via : Initial Calibration

Calibration Files
1 =VJ20041404.D 2 =VJ20041405.D 3 =VJ20041406.D 4 =VJ20041407.D 5 =VJ20041408.D 6 =VJ20041409.D
7 =VJ20041410.D 8 =VJ20041411.D 9 =VJ20041412.D 10 =VJ20041414.D 1a =VJ20041416.D

		Compound	1	2	3	4	5	6	7	8	9	10	1a	Avg	%RSD
1)	I	Pentafluorobenzene...	ISTD												
2)		Dichlorodifluo...			1.001	1.081	1.036	0.898	0.998	0.910	1.151	1.081	1.094	1.028	8.26
3)	P	Chloromethane					2.005	1.652	1.610	1.446	1.642	1.452	1.513	1.617	11.82
4)	C	Vinyl Chloride			1.165	1.343	1.053	0.978	1.073	0.977	1.298	1.036	1.244	1.130	12.22
5)		Bromomethane					1.387	0.847	0.713	0.547	0.468	0.420	0.431	0.688	50.41
6)		Chloroethane						0.336	0.302	0.249	0.240	0.252	0.238	0.269	14.84
7)		Trichlorofluor...					0.383	0.429	0.346	0.286	0.273	0.286	0.275	0.325	19.00
8)		Ethanol					0.035	0.030	0.026	0.029	0.035	0.031		0.031	11.46
9)	C	1,1-Dichloroet...		1.825	1.541	1.423	1.730	1.603	1.659	1.236	1.248	1.578	1.297	1.514	13.59
10)		Carbon Disulfide	3.133	2.373	2.173	2.177	2.629	2.437	2.669	2.160	2.148	2.612	2.400	2.447	12.31
11)		Freon 113			0.894	0.920	1.003	0.908	1.003	0.944	0.957	0.966	0.950	0.949	4.05
12)		Iodomethane						0.106	0.150	0.164	0.237	0.304	0.390	0.225	47.50
13)		Methylene Chlo...						1.289	1.199	1.028	1.061	0.995	1.013	1.098	10.84
14)		Acetone					0.818	0.563	0.586	0.593	0.650	0.592	0.554	0.622	14.74
15)		t-1,2-Dichloro...		2.018	1.732	1.756	1.724	1.627	1.673	1.613	1.669	1.626	1.634	1.707	7.04
16)		n-Hexane				0.257	0.235	0.209	0.235	0.229	0.238	0.241	0.237	0.235	5.75
17)		Methyl-tert-bu...	4.411	3.957	3.820	3.666	3.592	3.439	3.635	3.567	3.823	3.812	3.873	3.781	6.87
18)		tert-Butanol (...			0.341	0.333	0.266	0.256	0.253	0.291	0.361	0.320		0.302	13.82
19)		Diisopropyl et...		3.926	3.930	3.890	3.866	3.654	3.729	3.621	3.851	3.864		3.815	3.05
20)	P	1,1-Dichloroet...		1.927	2.072	2.200	2.200	2.014	2.129	1.960	2.052	1.983	1.937	2.047	4.98
21)		Acrylonitrile				0.714	0.616	0.599	0.681	0.705	0.782	0.732	0.703	0.691	8.64
22)		Ethyl-tert-but...			3.348	3.217	3.231	3.158	3.309	3.237	3.436	3.524		3.307	3.73
23)		c-1,2-Dichloro...		1.539	1.600	1.593	1.613	1.550	1.633	1.534	1.625	1.612	1.628	1.593	2.38
24)		2,2-Dichloropr...	2.087	1.777	1.843	1.876	1.697	1.575	1.678	1.569	1.646	1.614	1.589	1.723	9.32
25)		Bromochloromet...		0.972	0.983	1.085	1.031	0.969	1.044	0.952	0.985	0.932	0.937	0.989	5.00
26)	C	Chloroform	2.083	1.864	1.962	2.106	2.110	2.000	2.066	1.941	2.007	1.942	1.943	2.002	4.02
27)		Carbon Tetrach...			1.030	0.999	1.267	1.227	1.364	1.316	1.382	1.435	1.459	1.275	12.99
28)		Tetrahydrofuran				0.874	0.662	0.610	0.641	0.691	0.781	0.734	0.813	0.726	12.57
29)		1,1,1-Trichlor...		1.490	1.724	1.778	1:871	1.686	1.832	1.723	1.780	1.794	1.788	1.747	6.02
30)	S	Dibromofluorom...	0.880	0.870	0.869	0.870	0.914	0.890	0.912	0.867	0.865	0.850	0.870	0.878	2.26
31)		1,1-Dichloropr...		1.360	1.383	1.502	1.504	1.411	1.578	1.542	1.620	1.647	1.646	1.519	7.04
32)		2-Butanone (MEK)			1.069	1.082	0.913	0.859	0.915	0.969	1.111	1.041	1.133	1.010	9.76
33)		Benzene	6.238	5.153	5.130	5.168	5.030	4.841	5.095	4.821	5.019	4.968	4.987	5.132	7.49
34)		tert-Amyl meth...			3.570	3.496	3.356	3.126	3.190	3.074	3.320	3.369		3.313	5.26
35)		1,2-Dichloroet...			1.612	1.784	1.729	1.596	1.650	1.582	1.673	1.624	1.623	1.652	4.01
36)		iso-Butyl Alcohol				0.123	0.099	0.094	0.091	0.111	0.139	0.133	0.146	0.117	18.28
37)	S	1,4-Difluorobe...	3.140	3.138	3.150	3.117	3.149	3.112	3.117	3.099	3.127	3.136	3.172	3.133	0.66
38)		Trichloroethen...		1.073	1.258	1.331	1.277	1.188	1.302	1.212	1.275	1.295	1.321	1.253	6.19
39)		tert-Amyl ethy...					3.410	2.638	2.565	2.454	2.554	2.658		2.713	12.86
40)		Dibromomethane			0.496	0.712	0.745	0.707	0.737	0.710	0.756	0.734	0.745	0.705	11.37

Method Path : C:\msdchem\1\methods\
Method File : VJ200414S.M
Title : EPA 8260C: Volatile Organic Compounds

41)	C	1,2-Dichloropr...				1.189	1.268	1.255	1.196	1.260	1.204	1.290	1.285	1.306	1.250	3.49
42)		Bromodichlorom...			1.143	1.204	1.155	1.297	1.277	1.370	1.340	1.445	1.498	1.563	1.329	10.72
43)		Chlorobenzene-d5 (I)	----------ISTD----------													
44)		c-1,3-Dichloro...		0.582	0.506	0.588	0.558	0.561	0.612	0.609	0.680	0.699	0.719	0.611	11.16
45)	S	Toluene-d8 (S)	1.365	1.361	1.377	1.380	1.363	1.364	1.346	1.352	1.353	1.346	1.348	1.360	0.87
46)	C	Toluene	2.289	2.040	1.843	1.978	1.852	1.833	1.878	1.800	1.875	1.848	1.832	1.915	7.44
47)		Tetrachloroeth...		0.291	0.367	0.396	0.375	0.388	0.409	0.388	0.403	0.401	0.394	0.381	8.99
48)		4-Methyl-2-Pen...				0.489	0.471	0.496	0.536	0.575	0.674	0.644	0.638	0.565	13.97
49)		t-1,3-Dichloro...		0.507	0.500	0.541	0.540	0.565	0.615	0.632	0.684	0.678	0.686	0.595	12.34
50)		1,1,2-Trichlor...		0.355	0.353	0.410	0.421	0.405	0.420	0.406	0.419	0.413	0.414	0.402	6.41
51)		Dibromochlorom...					0.298	0.308	0.338	0.336	0.369	0.393	0.412	0.350	12.13
52)		1,3-Dichloropr...		0.718	0.682	0.724	0.705	0.715	0.735	0.716	0.757	0.743	0.749	0.724	3.11
53)		1,2-Dibromoeth...		0.358	0.336	0.384	0.385	0.375	0.399	0.400	0.436	0.435	0.443	0.395	8.88
54)		2-Hexanone		0.277	0.283	0.296	0.281	0.308	0.334	0.397	0.509	0.491	0.515	0.369	27.19
55)	P	Chlorobenzene	1.354	1.211	1.156	1.197	1.133	1.132	1.153	1.102	1.147	1.123	1.117	1.166	6.05
56)	C	Ethylbenzene	2.117	1.763	1.748	1.837	1.773	1.794	1.877	1.858	1.978	1.951	1.933	1.875	5.98
57)		1,1,1,2-Tetrac...				0.294	0.345	0.328	0.348	0.369	0.370	0.395	0.402	0.394	0.361	9.82
58)		m,p-Xylenes (2)	1.360	1.222	1.195	1.220	1.204	1.266	1.381	1.373	1.481	1.436	1.418	1.323	7.89
59)		o-Xylene		1.160	1.159	1.183	1.116	1.187	1.289	1.315	1.479	1.453	1.473	1.281	11.10
60)		Styrene		0.655	0.594	0.666	0.654	0.737	0.866	0.925	1.089	1.106	1.119	0.841	24.70
61)	P	Bromoform			0.148	0.145	0.177	0.189	0.215	0.219	0.253	0.261	0.262	0.208	22.07
62)		Isopropylbenzene			1.260	1.339	1.328	1.409	1.583	1.608	1.774	1.779	1.770	1.539	13.64
63)	I	1,4-Dichlorobenzen...	----------ISTD----------													
64)	S	4-Bromofluorob...	0.749	0.746	0.748	0.768	0.752	0.767	0.769	0.772	0.753	0.779	0.752	0.759	1.50
65)		Bromobenzene	0.818	0.913	0.900	0.982	0.925	0.930	0.929	0.922	0.937	0.959	0.918	0.921	4.44
66)		n-Propylbenzene	4.482	4.380	3.817	4.241	3.948	4.071	4.331	4.403	4.553	4.729	4.496	4.314	6.34
67)	P	1,1,2,2-Tetrac...	1.168	0.891	1.002	1.111	1.068	1.084	1.081	1.100	1.115	1.115	1.078	1.074	6.79
68)		2-Chlorotoluene		0:816	0.682	0.791	0.796	0.828	0.863	0.875	0.904	0.939	0.896	0.839	8.75
69)		1,3,5-Trimethy...	2.831	2.404	2.285	2.654	2.446	2.722	2.981	3.042	3.164	3.237	3.080	2.804	11.66
70)		1,2,3-Trichlor...			0.361	0.418	0.398	0.412	0.414	0.417	0.429	0.422	0.403	0.408	4.92
71)		t-1,4-Dichloro...							0.143	0.157	0.188	0.193	0.195	0.175	13.41
72)		4-Chlorotoluene	2.617	2.459	2.224	2.531	2.374	2.559	2.677	2.669	2.774	2.856	2.715	2.587	7.09
73)		tert-Butylbenzene	1.569	1.374	1.390	1.441	1.417	1.502	1.654	1.691	1.768	1.825	1.743	1.580	10.41
74)		1,2,4-Trimethy...	2.765	2.386	2.257	2.520	2.432	2.734	2.998	3.081	3.191	3.235	3.079	2.789	12.53
75)		sec-Butylbenzene	2.901	2.804	2.789	3.183	2.968	3.324	3.653	3.693	3.863	4.015	3.803	3.363	13.65
76)		4-Isopropyltol...			2.256	2.427	2.306	2.605	2.891	2.988	3.210	3.335	3.188	2.801	14.76
77)		1,3-Dichlorobe...	1.339	1.667	1.519	1.762	1.557	1.654	1.650	1.639	1.668	1.676	1.620	1.614	6.87
78)		1,4-Dichlorobe...	1.776	1.798	1.757	1.919	1.711	1.692	1.649	1.628	1.668	1.653	1.610	1.714	5.33
79)		n-Butylbenzene	2.944	2.580	2.320	2.630	2.279	2.427	2.671	2.720	2.844	2.917	2.788	2.647	8.62
80)		1,2-Dichlorobe...	1.195	1.376	1.490	1.583	1.478	1.495	1.530	1.487	1.545	1.516	1.516	1.474	7.17
81)		1,2-Dibromo-3-...			0.116	0.209	0.189	0.194	0.194	0.212	0.258	0.292	0.331	0.222	28.66
82)		Hexachlorobuta...				0.248	0.226	0.223	0.226	0.225	0.228	0.222	0.224	0.228	3.61
83)		1,2,4-Trichlor...	0.658	0.885	0.830	0.912	0.844	0.860	0.915	0.939	0.982	0.982	1.018	0.893	11.03
84)		Naphthalene	2.780	2.901	2.566	2.860	2.594	2.744	2.919	3.266	3.654	3.747	3.907	3.085	15.55
85)		1,2,3-Trichlor...		0.806	0.810	0.879	0.815	0.841	0.882	0.902	0.964	0.958	0.999	0.885	7.85

(#) = Out of Range

Compound List Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200414S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Wed Apr 15 13:36:53 2020
Response Via : Initial Calibration

Total Cpnds : 85

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Pentafluorobenzene (I)	99	6.059	1.000	A	2	A	R
2		Dichlorodifluoromethane	85	1.685	0.278	A	2	A	R
3	P	Chloromethane	50	1.885	0.311	A	2	A	R
4	C	Vinyl Chloride	62	1.977	0.326	A	2	A	R
5		Bromomethane	96	2.329	0.384	Q	2	A	R
6		Chloroethane	64	2.457	0.406	A	2	A	R
7		Trichlorofluoromethane	101	2.591	0.428	Q	2	A	R
8		Ethanol	45	3.315	0.547	A	1	A	R
9	C	1,1-Dichloroethene	61	3.127	0.516	A	2	A	R
10		Carbon Disulfide	76	3.139	0.518	A	2	A	R
11		Freon 113	101	3.181	0.525	A	2	A	R
12		Iodomethane	142	3.278	0.541	Q	2	A	R
13		Methylene Chloride	84	3.759	0.620	A	2	A	R
14		Acetone	43	3.844	0.635	A	1	A	R
15		t-1,2-Dichloroethene	61	3.924	0.648	A	2	A	R
16		n-Hexane	86	4.015	0.663	A	3	A	R
17		Methyl-tert-butyl-ether	73	4.082	0.674	A	3	A	R
18		tert-Butanol (TBA)	59	4.282	0.707	A	1	A	R
19		Diisopropyl ether (DIPE)	45	4.477	0.739	A	2	A	R
20	P	1,1-Dichloroethane	63	4.550	0.751	A	2	A	R
21		Acrylonitrile	53	4.605	0.760	A	2	A	R
22		Ethyl-tert-butyl ether (ETBE)	59	4.842	0.799	A	2	A	R
23		c-1,2-Dichloroethene	61	5.098	0.841	A	2	A	R
24		2,2-Dichloropropane	77	5.207	0.859	A	2	A	R
25		Bromochloromethane	49	5.298	0.874	A	2	A	R
26	C	Chloroform	83	5.384	0.889	A	2	A	R
27		Carbon Tetrachloride	117	5.524	0.912	A	2	A	R
28		Tetrahydrofuran	42	5.560	0.918	A	2	A	R
29		1,1,1-Trichloroethane	97	5.590	0.923	A	2	A	R
30	S	Dibromofluoromethane (S)	111	5.566	0.919	A	2	A	R
31		1,1-Dichloropropene	75	5.718	0.944	A	2	A	R
32		2-Butanone (MEK)	43	5.700	0.941	A	2	A	R
33		Benzene	78	5.968	0.985	A	2	A	R
34		tert-Amyl methyl ether (TAME)	73	6.120	1.010	A	2	A	R
35		1,2-Dichloroethane (EDC)	62	6.174	1.019	A	2	A	R
36		iso-Butyl Alcohol	43	6.265	1.034	Q	2	A	R
37	S	1,4-Difluorobenzene (S)	114	6.619	1.092	A	2	A	R
38		Trichloroethene (TCE)	130	6.588	1.087	A	2	A	R
39		tert-Amyl ethyl ether (TAEE)	59	6.868	1.134	A	2	A	R
40		Dibromomethane	93	7.026	1.160	A	2	A	R
41	C	1,2-Dichloropropane	63	7.136	1.178	A	2	A	R
42		Bromodichloromethane	83	7.215	1.191	A	2	A	R
43	I	Chlorobenzene-d5 (I)	117	9.776	1.000	A	2	A	R
44		c-1,3-Dichloropropene	75	7.914	0.810	A	2	A	R
45	S	Toluene-d8 (S)	98	8.133	0.832	A	2	A	R
46	C	Toluene	91	8.188	0.838	A	2	A	R
47		Tetrachloroethene (PCE)	166	8.644	0.884	A	2	A	R
48		4-Methyl-2-Pentanone (MIBK)	43	8.626	0.882	A	2	A	R
49		t-1,3-Dichloropropene	75	8.663	0.886	A	2	A	R
50		1,1,2-Trichloroethane	97	8.839	0.904	A	2	A	R
51		Dibromochloromethane	129	9.034	0.924	A	2	A	R
52		1,3-Dichloropropane	76	9.125	0.933	A	2	A	R
53		1,2-Dibromoethane (EDB)	107	9.265	0.948	A	2	A	R
54		2-Hexanone	43	9.514	0.973	Q	2	A	R

55	P	Chlorobenzene	112	9.794	1.002	A	2	A	R
56	C	Ethylbenzene	91	9.831	1.006	A	2	A	R
57		1,1,1,2-Tetrachloroethane	131	9.855	1.008	A	2	A	R
58		m,p-Xylenes (2)	91	9.964	1.019	Q1/a	2	A	R
59		o-Xylene	91	10.347	1.058	Q1/a	2	A	R
60		Styrene	104	10.396	1.063	Q1/a	2	A	R
61	P	Bromoform	173	10.408	1.065	Q1/a2	2	A	R
62		Isopropylbenzene	105	10.627	1.087	A	2	A	R
63	I	1,4-Dichlorobenzene-d4 (I)	152	11.741	1.000	A	2	A	R
64	S	4-Bromofluorobenzene (S)	174	10.853	0.924	A	2	A	R
65		Bromobenzene	156	10.938	0.932	A	2	A	R
66		n-Propylbenzene	91	10.968	0.934	A	2	A	R
67	P	1,1,2,2-Tetrachloroethane	83	11.023	0.939	A	2	A	R
68		2-Chlorotoluene	126	11.090	0.945	A	2	A	R
69		1,3,5-Trimethylbenzene	105	11.126	0.948	A	2	A	R
70		1,2,3-Trichloropropane	110	11.126	0.948	A	2	A	R
71		t-1,4-Dichloro-2-butene	88	11.163	0.951	A	3	A	R
72		4-Chlorotoluene	91	11.224	0.956	A	2	A	R
73		tert-Butylbenzene	91	11.382	0.969	A	2	A	R
74		1,2,4-Trimethylbenzene	105	11.437	0.974	A	2	A	R
75		sec-Butylbenzene	105	11.522	0.981	A	2	A	R
76		4-Isopropyltoluene	119	11.631	0.991	A	2	A	R
77		1,3-Dichlorobenzene	146	11.686	0.995	A	2	A	R
78		1,4-Dichlorobenzene	146	11.753	1.001	A	2	A	R
79		n-Butylbenzene	91	11.948	1.018	A	2	A	R
80		1,2-Dichlorobenzene	146	12.069	1.028	A	2	A	R
81		1,2-Dibromo-3-Chloropropane	157	12.671	1.079	Q1/a2	2	A	R
82		Hexachlorobutadiene	223	13.188	1.123	A	3	A	R
83		1,2,4-Trichlorobenzene	180	13.213	1.125	A	2	A	R
84		Naphthalene	128	13.486	1.149	Q1/a2	2	A	R
85		1,2,3-Trichlorobenzene	180	13.645	1.162	A	2	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VJ200414S.M Wed Apr 15 14:24:45 2020

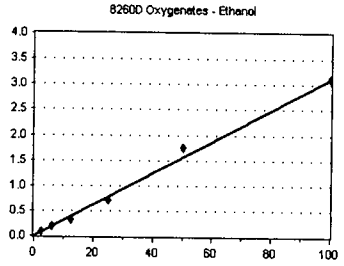
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **8260D Oxygenates** Instrument Cal ID: **VJ200414S VJ200414G**

Ethanol

Curve Fit: **AVERAGE RF**

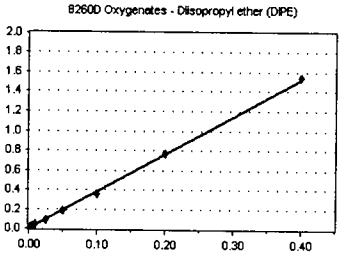


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~6.25~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~12.5~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL3~~	~~25~~	~~407~~	~~7.709~~	~~3.33~~
~~0D14058-CAL4~~	~~62.5~~	~~6877~~	~~5.412~~	~~3.27~~
0D14058-CAL5	125	9579	3.530	3.33
0D14058-CAL6	312	21436	3.000	3.41
0D14058-CAL7	625	36961	0.026	3.31
0D14058-CAL8	1250	86767	2.876	3.32
0D14058-CAL9	2500	192713	3.495	3.27
0D14058-CALA	5000	380721	3.117	3.32

AVE RF **3.106** RF RSD **11.46** AVE RT **3.32**

Diisopropyl ether (DIPE)

Curve Fit: **AVERAGE RF**

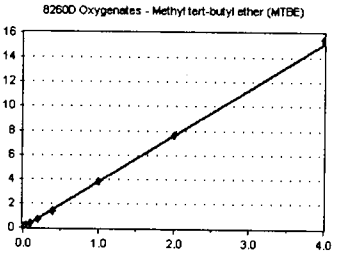


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.05	407	3.926	0.00
0D14058-CAL3	0.1	830	3.930	4.47
0D14058-CAL4	0.25	1977	3.890	4.48
0D14058-CAL5	0.5	4196	3.866	4.47
0D14058-CAL6	1.25	10462	3.654	4.47
0D14058-CAL7	2.5	21062	3.729	4.47
0D14058-CAL8	5	43695	3.621	4.48
0D14058-CAL9	10	84930	3.851	4.48
0D14058-CALA	20	188761	3.864	4.48

AVE RF **3.815** RF RSD **3.05** AVE RT **3.98**

Methyl tert-butyl ether (MTBE)

Curve Fit: **AVERAGE RF**

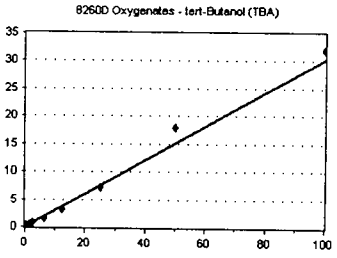


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	932	4.411	4.08
0D14058-CAL2	0.2	1641	3.957	4.08
0D14058-CAL3	0.4	3227	3.820	4.08
0D14058-CAL4	1	7453	3.666	4.08
0D14058-CAL5	2	15596	3.592	4.08
0D14058-CAL6	5	39384	3.439	4.08
0D14058-CAL7	10	82126	3.635	4.08
0D14058-CAL8	20	172134	3.567	4.08
0D14058-CAL9	50	421496	3.823	4.08
0D14058-CALA	100	931269	3.812	4.08
0D14058-CALB	200	1814036	3.873	4.07

AVE RF **3.781** RF RSD **6.87** AVE RT **4.08**

tert-Butanol (TBA)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~6.25~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~12.5~~	~~9827~~	~~0.379~~	~~4.24~~
0D14058-CAL3	25	18003	0.341	4.23
0D14058-CAL4	62.5	42254	0.333	4.25
0D14058-CAL5	125	72159	0.266	4.30
0D14058-CAL6	312	182697	0.256	4.32
0D14058-CAL7	625	356524	0.253	4.28
0D14058-CAL8	1250	877843	0.291	4.28
0D14058-CAL9	2500	1987882	0.361	4.24
0D14058-CALA	5000	3910191	0.320	4.29

AVE RF **0.302** RF RSD **13.82** AVE RT **4.27**

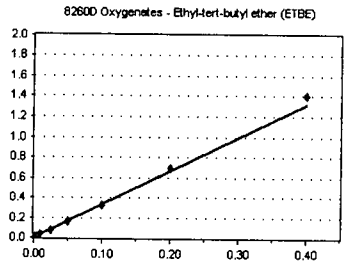
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **8260D Oxygenates** Instrument Cal ID: **VJ200414S VJ200414G**

Ethyl-tert-butyl ether (ETBE)

Curve Fit: **AVERAGE RF**

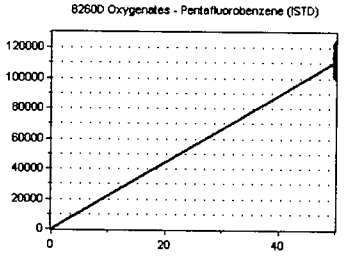


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.1	707	3.348	4.84
0D14058-CAL4	0.25	1635	3.217	4.85
0D14058-CAL5	0.5	3507	3.231	4.83
0D14058-CAL6	1.25	9041	3.158	4.84
0D14058-CAL7	2.5	18690	3.309	4.84
0D14058-CAL8	5	39056	3.237	4.84
0D14058-CAL9	10	75774	3.436	4.84
0D14058-CALA	20	172177	3.524	4.84

AVE RF **3.308** RF RSD **3.73** AVE RT **4.84**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

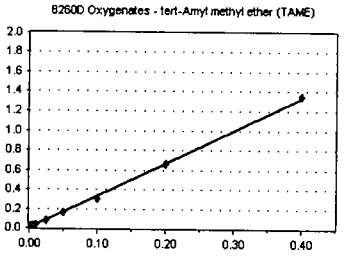


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	105642	2112.840	6.05
0D14058-CAL2	50	103672	2073.440	6.05
0D14058-CAL3	50	105594	2111.880	6.05
0D14058-CAL4	50	101650	2033.000	6.05
0D14058-CAL5	50	108540	2170.800	6.05
0D14058-CAL6	50	114526	2290.520	6.06
0D14058-CAL7	50	112952	2259.040	6.06
0D14058-CAL8	50	120657	2413.140	6.06
0D14058-CAL9	50	110264	2205.280	6.06
0D14058-CALA	50	122138	2442.760	6.06
0D14058-CALB	50	117091	2341.820	6.05

AVE RF **2223.138** RF RSD **6.21** AVE RT **6.06**

tert-Amyl methyl ether (TAME)

Curve Fit: **AVERAGE RF**

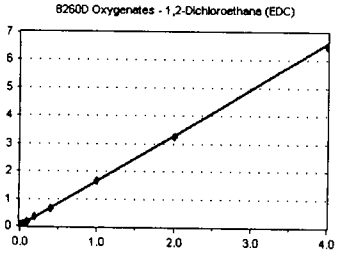


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.1	754	3.570	6.12
0D14058-CAL4	0.25	1777	3.496	6.11
0D14058-CAL5	0.5	3643	3.356	6.12
0D14058-CAL6	1.25	8949	3.126	6.12
0D14058-CAL7	2.5	18016	3.190	6.11
0D14058-CAL8	5	37084	3.074	6.12
0D14058-CAL9	10	73216	3.320	6.12
0D14058-CALA	20	164593	3.369	6.12

AVE RF **3.313** RF RSD **5.26** AVE RT **6.12**

1,2-Dichloroethane (EDC)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.4	1362	1.612	6.17
0D14058-CAL4	1	3627	1.784	6.18
0D14058-CAL5	2	7505	1.729	6.17
0D14058-CAL6	5	18274	1.596	6.17
0D14058-CAL7	10	37263	1.650	6.17
0D14058-CAL8	20	76329	1.582	6.17
0D14058-CAL9	50	184518	1.673	6.17
0D14058-CALA	100	396654	1.624	6.18
0D14058-CALB	200	760174	1.623	6.17

AVE RF **1.652** RF RSD **4.01** AVE RT **6.17**

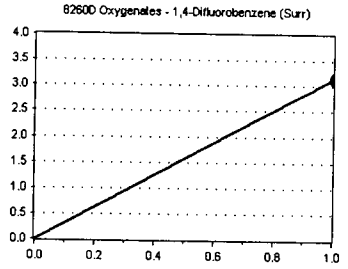
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **8260D Oxygenates** Instrument Cal ID: **VJ200414S VJ200414G**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

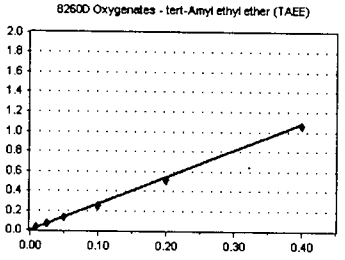


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	331750	3.140	6.62
0D14058-CAL2	50	325315	3.138	6.61
0D14058-CAL3	50	332647	3.150	6.61
0D14058-CAL4	50	316835	3.117	6.62
0D14058-CAL5	50	341820	3.149	6.62
0D14058-CAL6	50	356364	3.112	6.62
0D14058-CAL7	50	352107	3.117	6.62
0D14058-CAL8	50	373957	3.099	6.62
0D14058-CAL9	50	344845	3.127	6.62
0D14058-CALA	50	383034	3.136	6.62
0D14058-CALB	50	371374	3.172	6.61

AVE RF **3.133** RF RSD **0.66** AVE RT **6.62**

tert-Amyl ethyl ether (TAEE)

Curve Fit: **AVERAGE RF**

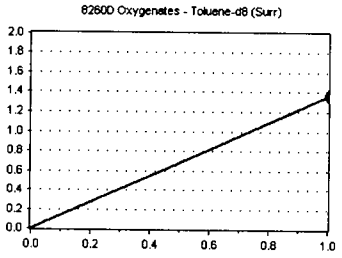


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.05~~	~~1511~~	~~14.575~~	~~6.84~~
~~0D14058-CAL3~~	~~0.1~~	~~1722~~	~~8.154~~	~~6.85~~
~~0D14058-CAL4~~	~~0.25~~	~~2528~~	~~4.974~~	~~6.84~~
0D14058-CAL5	0.5	3701	3.410	6.85
0D14058-CAL6	1.25	7553	2.638	6.87
0D14058-CAL7	2.5	14484	2.565	6.87
0D14058-CAL8	5	29606	2.454	6.87
0D14058-CAL9	10	56312	2.554	6.87
0D14058-CALA	20	129880	2.658	6.87

AVE RF **2.713** RF RSD **12.86** AVE RT **6.87**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**

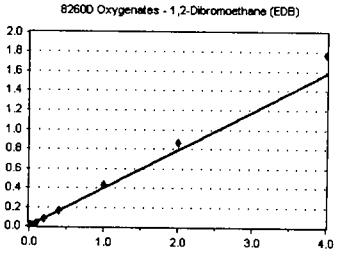


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	393483	1.365	8.13
0D14058-CAL2	50	387254	1.361	8.13
0D14058-CAL3	50	397845	1.377	8.13
0D14058-CAL4	50	377021	1.380	8.13
0D14058-CAL5	50	408232	1.363	8.13
0D14058-CAL6	50	421290	1.364	8.13
0D14058-CAL7	50	416754	1.346	8.13
0D14058-CAL8	50	443469	1.352	8.13
0D14058-CAL9	50	407069	1.353	8.13
0D14058-CALA	50	449815	1.346	8.13
0D14058-CALB	50	438887	1.348	8.13

AVE RF **1.360** RF RSD **0.87** AVE RT **8.13**

1,2-Dibromoethane (EDB)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	407	0.358	9.27
0D14058-CAL3	0.4	777	0.336	9.27
0D14058-CAL4	1	2095	0.384	9.27
0D14058-CAL5	2	4614	0.385	9.27
0D14058-CAL6	5	11584	0.375	9.27
0D14058-CAL7	10	24716	0.399	9.27
0D14058-CAL8	20	52465	0.400	9.27
0D14058-CAL9	50	131063	0.436	9.27
0D14058-CALA	100	290472	0.435	9.27
0D14058-CALB	200	577502	0.443	9.27

AVE RF **0.395** RF RSD **8.88** AVE RT **9.27**

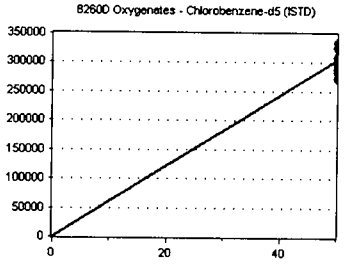
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **8260D Oxygenates** Instrument Cal ID: **VJ200414S VJ200414G**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

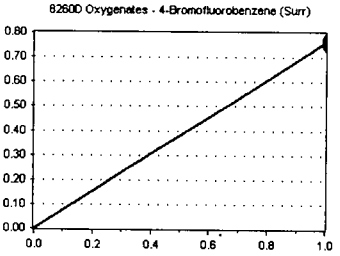


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	288314	5766.280	9.78
0D14058-CAL2	50	284575	5691.500	9.78
0D14058-CAL3	50	288887	5777.740	9.78
0D14058-CAL4	50	273138	5462.760	9.78
0D14058-CAL5	50	299437	5988.740	9.78
0D14058-CAL6	50	308854	6177.080	9.78
0D14058-CAL7	50	309528	6190.560	9.78
0D14058-CAL8	50	327947	6558.940	9.78
0D14058-CAL9	50	300882	6017.640	9.78
0D14058-CALA	50	334260	6685.200	9.78
0D14058-CALB	50	325548	6510.960	9.78

AVE RF **6075.218** RF RSD **6.45** AVE RT **9.78**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

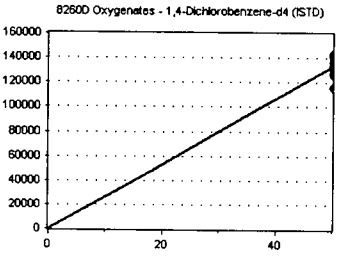


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	96219	0.749	10.85
0D14058-CAL2	50	94121	0.746	10.85
0D14058-CAL3	50	98324	0.748	10.85
0D14058-CAL4	50	89056	0.768	10.85
0D14058-CAL5	50	100257	0.752	10.85
0D14058-CAL6	50	102646	0.767	10.85
0D14058-CAL7	50	104997	0.769	10.85
0D14058-CAL8	50	108624	0.772	10.85
0D14058-CAL9	50	102598	0.753	10.85
0D14058-CALA	50	111188	0.779	10.85
0D14058-CALB	50	108105	0.752	10.85

AVE RF **0.759** RF RSD **1.50** AVE RT **10.85**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	128408	2568.160	11.74
0D14058-CAL2	50	126249	2524.980	11.74
0D14058-CAL3	50	131365	2627.300	11.74
0D14058-CAL4	50	116028	2320.560	11.74
0D14058-CAL5	50	133278	2665.560	11.74
0D14058-CAL6	50	133791	2675.820	11.74
0D14058-CAL7	50	136622	2732.440	11.74
0D14058-CAL8	50	140705	2814.100	11.74
0D14058-CAL9	50	136262	2725.240	11.74
0D14058-CALA	50	142815	2856.300	11.74
0D14058-CALB	50	143744	2874.880	11.74

AVE RF **2671.395** RF RSD **6.03** AVE RT **11.74**

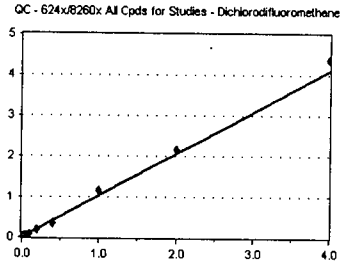
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

Dichlorodifluoromethane

Curve Fit: **AVERAGE RF**

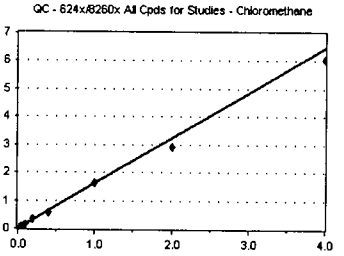


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.4	846	1.001	1.68
0D14058-CAL4	1	2198	1.081	1.68
0D14058-CAL5	2	4500	1.036	1.67
0D14058-CAL6	5	10284	0.898	1.69
0D14058-CAL7	10	22545	0.998	1.69
0D14058-CAL8	20	43914	0.910	1.69
0D14058-CAL9	50	126884	1.151	1.69
0D14058-CALA	100	264089	1.081	1.69
0D14058-CALB	200	512521	1.094	1.67

AVE RF **1.028** RF RSD **8.26** AVE RT **1.68**

Chloromethane

Curve Fit: **AVERAGE RF**

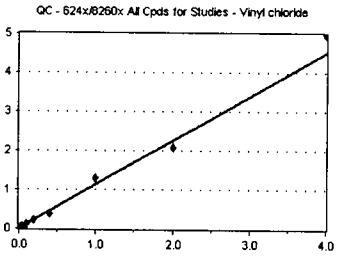


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~3332~~	~~15.770~~	~~1.88~~
~~0D14058-CAL2~~	~~0.2~~	~~3985~~	~~9.610~~	~~1.87~~
~~0D14058-CAL3~~	~~0.4~~	~~4050~~	~~4.794~~	~~1.87~~
~~0D14058-CAL4~~	~~1~~	~~6544~~	~~3.219~~	~~1.88~~
0D14058-CAL5	2	8703	2.005	1.87
0D14058-CAL6	5	18921	1.652	1.89
0D14058-CAL7	10	36365	1.610	1.89
0D14058-CAL8	20	69801	1.446	1.89
0D14058-CAL9	50	181011	1.642	1.89
0D14058-CALA	100	354765	1.452	1.89
0D14058-CALB	200	708705	1.513	1.87

AVE RF **1.617** RF RSD **11.82** AVE RT **1.88**

Vinyl chloride

Curve Fit: **AVERAGE RF**

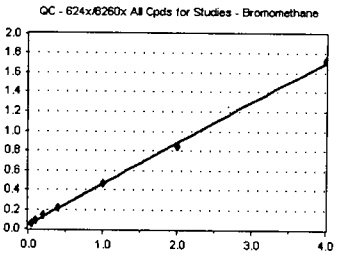


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.4	984	1.165	1.98
0D14058-CAL4	1	2731	1.343	1.98
0D14058-CAL5	2	4573	1.053	1.97
0D14058-CAL6	5	11203	0.978	1.98
0D14058-CAL7	10	24245	1.073	1.97
0D14058-CAL8	20	47143	0.977	1.98
0D14058-CAL9	50	143149	1.298	1.99
0D14058-CALA	100	253013	1.036	1.98
0D14058-CALB	200	582810	1.244	1.97

AVE RF **1.130** RF RSD **12.22** AVE RT **1.98**

Bromomethane

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~4627~~	~~21.899~~	~~2.32~~
~~0D14058-CAL2~~	~~0.2~~	~~5411~~	~~13.048~~	~~2.32~~
~~0D14058-CAL3~~	~~0.4~~	~~5015~~	~~5.937~~	~~2.32~~
~~0D14058-CAL4~~	~~1~~	~~6310~~	~~3.104~~	~~2.32~~
0D14058-CAL5	2	6021	1.387	2.32
0D14058-CAL6	5	9703	0.847	2.33
0D14058-CAL7	10	16117	0.713	2.33
0D14058-CAL8	20	26385	0.547	2.33
0D14058-CAL9	50	51570	0.468	2.33
0D14058-CALA	100	102534	0.420	2.34
0D14058-CALB	200	201911	0.431	2.32

AVE RF **0.688** RF RSD **50.41** AVE RT **2.33**

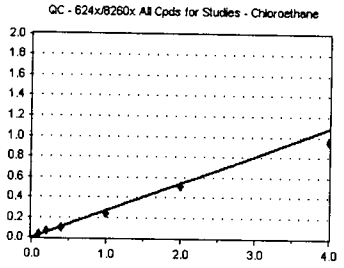
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

Chloroethane

Curve Fit: **AVERAGE RF**

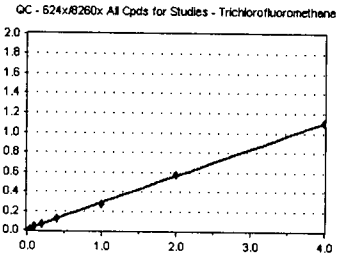


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL3~~	~~0.4~~	~~384~~	~~0.455~~	~~2.43~~
~~0D14058-CAL4~~	~~1~~	~~659~~	~~0.324~~	~~2.44~~
~~0D14058-CAL5~~	~~2~~	~~1499~~	~~0.345~~	~~2.46~~
0D14058-CAL6	5	3845	0.336	2.47
0D14058-CAL7	10	6815	0.302	2.46
0D14058-CAL8	20	12027	0.249	2.46
0D14058-CAL9	50	26476	0.240	2.45
0D14058-CALA	100	61488	0.252	2.46
0D14058-CALB	200	111540	0.238	2.44

AVE RF **0.269** RF RSD **14.84** AVE RT **2.46**

Trichlorofluoromethane

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

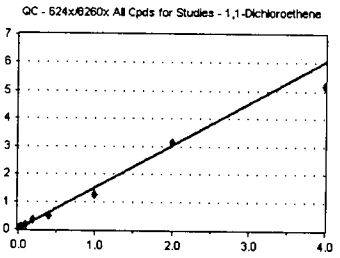


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL3~~	~~0.4~~	~~116~~	~~0.137~~	~~2.57~~
~~0D14058-CAL4~~	~~1~~	~~583~~	~~0.287~~	~~2.57~~
0D14058-CAL5	2	1663	0.383	2.59
0D14058-CAL6	5	4915	0.429	2.61
0D14058-CAL7	10	7818	0.346	2.59
0D14058-CAL8	20	13781	0.286	2.59
0D14058-CAL9	50	30102	0.273	2.59
0D14058-CALA	100	69935	0.286	2.59
0D14058-CALB	200	128760	0.275	2.57

AVE RF **0.325** RF RSD **19.00** AVE RT **2.59**

1,1-Dichloroethene

Curve Fit: **AVERAGE RF**

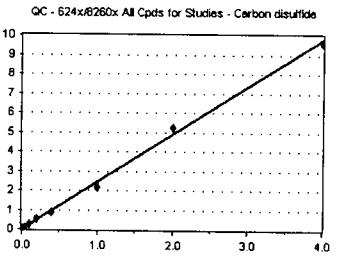


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	757	1.825	3.10
0D14058-CAL3	0.4	1302	1.541	3.10
0D14058-CAL4	1	2892	1.423	3.11
0D14058-CAL5	2	7512	1.730	3.12
0D14058-CAL6	5	18360	1.603	3.13
0D14058-CAL7	10	37467	1.659	3.13
0D14058-CAL8	20	59672	1.236	3.13
0D14058-CAL9	50	137588	1.248	3.12
0D14058-CALA	100	385423	1.578	3.13
0D14058-CALB	200	607289	1.297	3.11

AVE RF **1.514** RF RSD **13.59** AVE RT **3.12**

Carbon disulfide

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	662	3.133	3.13
0D14058-CAL2	0.2	984	2.373	3.12
0D14058-CAL3	0.4	1836	2.173	3.13
0D14058-CAL4	1	4426	2.177	3.13
0D14058-CAL5	2	11415	2.629	3.14
0D14058-CAL6	5	27914	2.437	3.15
0D14058-CAL7	10	60295	2.669	3.15
0D14058-CAL8	20	104264	2.160	3.14
0D14058-CAL9	50	236878	2.148	3.13
0D14058-CALA	100	638048	2.612	3.14
0D14058-CALB	200	1124276	2.400	3.12

AVE RF **2.447** RF RSD **12.31** AVE RT **3.13**

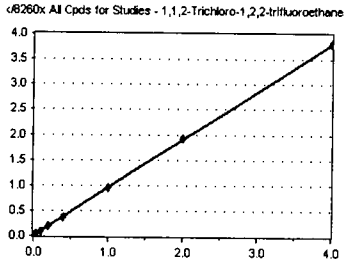
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

1,1,2-Trichloro-1,2,2-trifluoroetha

Curve Fit: **AVERAGE RF**

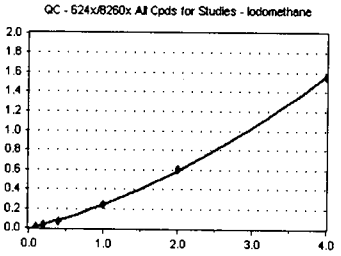


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.4	755	0.894	3.16
0D14058-CAL4	1	1870	0.920	3.16
0D14058-CAL5	2	4355	1.003	3.18
0D14058-CAL6	5	10399	0.908	3.19
0D14058-CAL7	10	22663	1.003	3.19
0D14058-CAL8	20	45551	0.944	3.18
0D14058-CAL9	50	105550	0.957	3.18
0D14058-CALA	100	236088	0.966	3.18
0D14058-CALB	200	444727	0.950	3.16

AVE RF **0.949** RF RSD **4.05** AVE RT **3.18**

Iodomethane

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

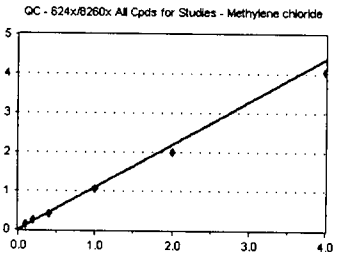


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL3~~	~~0.4~~	~~191~~	~~0.226~~	~~3.25~~
~~0D14058-CAL4~~	~~1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL5~~	~~2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL6	5	1216	0.106	3.28
0D14058-CAL7	10	3379	0.150	3.28
0D14058-CAL8	20	7894	0.164	3.28
0D14058-CAL9	50	26086	0.237	3.27
0D14058-CALA	100	74202	0.304	3.28
0D14058-CALB	200	182559	0.390	3.27

AVE RF **0.225** RF RSD **47.50** AVE RT **3.28**

Methylene chloride

Curve Fit: **AVERAGE RF**

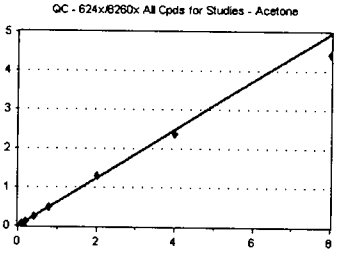


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~2946~~	~~13.943~~	~~3.75~~
~~0D14058-CAL2~~	~~0.2~~	~~3040~~	~~7.331~~	~~3.75~~
~~0D14058-CAL3~~	~~0.4~~	~~3388~~	~~4.011~~	~~3.75~~
~~0D14058-CAL4~~	~~1~~	~~5044~~	~~2.481~~	~~3.75~~
~~0D14058-CAL5~~	~~2~~	~~7445~~	~~1.715~~	~~3.75~~
0D14058-CAL6	5	14765	1.289	3.76
0D14058-CAL7	10	27081	1.199	3.76
0D14058-CAL8	20	49630	1.028	3.76
0D14058-CAL9	50	116970	1.061	3.76
0D14058-CALA	100	243020	0.995	3.76
0D14058-CALB	200	474555	1.013	3.75

AVE RF **1.098** RF RSD **10.84** AVE RT **3.76**

Acetone

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.4~~	~~2232~~	~~2.691~~	~~3.84~~
~~0D14058-CAL3~~	~~0.8~~	~~2774~~	~~1.642~~	~~3.84~~
~~0D14058-CAL4~~	~~2~~	~~4577~~	~~1.126~~	~~3.85~~
0D14058-CAL5	4	7107	0.818	3.84
0D14058-CAL6	10	12899	0.563	3.86
0D14058-CAL7	20	26480	0.586	3.84
0D14058-CAL8	40	57230	0.593	3.84
0D14058-CAL9	100	143371	0.650	3.84
0D14058-CALA	200	289316	0.592	3.85
0D14058-CALB	400	518921	0.554	3.83

AVE RF **0.622** RF RSD **14.74** AVE RT **3.84**

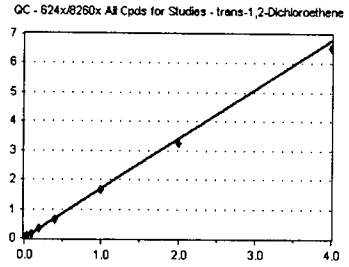
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

trans-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**

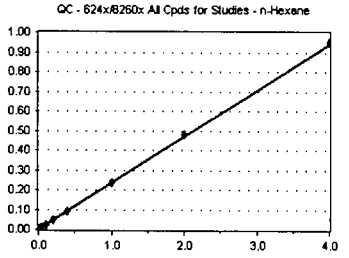


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	837	2.018	3.91
0D14058-CAL3	0.4	1463	1.732	3.91
0D14058-CAL4	1	3570	1.756	3.92
0D14058-CAL5	2	7484	1.724	3.92
0D14058-CAL6	5	18633	1.627	3.92
0D14058-CAL7	10	37791	1.673	3.92
0D14058-CAL8	20	77860	1.613	3.92
0D14058-CAL9	50	183985	1.669	3.92
0D14058-CALA	100	397172	1.626	3.92
0D14058-CALB	200	765331	1.634	3.91

AVE RF **1.707** RF RSD **7.04** AVE RT **3.92**

n-Hexane

Curve Fit: **AVERAGE RF**

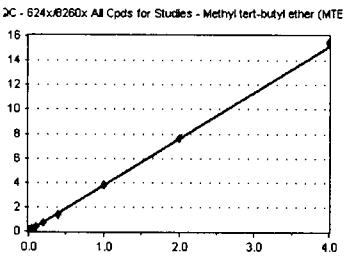


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL4	1	523	0.257	4.00
0D14058-CAL5	2	1019	0.235	4.02
0D14058-CAL6	5	2389	0.209	4.03
0D14058-CAL7	10	5313	0.235	4.02
0D14058-CAL8	20	11051	0.229	4.02
0D14058-CAL9	50	26290	0.238	4.02
0D14058-CALA	100	58843	0.241	4.02
0D14058-CALB	200	111118	0.237	4.00

AVE RF **0.235** RF RSD **5.75** AVE RT **4.02**

Methyl tert-butyl ether (MTBE)

Curve Fit: **AVERAGE RF**

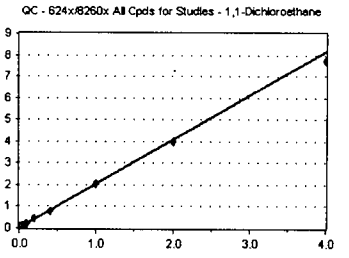


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	932	4.411	4.08
0D14058-CAL2	0.2	1641	3.957	4.08
0D14058-CAL3	0.4	3227	3.820	4.08
0D14058-CAL4	1	7453	3.666	4.08
0D14058-CAL5	2	15596	3.592	4.08
0D14058-CAL6	5	39384	3.439	4.08
0D14058-CAL7	10	82126	3.635	4.08
0D14058-CAL8	20	172134	3.567	4.08
0D14058-CAL9	50	421496	3.823	4.08
0D14058-CALA	100	931269	3.812	4.08
0D14058-CALB	200	1814036	3.873	4.07

AVE RF **3.781** RF RSD **6.87** AVE RT **4.08**

1,1-Dichloroethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	799	1.927	4.54
0D14058-CAL3	0.4	1750	2.072	4.54
0D14058-CAL4	1	4472	2.200	4.54
0D14058-CAL5	2	9552	2.200	4.54
0D14058-CAL6	5	23066	2.014	4.55
0D14058-CAL7	10	48104	2.129	4.55
0D14058-CAL8	20	94607	1.960	4.55
0D14058-CAL9	50	226281	2.052	4.55
0D14058-CALA	100	484451	1.983	4.55
0D14058-CALB	200	907148	1.937	4.54

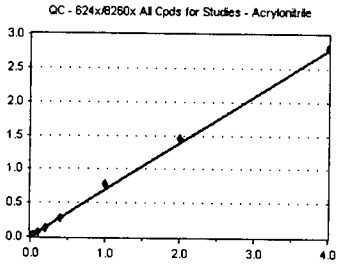
AVE RF **2.047** RF RSD **4.98** AVE RT **4.55**

Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

Acrylonitrile

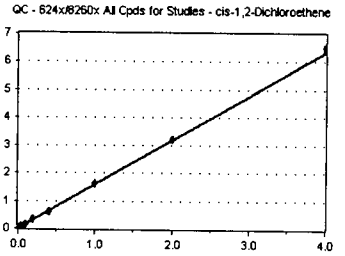


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL3~~	~~0.4~~	~~214~~	~~0.253~~	~~4.61~~
0D14058-CAL4	1	1452	0.714	4.61
0D14058-CAL5	2	2675	0.616	4.61
0D14058-CAL6	5	6864	0.599	4.61
0D14058-CAL7	10	15376	0.681	4.61
0D14058-CAL8	20	34002	0.705	4.61
0D14058-CAL9	50	86281	0.782	4.61
0D14058-CALA	100	178692	0.732	4.61
0D14058-CALB	200	329130	0.703	4.60

AVE RF **0.691** RF RSD **8.64** AVE RT **4.61**

cis-1,2-Dichloroethene

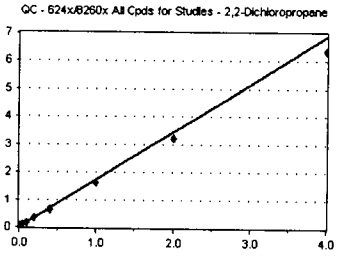


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	638	1.539	5.09
0D14058-CAL3	0.4	1352	1.600	5.10
0D14058-CAL4	1	3238	1.593	5.10
0D14058-CAL5	2	7005	1.613	5.10
0D14058-CAL6	5	17746	1.550	5.10
0D14058-CAL7	10	36887	1.633	5.10
0D14058-CAL8	20	74058	1.534	5.10
0D14058-CAL9	50	179197	1.625	5.10
0D14058-CALA	100	393786	1.612	5.10
0D14058-CALB	200	762386	1.628	5.09

AVE RF **1.593** RF RSD **2.38** AVE RT **5.10**

2,2-Dichloropropane

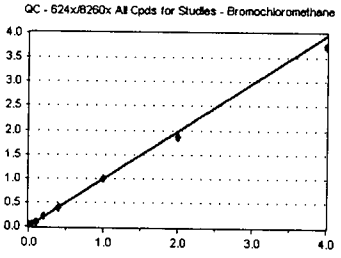


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	441	2.087	5.20
0D14058-CAL2	0.2	737	1.777	5.20
0D14058-CAL3	0.4	1557	1.843	5.20
0D14058-CAL4	1	3813	1.876	5.21
0D14058-CAL5	2	7369	1.697	5.21
0D14058-CAL6	5	18033	1.575	5.21
0D14058-CAL7	10	37898	1.678	5.21
0D14058-CAL8	20	75705	1.569	5.21
0D14058-CAL9	50	181444	1.646	5.21
0D14058-CALA	100	394333	1.614	5.21
0D14058-CALB	200	744440	1.589	5.20

AVE RF **1.723** RF RSD **9.32** AVE RT **5.21**

Bromochloromethane



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	403	0.972	5.30
0D14058-CAL3	0.4	830	0.983	5.29
0D14058-CAL4	1	2205	1.085	5.29
0D14058-CAL5	2	4475	1.031	5.29
0D14058-CAL6	5	11098	0.969	5.30
0D14058-CAL7	10	23591	1.044	5.29
0D14058-CAL8	20	45939	0.952	5.30
0D14058-CAL9	50	108634	0.985	5.30
0D14058-CALA	100	227664	0.932	5.30
0D14058-CALB	200	439068	0.937	5.29

AVE RF **0.989** RF RSD **5.00** AVE RT **5.30**

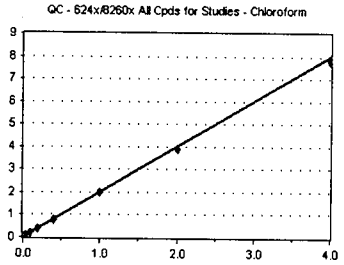
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

Chloroform

Curve Fit: **AVERAGE RF**

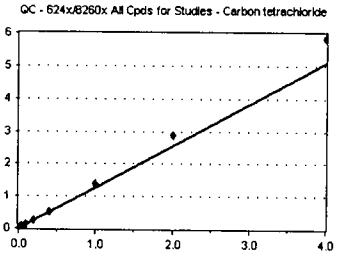


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	440	2.083	5.38
0D14058-CAL2	0.2	773	1.864	5.38
0D14058-CAL3	0.4	1657	1.962	5.37
0D14058-CAL4	1	4281	2.106	5.38
0D14058-CAL5	2	9162	2.110	5.38
0D14058-CAL6	5	22905	2.000	5.39
0D14058-CAL7	10	46665	2.066	5.38
0D14058-CAL8	20	93659	1.941	5.38
0D14058-CAL9	50	221317	2.007	5.38
0D14058-CALA	100	474265	1.942	5.38
0D14058-CALB	200	909798	1.943	5.38

AVE RF **2.002** RF RSD **4.02** AVE RT **5.38**

Carbon tetrachloride

Curve Fit: **AVERAGE RF**

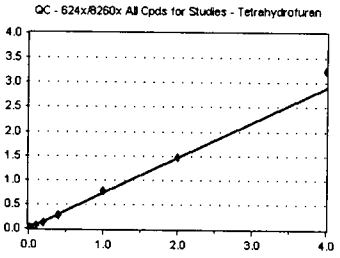


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~381~~	~~0.919~~	~~5.52~~
0D14058-CAL3	0.4	870	1.030	5.52
0D14058-CAL4	1	2030	0.999	5.52
0D14058-CAL5	2	5499	1.267	5.52
0D14058-CAL6	5	14055	1.227	5.52
0D14058-CAL7	10	30811	1.364	5.52
0D14058-CAL8	20	63492	1.316	5.52
0D14058-CAL9	50	152337	1.382	5.52
0D14058-CALA	100	350629	1.435	5.52
0D14058-CALB	200	683501	1.459	5.52

AVE RF **1.275** RF RSD **12.99** AVE RT **5.52**

Tetrahydrofuran

Curve Fit: **AVERAGE RF**

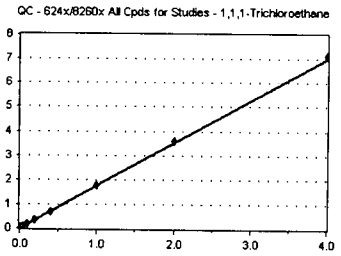


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~580~~	~~1.399~~	~~5.56~~
~~0D14058-CAL3~~	~~0.4~~	~~793~~	~~0.939~~	~~5.56~~
0D14058-CAL4	1	1776	0.874	5.57
0D14058-CAL5	2	2876	0.662	5.55
0D14058-CAL6	5	6991	0.610	5.56
0D14058-CAL7	10	14484	0.641	5.55
0D14058-CAL8	20	33365	0.691	5.56
0D14058-CAL9	50	86108	0.781	5.56
0D14058-CALA	100	179202	0.734	5.55
0D14058-CALB	200	380890	0.813	5.55

AVE RF **0.726** RF RSD **12.57** AVE RT **5.56**

1,1,1-Trichloroethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	618	1.490	5.59
0D14058-CAL3	0.4	1456	1.724	5.58
0D14058-CAL4	1	3615	1.778	5.58
0D14058-CAL5	2	8123	1.871	5.58
0D14058-CAL6	5	19309	1.686	5.59
0D14058-CAL7	10	41392	1.832	5.59
0D14058-CAL8	20	83161	1.723	5.59
0D14058-CAL9	50	196290	1.780	5.59
0D14058-CALA	100	438285	1.794	5.59
0D14058-CALB	200	837558	1.788	5.58

AVE RF **1.747** RF RSD **6.02** AVE RT **5.59**

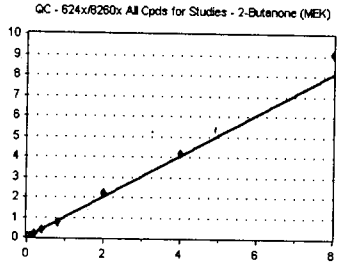
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

2-Butanone (MEK)

Curve Fit: **AVERAGE RF**

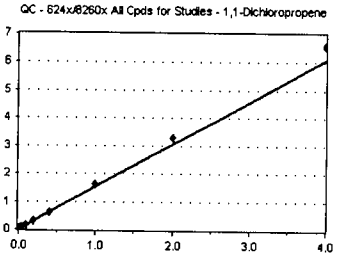


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.2~~	~~471~~	~~1.115~~	~~5.70~~
~~0D14058-CAL2~~	~~0.4~~	~~1017~~	~~1.226~~	~~5.70~~
0D14058-CAL3	0.8	1806	1.069	5.69
0D14058-CAL4	2	4400	1.082	5.70
0D14058-CAL5	4	7931	0.913	5.70
0D14058-CAL6	10	19682	0.859	5.71
0D14058-CAL7	20	41328	0.915	5.70
0D14058-CAL8	40	93489	0.969	5.70
0D14058-CAL9	100	245104	1.111	5.70
0D14058-CALA	200	508448	1.041	5.70
0D14058-CALB	400	1060971	1.133	5.69

AVE RF **1.010** RF RSD **9.76** AVE RT **5.70**

1,1-Dichloropropene

Curve Fit: **AVERAGE RF**

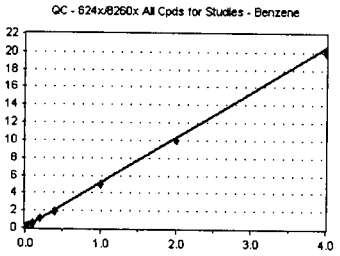


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	564	1.360	5.72
0D14058-CAL3	0.4	1168	1.383	5.71
0D14058-CAL4	1	3053	1.502	5.71
0D14058-CAL5	2	6529	1.504	5.71
0D14058-CAL6	5	16156	1.411	5.72
0D14058-CAL7	10	35653	1.578	5.72
0D14058-CAL8	20	74404	1.542	5.72
0D14058-CAL9	50	178612	1.620	5.72
0D14058-CALA	100	402420	1.647	5.72
0D14058-CALB	200	770697	1.646	5.71

AVE RF **1.519** RF RSD **7.04** AVE RT **5.72**

Benzene

Curve Fit: **AVERAGE RF**

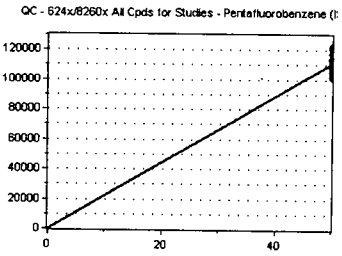


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	1318	6.238	5.97
0D14058-CAL2	0.2	2137	5.153	5.96
0D14058-CAL3	0.4	4334	5.130	5.97
0D14058-CAL4	1	10506	5.168	5.97
0D14058-CAL5	2	21837	5.030	5.97
0D14058-CAL6	5	55437	4.841	5.97
0D14058-CAL7	10	115101	5.095	5.97
0D14058-CAL8	20	232693	4.821	5.97
0D14058-CAL9	50	553408	5.019	5.97
0D14058-CALA	100	1213450	4.968	5.97
0D14058-CALB	200	2335719	4.987	5.96

AVE RF **5.132** RF RSD **7.49** AVE RT **5.97**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	105642	2112.840	6.05
0D14058-CAL2	50	103672	2073.440	6.05
0D14058-CAL3	50	105594	2111.880	6.05
0D14058-CAL4	50	101650	2033.000	6.05
0D14058-CAL5	50	108540	2170.800	6.05
0D14058-CAL6	50	114526	2290.520	6.06
0D14058-CAL7	50	112952	2259.040	6.06
0D14058-CAL8	50	120657	2413.140	6.06
0D14058-CAL9	50	110264	2205.280	6.06
0D14058-CALA	50	122138	2442.760	6.06
0D14058-CALB	50	117091	2341.820	6.05

AVE RF **2223.138** RF RSD **6.21** AVE RT **6.06**

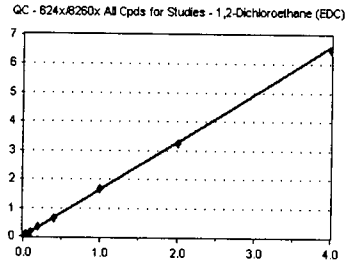
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

1,2-Dichloroethane (EDC)

Curve Fit: **AVERAGE RF**

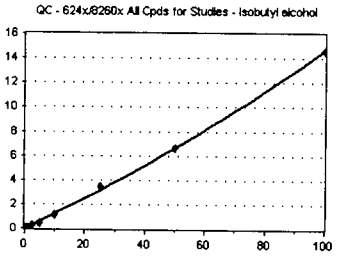


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.4	1362	1.612	6.17
0D14058-CAL4	1	3627	1.784	6.18
0D14058-CAL5	2	7505	1.729	6.17
0D14058-CAL6	5	18274	1.596	6.17
0D14058-CAL7	10	37263	1.650	6.17
0D14058-CAL8	20	76329	1.582	6.17
0D14058-CAL9	50	184518	1.673	6.17
0D14058-CALA	100	396654	1.624	6.18
0D14058-CALB	200	760174	1.623	6.17

AVE RF **1.652** RF RSD **4.01** AVE RT **6.17**

Isobutyl alcohol

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

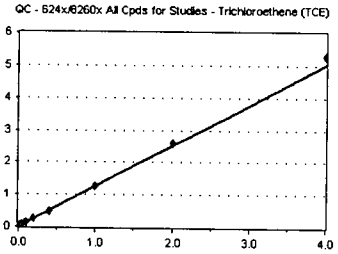


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~2.5~~	~~1674~~	~~0.317~~	~~6.28~~
~~0D14058-CAL2~~	~~5~~	~~2299~~	~~0.222~~	~~6.27~~
~~0D14058-CAL3~~	~~10~~	~~3401~~	~~0.161~~	~~6.28~~
0D14058-CAL4	25	6227	0.123	6.26
0D14058-CAL5	50	10790	9.941	6.28
0D14058-CAL6	125	26792	9.358	6.29
0D14058-CAL7	250	51399	9.101	6.27
0D14058-CAL8	500	133666	0.111	6.27
0D14058-CAL9	1250	383753	0.139	6.25
0D14058-CALA	2500	810408	0.133	6.27
0D14058-CALB	5000	1712299	0.146	6.24

AVE RF **0.117** RF RSD **18.28** AVE RT **6.27**

Trichloroethene (TCE)

Curve Fit: **AVERAGE RF**

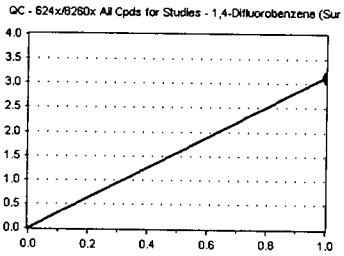


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	445	1.073	6.59
0D14058-CAL3	0.4	1063	1.258	6.59
0D14058-CAL4	1	2706	1.331	6.58
0D14058-CAL5	2	5544	1.277	6.59
0D14058-CAL6	5	13604	1.188	6.59
0D14058-CAL7	10	29421	1.302	6.59
0D14058-CAL8	20	58485	1.212	6.59
0D14058-CAL9	50	140559	1.275	6.59
0D14058-CALA	100	316216	1.295	6.59
0D14058-CALB	200	618609	1.321	6.58

AVE RF **1.253** RF RSD **6.19** AVE RT **6.59**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	331750	3.140	6.62
0D14058-CAL2	50	325315	3.138	6.61
0D14058-CAL3	50	332647	3.150	6.61
0D14058-CAL4	50	316835	3.117	6.62
0D14058-CAL5	50	341820	3.149	6.62
0D14058-CAL6	50	356364	3.112	6.62
0D14058-CAL7	50	352107	3.117	6.62
0D14058-CAL8	50	373957	3.099	6.62
0D14058-CAL9	50	344845	3.127	6.62
0D14058-CALA	50	383034	3.136	6.62
0D14058-CALB	50	371374	3.172	6.61

AVE RF **3.133** RF RSD **0.66** AVE RT **6.62**

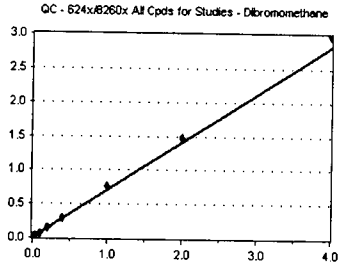
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

Dibromomethane

Curve Fit: **AVERAGE RF**

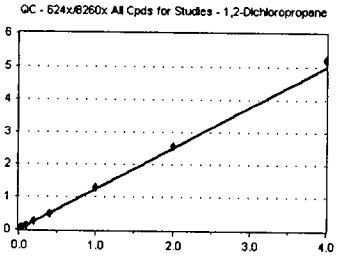


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.4	419	0.496	7.03
0D14058-CAL4	1	1448	0.712	7.02
0D14058-CAL5	2	3234	0.745	7.03
0D14058-CAL6	5	8101	0.707	7.03
0D14058-CAL7	10	16647	0.737	7.03
0D14058-CAL8	20	34268	0.710	7.03
0D14058-CAL9	50	83366	0.756	7.03
0D14058-CALA	100	179270	0.734	7.03
0D14058-CALB	200	348754	0.745	7.02

AVE RF **0.705** RF RSD **11.37** AVE RT **7.02**

1,2-Dichloropropane

Curve Fit: **AVERAGE RF**

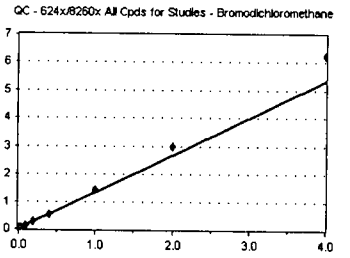


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.4	1004	1.189	7.14
0D14058-CAL4	1	2577	1.268	7.14
0D14058-CAL5	2	5449	1.255	7.14
0D14058-CAL6	5	13699	1.196	7.14
0D14058-CAL7	10	28456	1.260	7.14
0D14058-CAL8	20	58101	1.204	7.14
0D14058-CAL9	50	142249	1.290	7.14
0D14058-CALA	100	313962	1.285	7.14
0D14058-CALB	200	611540	1.306	7.13

AVE RF **1.250** RF RSD **3.49** AVE RT **7.14**

Bromodichloromethane

Curve Fit: **AVERAGE RF**

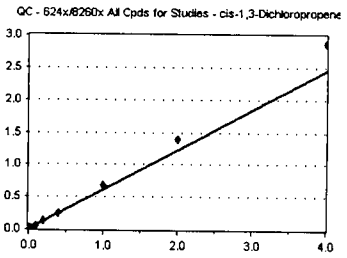


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	474	1.143	7.21
0D14058-CAL3	0.4	1017	1.204	7.22
0D14058-CAL4	1	2348	1.155	7.22
0D14058-CAL5	2	5632	1.297	7.21
0D14058-CAL6	5	14621	1.277	7.22
0D14058-CAL7	10	30951	1.370	7.22
0D14058-CAL8	20	64659	1.340	7.22
0D14058-CAL9	50	159378	1.445	7.22
0D14058-CALA	100	365858	1.498	7.22
0D14058-CALB	200	731916	1.563	7.21

AVE RF **1.329** RF RSD **10.72** AVE RT **7.21**

cis-1,3-Dichloropropene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	662	0.582	7.91
0D14058-CAL3	0.4	1170	0.506	7.90
0D14058-CAL4	1	3213	0.588	7.91
0D14058-CAL5	2	6680	0.558	7.91
0D14058-CAL6	5	17312	0.561	7.91
0D14058-CAL7	10	37857	0.612	7.91
0D14058-CAL8	20	79825	0.609	7.91
0D14058-CAL9	50	204703	0.680	7.91
0D14058-CALA	100	467195	0.699	7.91
0D14058-CALB	200	936076	0.719	7.91

AVE RF **0.611** RF RSD **11.16** AVE RT **7.91**

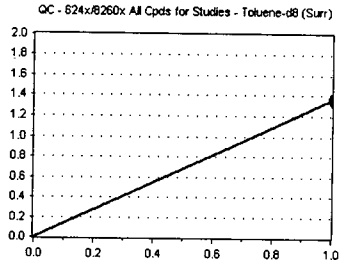
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**

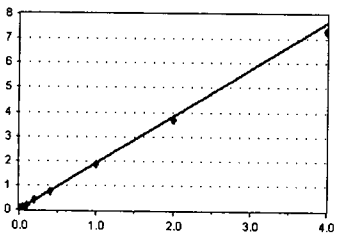


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	393483	1.365	8.13
0D14058-CAL2	50	387254	1.361	8.13
0D14058-CAL3	50	397845	1.377	8.13
0D14058-CAL4	50	377021	1.380	8.13
0D14058-CAL5	50	408232	1.363	8.13
0D14058-CAL6	50	421290	1.364	8.13
0D14058-CAL7	50	416754	1.346	8.13
0D14058-CAL8	50	443469	1.352	8.13
0D14058-CAL9	50	407069	1.353	8.13
0D14058-CALA	50	449815	1.346	8.13
0D14058-CALB	50	438887	1.348	8.13

AVE RF **1.360** RF RSD **0.87** AVE RT **8.13**

Toluene

Curve Fit: **AVERAGE RF**

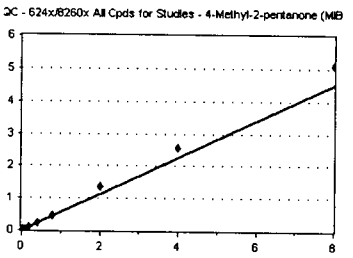


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	1320	2.289	8.18
0D14058-CAL2	0.2	2322	2.040	8.19
0D14058-CAL3	0.4	4260	1.843	8.19
0D14058-CAL4	1	10806	1.978	8.19
0D14058-CAL5	2	22184	1.852	8.19
0D14058-CAL6	5	56606	1.833	8.19
0D14058-CAL7	10	116230	1.878	8.19
0D14058-CAL8	20	236180	1.800	8.19
0D14058-CAL9	50	564082	1.875	8.19
0D14058-CALA	100	1235726	1.848	8.19
0D14058-CALB	200	2385651	1.832	8.19

AVE RF **1.915** RF RSD **7.44** AVE RT **8.19**

4-Methyl-2-pentanone (MiBK)

Curve Fit: **AVERAGE RF**

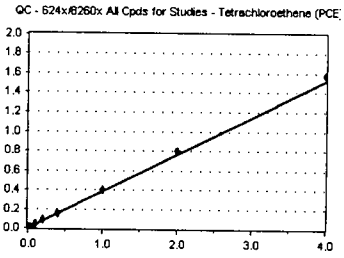


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.4~~	~~1079~~	~~0.474~~	~~8.63~~
~~0D14058-CAL3~~	~~0.8~~	~~2338~~	~~0.506~~	~~8.63~~
0D14058-CAL4	2	5344	0.489	8.63
0D14058-CAL5	4	11285	0.471	8.63
0D14058-CAL6	10	30656	0.496	8.63
0D14058-CAL7	20	66313	0.536	8.63
0D14058-CAL8	40	150802	0.575	8.63
0D14058-CAL9	100	405804	0.674	8.63
0D14058-CALA	200	860414	0.644	8.63
0D14058-CALB	400	1661248	0.638	8.63

AVE RF **0.565** RF RSD **13.97** AVE RT **8.63**

Tetrachloroethene (PCE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	331	0.291	8.63
0D14058-CAL3	0.4	848	0.367	8.64
0D14058-CAL4	1	2164	0.396	8.64
0D14058-CAL5	2	4491	0.375	8.64
0D14058-CAL6	5	11972	0.388	8.64
0D14058-CAL7	10	25347	0.409	8.64
0D14058-CAL8	20	50951	0.388	8.64
0D14058-CAL9	50	121169	0.403	8.64
0D14058-CALA	100	268399	0.401	8.64
0D14058-CALB	200	513218	0.394	8.64

AVE RF **0.381** RF RSD **8.99** AVE RT **8.64**

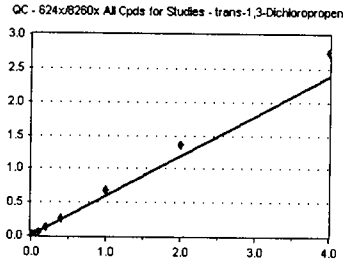
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

trans-1,3-Dichloropropene

Curve Fit: **AVERAGE RF**

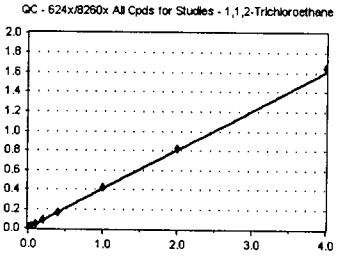


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	577	0.507	8.66
0D14058-CAL3	0.4	1155	0.500	8.66
0D14058-CAL4	1	2954	0.541	8.66
0D14058-CAL5	2	6472	0.540	8.66
0D14058-CAL6	5	17464	0.565	8.67
0D14058-CAL7	10	38055	0.615	8.66
0D14058-CAL8	20	82901	0.632	8.66
0D14058-CAL9	50	205734	0.684	8.67
0D14058-CALA	100	453467	0.678	8.66
0D14058-CALB	200	892991	0.686	8.66

AVE RF **0.595** RF RSD **12.34** AVE RT **8.66**

1,1,2-Trichloroethane

Curve Fit: **AVERAGE RF**

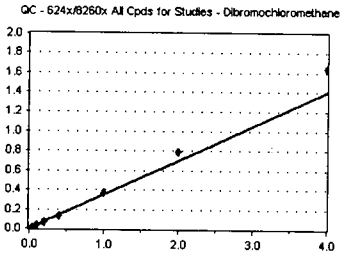


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	404	0.355	8.84
0D14058-CAL3	0.4	816	0.353	8.85
0D14058-CAL4	1	2240	0.410	8.85
0D14058-CAL5	2	5046	0.421	8.84
0D14058-CAL6	5	12503	0.405	8.84
0D14058-CAL7	10	25999	0.420	8.84
0D14058-CAL8	20	53196	0.406	8.84
0D14058-CAL9	50	126170	0.419	8.84
0D14058-CALA	100	276203	0.413	8.84
0D14058-CALB	200	539047	0.414	8.84

AVE RF **0.402** RF RSD **6.41** AVE RT **8.84**

Dibromochloromethane

Curve Fit: **AVERAGE RF**

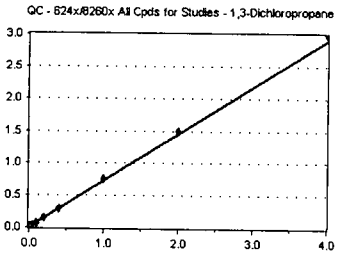


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~303~~	~~0.266~~	~~9.03~~
~~0D14058-CAL3~~	~~0.4~~	~~594~~	~~0.257~~	~~9.03~~
~~0D14058-CAL4~~	~~1~~	~~1391~~	~~0.255~~	~~9.03~~
0D14058-CAL5	2	3570	0.298	9.03
0D14058-CAL6	5	9512	0.308	9.03
0D14058-CAL7	10	20897	0.338	9.03
0D14058-CAL8	20	44058	0.336	9.03
0D14058-CAL9	50	110967	0.369	9.03
0D14058-CALA	100	262482	0.393	9.03
0D14058-CALB	200	536519	0.412	9.03

AVE RF **0.350** RF RSD **12.13** AVE RT **9.03**

1,3-Dichloropropane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	817	0.718	9.13
0D14058-CAL3	0.4	1576	0.682	9.13
0D14058-CAL4	1	3957	0.724	9.13
0D14058-CAL5	2	8442	0.705	9.13
0D14058-CAL6	5	22068	0.715	9.13
0D14058-CAL7	10	45518	0.735	9.13
0D14058-CAL8	20	93896	0.716	9.13
0D14058-CAL9	50	227885	0.757	9.13
0D14058-CALA	100	496726	0.743	9.13
0D14058-CALB	200	975410	0.749	9.13

AVE RF **0.724** RF RSD **3.11** AVE RT **9.13**

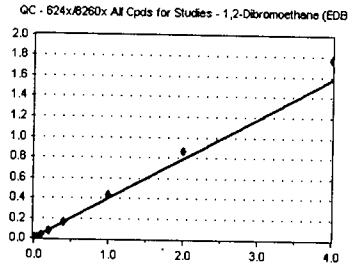
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

1,2-Dibromoethane (EDB)

Curve Fit: **AVERAGE RF**

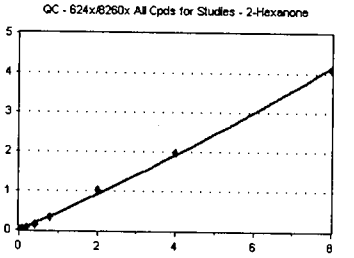


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	407	0.358	9.27
0D14058-CAL3	0.4	777	0.336	9.27
0D14058-CAL4	1	2095	0.384	9.27
0D14058-CAL5	2	4614	0.385	9.27
0D14058-CAL6	5	11584	0.375	9.27
0D14058-CAL7	10	24716	0.399	9.27
0D14058-CAL8	20	52465	0.400	9.27
0D14058-CAL9	50	131063	0.436	9.27
0D14058-CALA	100	290472	0.435	9.27
0D14058-CALB	200	577502	0.443	9.27

AVE RF **0.395** RF RSD **8.88** AVE RT **9.27**

2-Hexanone

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

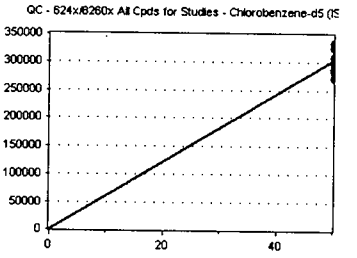


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.4	631	0.277	9.51
0D14058-CAL3	0.8	1306	0.283	9.51
0D14058-CAL4	2	3231	0.296	9.51
0D14058-CAL5	4	6736	0.281	9.51
0D14058-CAL6	10	19016	0.308	9.51
0D14058-CAL7	20	41308	0.334	9.51
0D14058-CAL8	40	104239	0.397	9.51
0D14058-CAL9	100	306522	0.509	9.51
0D14058-CALA	200	656536	0.491	9.51
0D14058-CALB	400	1340796	0.515	9.51

AVE RF **0.369** RF RSD **27.19** AVE RT **9.51**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

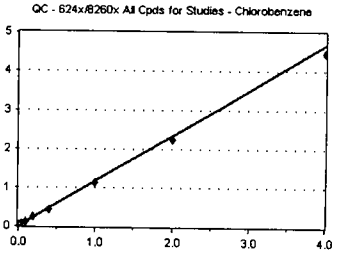


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	288314	5766.280	9.78
0D14058-CAL2	50	284575	5691.500	9.78
0D14058-CAL3	50	288887	5777.740	9.78
0D14058-CAL4	50	273138	5462.760	9.78
0D14058-CAL5	50	299437	5988.740	9.78
0D14058-CAL6	50	308854	6177.080	9.78
0D14058-CAL7	50	309528	6190.560	9.78
0D14058-CAL8	50	327947	6558.940	9.78
0D14058-CAL9	50	300882	6017.640	9.78
0D14058-CALA	50	334260	6685.200	9.78
0D14058-CALB	50	325548	6510.960	9.78

AVE RF **6075.218** RF RSD **6.45** AVE RT **9.78**

Chlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	781	1.354	9.79
0D14058-CAL2	0.2	1379	1.211	9.79
0D14058-CAL3	0.4	2671	1.156	9.79
0D14058-CAL4	1	6540	1.197	9.79
0D14058-CAL5	2	13570	1.133	9.79
0D14058-CAL6	5	34968	1.132	9.79
0D14058-CAL7	10	71361	1.153	9.79
0D14058-CAL8	20	144562	1.102	9.79
0D14058-CAL9	50	345012	1.147	9.79
0D14058-CALA	100	750995	1.123	9.79
0D14058-CALB	200	1453899	1.117	9.79

AVE RF **1.166** RF RSD **6.05** AVE RT **9.79**

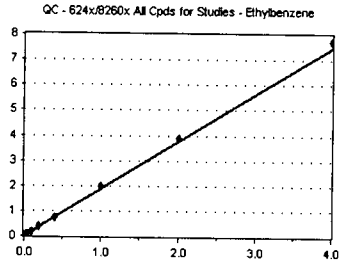
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

Ethylbenzene

Curve Fit: **AVERAGE RF**

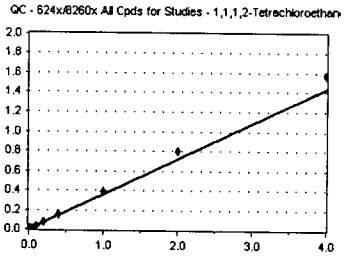


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	1221	2.117	9.83
0D14058-CAL2	0.2	2007	1.763	9.83
0D14058-CAL3	0.4	4040	1.748	9.83
0D14058-CAL4	1	10037	1.837	9.83
0D14058-CAL5	2	21231	1.773	9.83
0D14058-CAL6	5	55402	1.794	9.82
0D14058-CAL7	10	116198	1.877	9.83
0D14058-CAL8	20	243740	1.858	9.83
0D14058-CAL9	50	595001	1.978	9.83
0D14058-CALA	100	1304536	1.951	9.83
0D14058-CALB	200	2516565	1.933	9.83

AVE RF **1.875** RF RSD **5.98** AVE RT **9.83**

1,1,1,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**

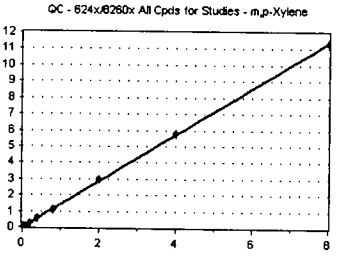


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~241~~	~~0.212~~	~~9.86~~
0D14058-CAL3	0.4	680	0.294	9.85
0D14058-CAL4	1	1887	0.345	9.86
0D14058-CAL5	2	3924	0.328	9.86
0D14058-CAL6	5	10761	0.348	9.86
0D14058-CAL7	10	22848	0.369	9.86
0D14058-CAL8	20	48569	0.370	9.86
0D14058-CAL9	50	118710	0.395	9.86
0D14058-CALA	100	268896	0.402	9.86
0D14058-CALB	200	512913	0.394	9.86

AVE RF **0.361** RF RSD **9.82** AVE RT **9.85**

m,p-Xylene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

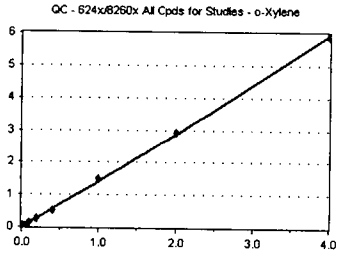


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.2	1568	1.360	9.97
0D14058-CAL2	0.4	2782	1.222	9.96
0D14058-CAL3	0.8	5522	1.195	9.96
0D14058-CAL4	2	13324	1.220	9.97
0D14058-CAL5	4	28830	1.204	9.96
0D14058-CAL6	10	78200	1.266	9.96
0D14058-CAL7	20	170994	1.381	9.97
0D14058-CAL8	40	360254	1.373	9.97
0D14058-CAL9	100	891467	1.481	9.96
0D14058-CALA	200	1919713	1.436	9.97
0D14058-CALB	400	3693314	1.418	9.96

AVE RF **1.323** RF RSD **7.89** AVE RT **9.96**

o-Xylene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~727~~	~~1.261~~	~~10.35~~
0D14058-CAL2	0.2	1320	1.160	10.35
0D14058-CAL3	0.4	2679	1.159	10.35
0D14058-CAL4	1	6463	1.183	10.35
0D14058-CAL5	2	13361	1.116	10.35
0D14058-CAL6	5	36670	1.187	10.35
0D14058-CAL7	10	79811	1.289	10.35
0D14058-CAL8	20	172449	1.315	10.35
0D14058-CAL9	50	445022	1.479	10.35
0D14058-CALA	100	971630	1.453	10.35
0D14058-CALB	200	1917634	1.473	10.35

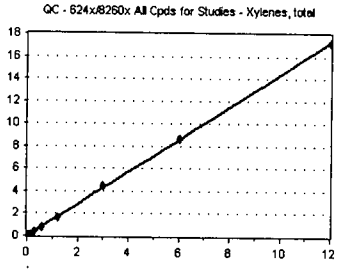
AVE RF **1.281** RF RSD **11.10** AVE RT **10.35**

Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

Xylenes, total

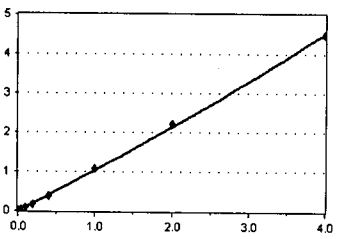


Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.3~~	~~2295~~	~~1.327~~	~~10.35~~
0D14058-CAL2	0.6	4102	1.201	10.35
0D14058-CAL3	1.2	8201	1.183	10.35
0D14058-CAL4	3	19787	1.207	10.35
0D14058-CAL5	6	42191	1.174	10.35
0D14058-CAL6	15	114870	1.240	10.35
0D14058-CAL7	30	250805	1.350	10.35
0D14058-CAL8	60	532703	1.354	10.35
0D14058-CAL9	150	1336489	1.481	10.35
0D14058-CALA	300	2891343	1.442	10.35
0D14058-CALB	600	5610948	1.436	10.35

AVE RF **1.307** RF RSD **9.12** AVE RT **10.35**

Styrene

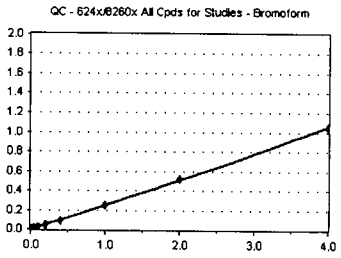


Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~376~~	~~0.652~~	~~0.00~~
0D14058-CAL2	0.2	746	0.655	10.39
0D14058-CAL3	0.4	1373	0.594	10.40
0D14058-CAL4	1	3638	0.666	10.39
0D14058-CAL5	2	7831	0.654	10.40
0D14058-CAL6	5	22772	0.737	10.40
0D14058-CAL7	10	53627	0.866	10.40
0D14058-CAL8	20	121284	0.925	10.40
0D14058-CAL9	50	327561	1.089	10.40
0D14058-CALA	100	739616	1.106	10.39
0D14058-CALB	200	1457393	1.119	10.39

AVE RF **0.841** RF RSD **24.70** AVE RT **10.39**

Bromoform

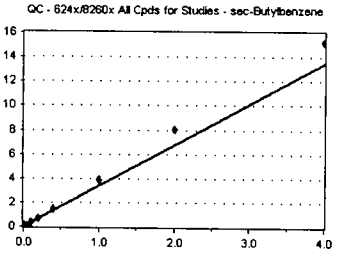


Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.4	342	0.148	10.41
0D14058-CAL4	1	792	0.145	10.41
0D14058-CAL5	2	2124	0.177	10.41
0D14058-CAL6	5	5845	0.189	10.41
0D14058-CAL7	10	13314	0.215	10.41
0D14058-CAL8	20	28786	0.219	10.41
0D14058-CAL9	50	76074	0.253	10.41
0D14058-CALA	100	174809	0.261	10.41
0D14058-CALB	200	341051	0.262	10.41

AVE RF **0.208** RF RSD **22.07** AVE RT **10.41**

sec-Butylbenzene



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	745	2.901	0.00
0D14058-CAL2	0.2	1416	2.804	11.52
0D14058-CAL3	0.4	2931	2.789	11.52
0D14058-CAL4	1	7387	3.183	11.52
0D14058-CAL5	2	15825	2.968	11.52
0D14058-CAL6	5	44468	3.324	11.52
0D14058-CAL7	10	99807	3.653	11.52
0D14058-CAL8	20	207846	3.693	11.52
0D14058-CAL9	50	526357	3.863	11.52
0D14058-CALA	100	1146668	4.015	11.52
0D14058-CALB	200	2186868	3.803	11.52

AVE RF **3.363** RF RSD **13.65** AVE RT **10.47**

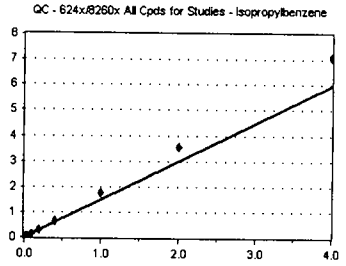
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

Isopropylbenzene

Curve Fit: **AVERAGE RF**

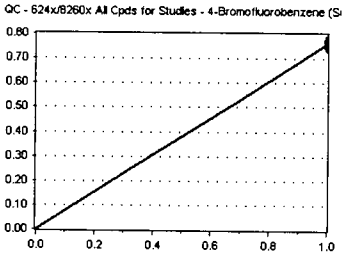


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	769	1.334	10.63
0D14058-CAL2	0.2	1420	1.247	10.62
0D14058-CAL3	0.4	2911	1.260	10.62
0D14058-CAL4	1	7312	1.339	10.62
0D14058-CAL5	2	15902	1.328	10.62
0D14058-CAL6	5	43513	1.409	10.62
0D14058-CAL7	10	97974	1.583	10.62
0D14058-CAL8	20	210984	1.608	10.63
0D14058-CAL9	50	533724	1.774	10.63
0D14058-CALA	100	1189441	1.779	10.62
0D14058-CALB	200	2304336	1.770	10.62

AVE RF **1.494** RF RSD **14.31** AVE RT **10.62**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

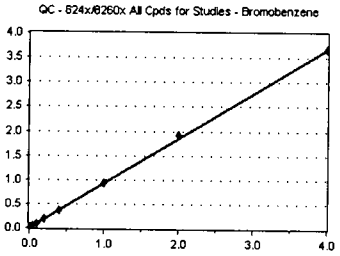


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	96219	0.749	10.85
0D14058-CAL2	50	94121	0.746	10.85
0D14058-CAL3	50	98324	0.748	10.85
0D14058-CAL4	50	89056	0.768	10.85
0D14058-CAL5	50	100257	0.752	10.85
0D14058-CAL6	50	102646	0.767	10.85
0D14058-CAL7	50	104997	0.769	10.85
0D14058-CAL8	50	108624	0.772	10.85
0D14058-CAL9	50	102598	0.753	10.85
0D14058-CALA	50	111188	0.779	10.85
0D14058-CALB	50	108105	0.752	10.85

AVE RF **0.759** RF RSD **1.50** AVE RT **10.85**

Bromobenzene

Curve Fit: **AVERAGE RF**

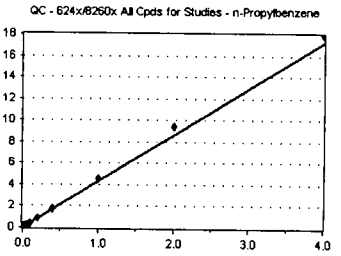


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	210	0.818	10.94
0D14058-CAL2	0.2	461	0.913	10.94
0D14058-CAL3	0.4	946	0.900	10.94
0D14058-CAL4	1	2278	0.982	10.94
0D14058-CAL5	2	4931	0.925	10.94
0D14058-CAL6	5	12437	0.930	10.94
0D14058-CAL7	10	25398	0.929	10.94
0D14058-CAL8	20	51875	0.922	10.94
0D14058-CAL9	50	127674	0.937	10.94
0D14058-CALA	100	274001	0.959	10.94
0D14058-CALB	200	527897	0.918	10.94

AVE RF **0.921** RF RSD **4.44** AVE RT **10.94**

n-Propylbenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	1151	4.482	10.97
0D14058-CAL2	0.2	2212	4.380	10.97
0D14058-CAL3	0.4	4011	3.817	10.97
0D14058-CAL4	1	9842	4.241	10.97
0D14058-CAL5	2	21049	3.948	10.97
0D14058-CAL6	5	54469	4.071	10.97
0D14058-CAL7	10	118337	4.331	10.97
0D14058-CAL8	20	247782	4.403	10.97
0D14058-CAL9	50	620445	4.553	10.97
0D14058-CALA	100	1350868	4.729	10.97
0D14058-CALB	200	2585026	4.496	10.97

AVE RF **4.314** RF RSD **6.34** AVE RT **10.97**

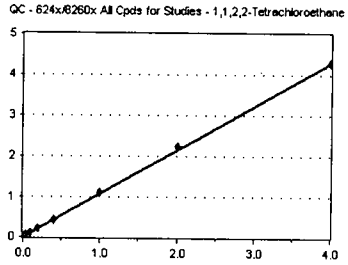
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

1,1,2,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**

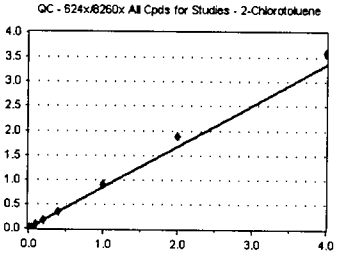


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	300	1.168	11.02
0D14058-CAL2	0.2	450	0.891	11.02
0D14058-CAL3	0.4	1053	1.002	11.02
0D14058-CAL4	1	2578	1.111	11.02
0D14058-CAL5	2	5694	1.068	11.02
0D14058-CAL6	5	14508	1.084	11.02
0D14058-CAL7	10	29530	1.081	11.02
0D14058-CAL8	20	61924	1.100	11.02
0D14058-CAL9	50	151908	1.115	11.02
0D14058-CALA	100	318496	1.115	11.02
0D14058-CALB	200	619643	1.078	11.02

AVE RF **1.074** RF RSD **6.79** AVE RT **11.02**

2-Chlorotoluene

Curve Fit: **AVERAGE RF**

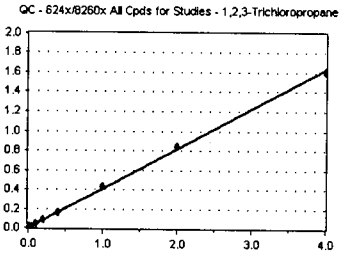


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL2	0.2	412	0.816	11.09
0D14058-CAL3	0.4	717	0.682	11.09
0D14058-CAL4	1	1836	0.791	11.09
0D14058-CAL5	2	4243	0.796	11.09
0D14058-CAL6	5	11078	0.828	11.09
0D14058-CAL7	10	23581	0.863	11.09
0D14058-CAL8	20	49251	0.875	11.09
0D14058-CAL9	50	123120	0.904	11.09
0D14058-CALA	100	268071	0.939	11.09
0D14058-CALB	200	514965	0.896	11.09

AVE RF **0.839** RF RSD **8.75** AVE RT **11.09**

1,2,3-Trichloropropane

Curve Fit: **AVERAGE RF**

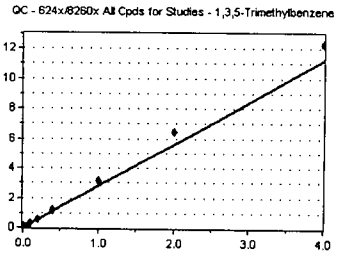


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.4	379	0.361	11.12
0D14058-CAL4	1	969	0.418	11.12
0D14058-CAL5	2	2122	0.398	11.13
0D14058-CAL6	5	5510	0.412	11.13
0D14058-CAL7	10	11302	0.414	11.13
0D14058-CAL8	20	23472	0.417	11.13
0D14058-CAL9	50	58450	0.429	11.13
0D14058-CALA	100	120574	0.422	11.13
0D14058-CALB	200	231988	0.403	11.13

AVE RF **0.408** RF RSD **4.92** AVE RT **11.12**

1,3,5-Trimethylbenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	727	2.831	11.13
0D14058-CAL2	0.2	1214	2.404	11.13
0D14058-CAL3	0.4	2401	2.285	11.13
0D14058-CAL4	1	6159	2.654	11.13
0D14058-CAL5	2	13041	2.446	11.13
0D14058-CAL6	5	36416	2.722	11.13
0D14058-CAL7	10	81461	2.981	11.13
0D14058-CAL8	20	171225	3.042	11.13
0D14058-CAL9	50	431158	3.164	11.13
0D14058-CALA	100	924444	3.237	11.13
0D14058-CALB	200	1771155	3.080	11.13

AVE RF **2.804** RF RSD **11.66** AVE RT **11.13**

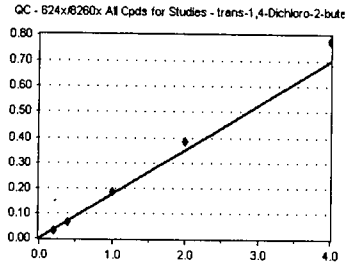
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

trans-1,4-Dichloro-2-butene

Curve Fit: **AVERAGE RF**

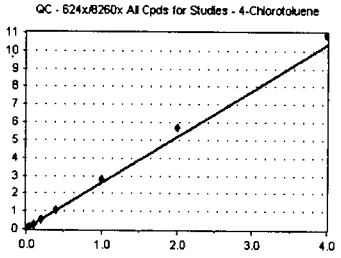


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL4~~	~~1~~	~~317~~	~~0.137~~	~~11.16~~
~~0D14058-CAL5~~	~~2~~	~~523~~	~~9.810~~	~~11.16~~
~~0D14058-CAL6~~	~~5~~	~~1754~~	~~0.131~~	~~11.16~~
0D14058-CAL7	10	3910	0.143	11.16
0D14058-CAL8	20	8823	0.157	11.16
0D14058-CAL9	50	25559	0.188	11.16
0D14058-CALA	100	55036	0.193	11.16
0D14058-CALB	200	111843	0.195	11.16

AVE RF **0.175** RF RSD **13.41** AVE RT **11.16**

4-Chlorotoluene

Curve Fit: **AVERAGE RF**

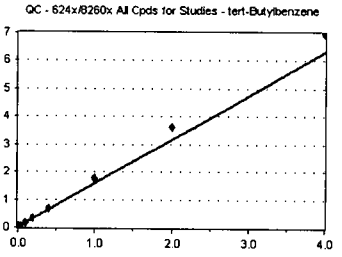


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	672	2.617	11.22
0D14058-CAL2	0.2	1242	2.459	11.22
0D14058-CAL3	0.4	2337	2.224	11.22
0D14058-CAL4	1	5874	2.531	11.22
0D14058-CAL5	2	12657	2.374	11.22
0D14058-CAL6	5	34236	2.559	11.22
0D14058-CAL7	10	73145	2.677	11.22
0D14058-CAL8	20	150224	2.669	11.22
0D14058-CAL9	50	377949	2.774	11.22
0D14058-CALA	100	815679	2.856	11.22
0D14058-CALB	200	1561182	2.715	11.22

AVE RF **2.587** RF RSD **7.09** AVE RT **11.22**

tert-Butylbenzene

Curve Fit: **AVERAGE RF**

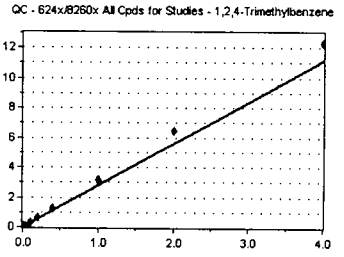


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	403	1.569	11.38
0D14058-CAL2	0.2	694	1.374	11.38
0D14058-CAL3	0.4	1461	1.390	11.38
0D14058-CAL4	1	3344	1.441	11.38
0D14058-CAL5	2	7552	1.417	11.38
0D14058-CAL6	5	20097	1.502	11.38
0D14058-CAL7	10	45200	1.654	11.38
0D14058-CAL8	20	95193	1.691	11.38
0D14058-CAL9	50	240963	1.768	11.38
0D14058-CALA	100	521369	1.825	11.38
0D14058-CALB	200	1001978	1.743	11.38

AVE RF **1.580** RF RSD **10.41** AVE RT **11.38**

1,2,4-Trimethylbenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	710	2.765	11.44
0D14058-CAL2	0.2	1205	2.386	11.44
0D14058-CAL3	0.4	2372	2.257	11.44
0D14058-CAL4	1	5848	2.520	11.44
0D14058-CAL5	2	12963	2.432	11.44
0D14058-CAL6	5	36582	2.734	11.44
0D14058-CAL7	10	81918	2.998	11.44
0D14058-CAL8	20	173394	3.081	11.44
0D14058-CAL9	50	434766	3.191	11.44
0D14058-CALA	100	924033	3.235	11.44
0D14058-CALB	200	1770182	3.079	11.44

AVE RF **2.789** RF RSD **12.53** AVE RT **11.44**

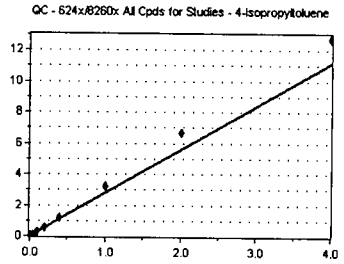
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

4-Isopropyltoluene

Curve Fit: **AVERAGE RF**

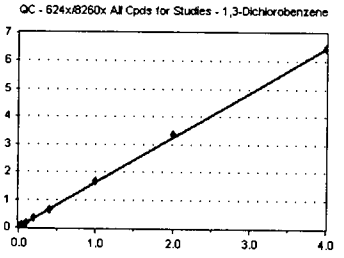


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~638~~	~~2.484~~	~~11.63~~
~~0D14058-CAL2~~	~~0.2~~	~~1118~~	~~2.214~~	~~11.63~~
0D14058-CAL3	0.4	2371	2.256	11.63
0D14058-CAL4	1	5632	2.427	11.63
0D14058-CAL5	2	12292	2.306	11.63
0D14058-CAL6	5	34848	2.605	11.63
0D14058-CAL7	10	79005	2.891	11.63
0D14058-CAL8	20	168190	2.988	11.63
0D14058-CAL9	50	437429	3.210	11.63
0D14058-CALA	100	952638	3.335	11.63
0D14058-CALB	200	1832896	3.188	11.63

AVE RF **2.801** RF RSD **14.76** AVE RT **11.63**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

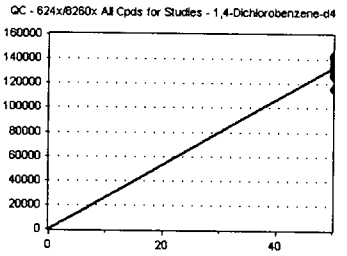


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	344	1.339	11.69
0D14058-CAL2	0.2	842	1.667	11.69
0D14058-CAL3	0.4	1596	1.519	11.68
0D14058-CAL4	1	4089	1.762	11.69
0D14058-CAL5	2	8299	1.557	11.69
0D14058-CAL6	5	22132	1.654	11.69
0D14058-CAL7	10	45095	1.650	11.69
0D14058-CAL8	20	92245	1.639	11.69
0D14058-CAL9	50	227353	1.668	11.69
0D14058-CALA	100	478649	1.676	11.69
0D14058-CALB	200	931568	1.620	11.69

AVE RF **1.614** RF RSD **6.87** AVE RT **11.69**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

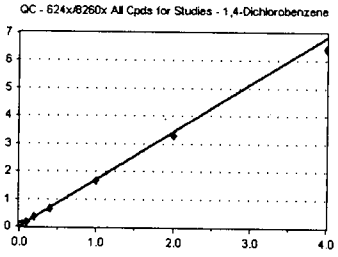


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	50	128408	2568.160	11.74
0D14058-CAL2	50	126249	2524.980	11.74
0D14058-CAL3	50	131365	2627.300	11.74
0D14058-CAL4	50	116028	2320.560	11.74
0D14058-CAL5	50	133278	2665.560	11.74
0D14058-CAL6	50	133791	2675.820	11.74
0D14058-CAL7	50	136622	2732.440	11.74
0D14058-CAL8	50	140705	2814.100	11.74
0D14058-CAL9	50	136262	2725.240	11.74
0D14058-CALA	50	142815	2856.300	11.74
0D14058-CALB	50	143744	2874.880	11.74

AVE RF **2671.395** RF RSD **6.03** AVE RT **11.74**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	456	1.776	11.75
0D14058-CAL2	0.2	908	1.798	11.75
0D14058-CAL3	0.4	1846	1.757	11.75
0D14058-CAL4	1	4453	1.919	11.75
0D14058-CAL5	2	9122	1.711	11.75
0D14058-CAL6	5	22637	1.692	11.75
0D14058-CAL7	10	45055	1.649	11.75
0D14058-CAL8	20	91616	1.628	11.75
0D14058-CAL9	50	227231	1.668	11.75
0D14058-CALA	100	472217	1.653	11.75
0D14058-CALB	200	925578	1.610	11.75

AVE RF **1.714** RF RSD **5.33** AVE RT **11.75**

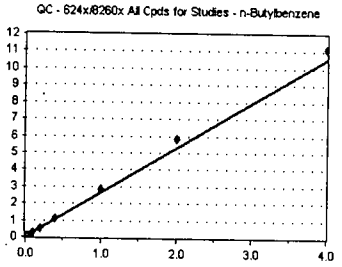
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

n-Butylbenzene

Curve Fit: **AVERAGE RF**

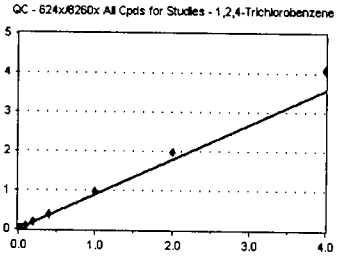


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	756	2.944	11.95
0D14058-CAL2	0.2	1303	2.580	11.95
0D14058-CAL3	0.4	2438	2.320	11.95
0D14058-CAL4	1	6102	2.630	11.95
0D14058-CAL5	2	12152	2.279	11.95
0D14058-CAL6	5	32474	2.427	11.95
0D14058-CAL7	10	72973	2.671	11.95
0D14058-CAL8	20	153060	2.720	11.95
0D14058-CAL9	50	387510	2.844	11.95
0D14058-CALA	100	833207	2.917	11.95
0D14058-CALB	200	1603056	2.788	11.95

AVE RF **2.647** RF RSD **8.62** AVE RT **11.95**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**

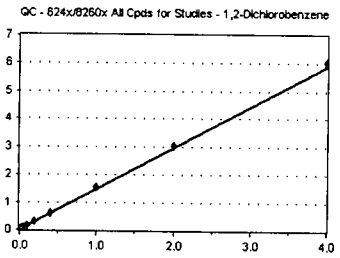


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	169	0.658	0.00
0D14058-CAL2	0.2	447	0.885	13.21
0D14058-CAL3	0.4	872	0.830	13.21
0D14058-CAL4	1	2117	0.912	13.21
0D14058-CAL5	2	4502	0.844	13.21
0D14058-CAL6	5	11508	0.860	13.21
0D14058-CAL7	10	24993	0.915	13.21
0D14058-CAL8	20	52853	0.939	13.21
0D14058-CAL9	50	133828	0.982	13.21
0D14058-CALA	100	280356	0.982	13.21
0D14058-CALB	200	585152	1.018	13.21

AVE RF **0.893** RF RSD **11.03** AVE RT **12.01**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

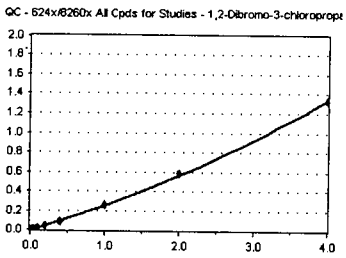


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	307	1.195	12.07
0D14058-CAL2	0.2	695	1.376	12.07
0D14058-CAL3	0.4	1566	1.490	12.07
0D14058-CAL4	1	3674	1.583	12.07
0D14058-CAL5	2	7878	1.478	12.07
0D14058-CAL6	5	20006	1.495	12.07
0D14058-CAL7	10	41793	1.530	12.07
0D14058-CAL8	20	83686	1.487	12.07
0D14058-CAL9	50	210540	1.545	12.07
0D14058-CALA	100	432908	1.516	12.07
0D14058-CALB	200	871820	1.516	12.07

AVE RF **1.474** RF RSD **7.17** AVE RT **12.07**

1,2-Dibromo-3-chloropropane

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0D14058-CAL3	0.4	122	0.116	12.67
0D14058-CAL4	1	485	0.209	12.67
0D14058-CAL5	2	1007	0.189	12.67
0D14058-CAL6	5	2595	0.194	12.67
0D14058-CAL7	10	5297	0.194	12.67
0D14058-CAL8	20	11933	0.212	12.67
0D14058-CAL9	50	35196	0.258	12.67
0D14058-CALA	100	83374	0.292	12.67
0D14058-CALB	200	190481	0.331	12.67

AVE RF **0.222** RF RSD **28.66** AVE RT **12.67**

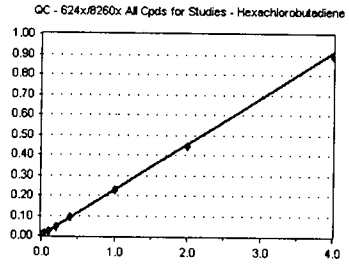
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VJ200414S VJ200414G**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

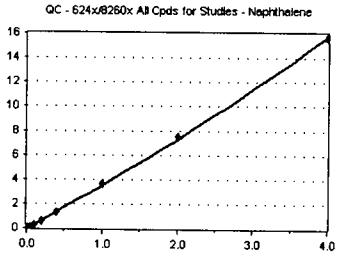


Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D14058-CAL3~~	~~0.4~~	~~124~~	~~0.118~~	~~13.19~~
0D14058-CAL4	1	575	0.248	13.19
0D14058-CAL5	2	1205	0.226	13.19
0D14058-CAL6	5	2990	0.223	13.20
0D14058-CAL7	10	6186	0.226	13.19
0D14058-CAL8	20	12680	0.225	13.19
0D14058-CAL9	50	31099	0.228	13.19
0D14058-CALA	100	63506	0.222	13.19
0D14058-CALB	200	128695	0.224	13.19

AVE RF **0.228** RF RSD **3.61** AVE RT **13.19**

Naphthalene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

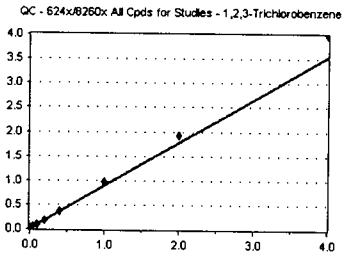


Standard	Concentration	Response	Response Factor	RT
0D14058-CAL1	0.1	714	2.780	13.49
0D14058-CAL2	0.2	1465	2.901	13.48
0D14058-CAL3	0.4	2697	2.566	13.49
0D14058-CAL4	1	6636	2.860	13.49
0D14058-CAL5	2	13828	2.594	13.49
0D14058-CAL6	5	36706	2.744	13.49
0D14058-CAL7	10	79754	2.919	13.49
0D14058-CAL8	20	183811	3.266	13.49
0D14058-CAL9	50	497953	3.654	13.49
0D14058-CALA	100	1070303	3.747	13.49
0D14058-CALB	200	2246235	3.907	13.49

AVE RF **3.085** RF RSD **15.55** AVE RT **13.49**

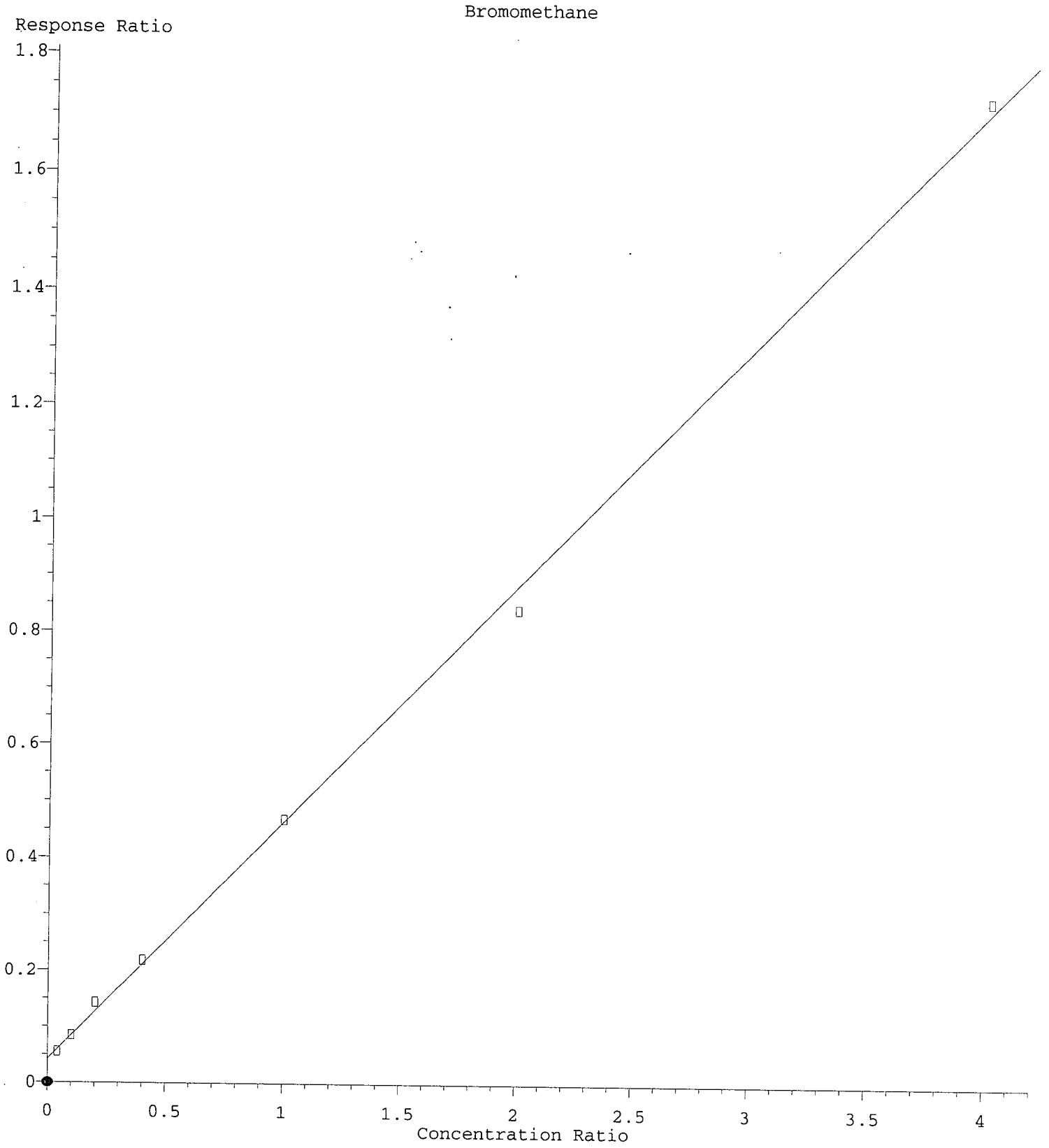
1,2,3-Trichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D14058-CAL1~~	~~0.1~~	~~128~~	~~0.498~~	~~0.00~~
0D14058-CAL2	0.2	407	0.806	13.65
0D14058-CAL3	0.4	851	0.810	13.65
0D14058-CAL4	1	2040	0.879	13.65
0D14058-CAL5	2	4346	0.815	13.65
0D14058-CAL6	5	11246	0.841	13.65
0D14058-CAL7	10	24088	0.882	13.65
0D14058-CAL8	20	50757	0.902	13.65
0D14058-CAL9	50	131349	0.964	13.65
0D14058-CALA	100	273584	0.958	13.65
0D14058-CALB	200	574176	0.999	13.65

AVE RF **0.885** RF RSD **7.85** AVE RT **13.65**



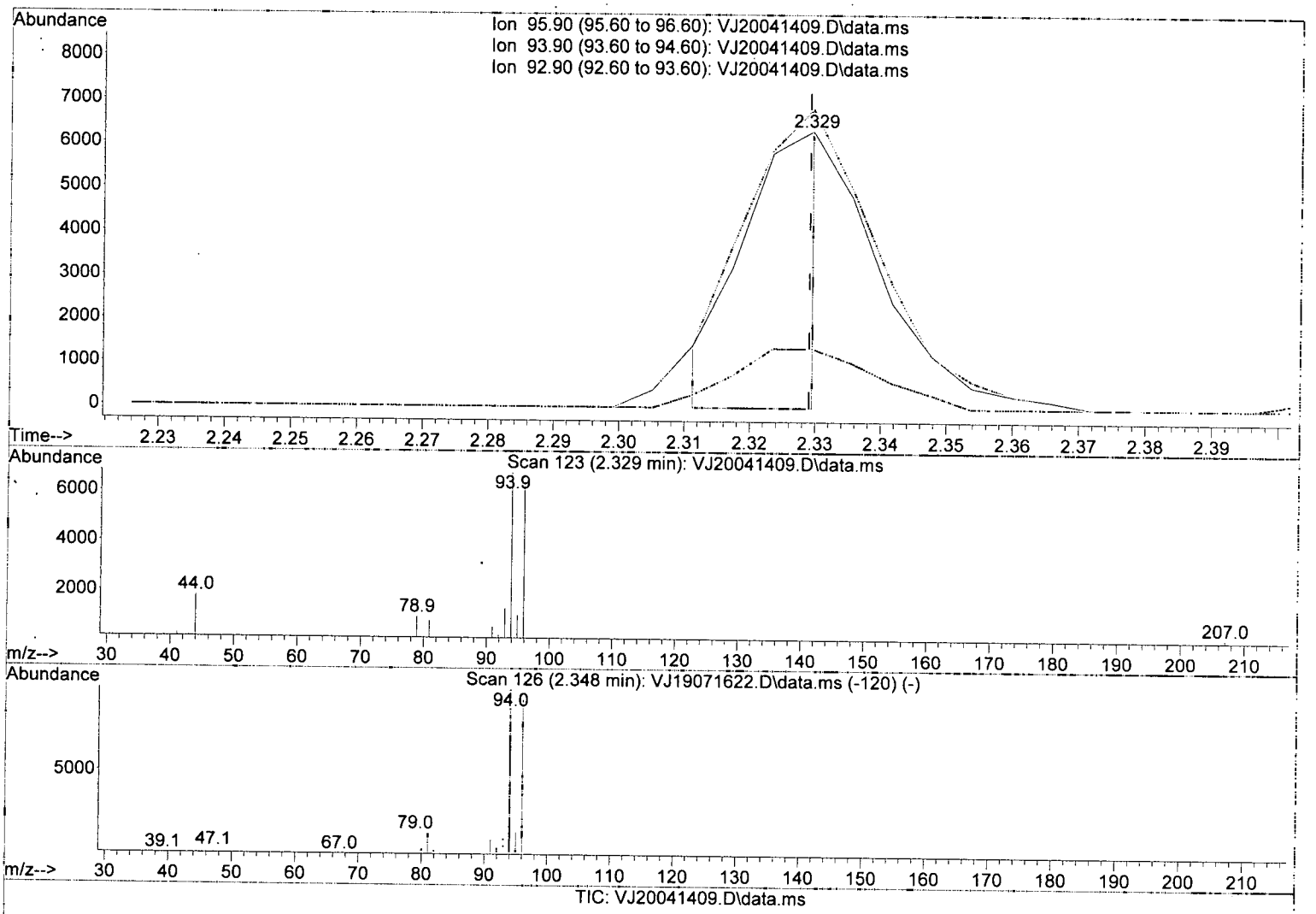
Int=(—)

R = -2.05e-003 A*A + 4.24e-001 A + 4.20e-002
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200414S.M
Calibration Table Last Updated: Wed Apr 15 14:19:47 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



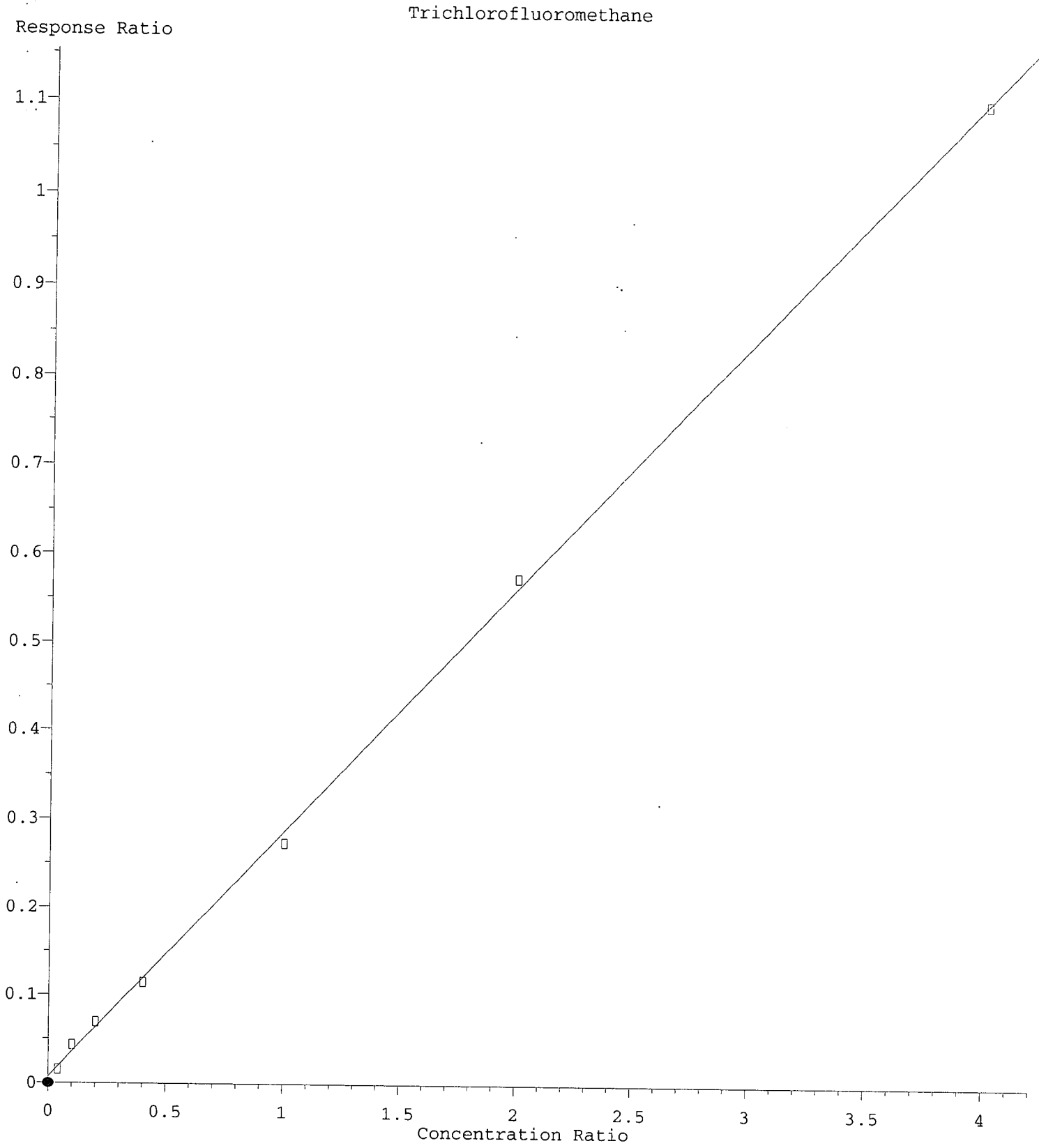
TIC: VJ20041409.D\data.ms

(5) Bromomethane

2.329min (+ 0.000) 0.82 ug/L m

response 5609

Ion	Exp%	Act%
95.90	100.00	100.00
93.90	106.80	107.85
92.90	22.80	21.54
0.00	0.00	0.00



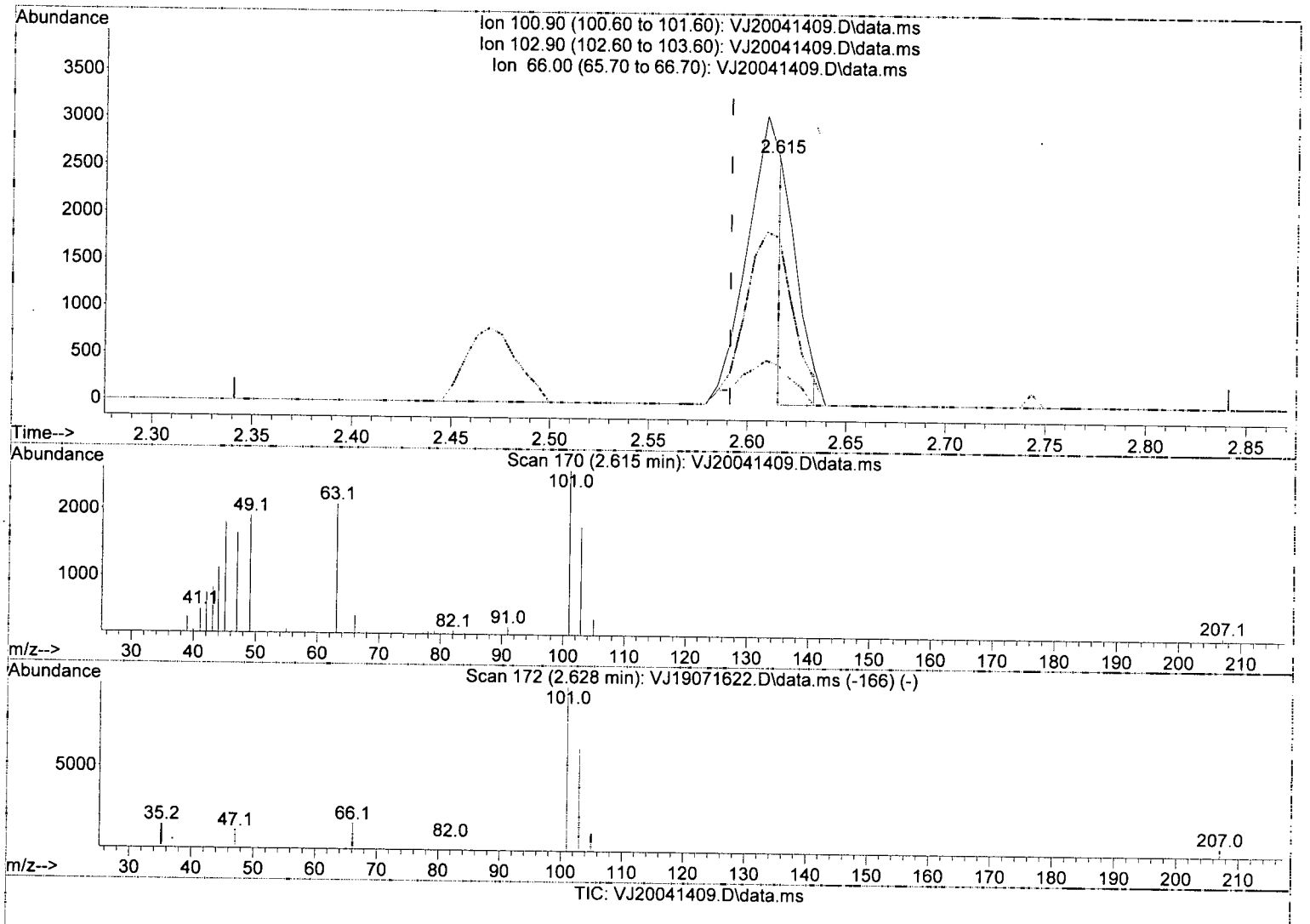
Int = (—)

R = -1.87e-003 A*A + 2.81e-001 A + 1.35e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200414S.M
Calibration Table Last Updated: Wed Apr 15 14:19:47 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



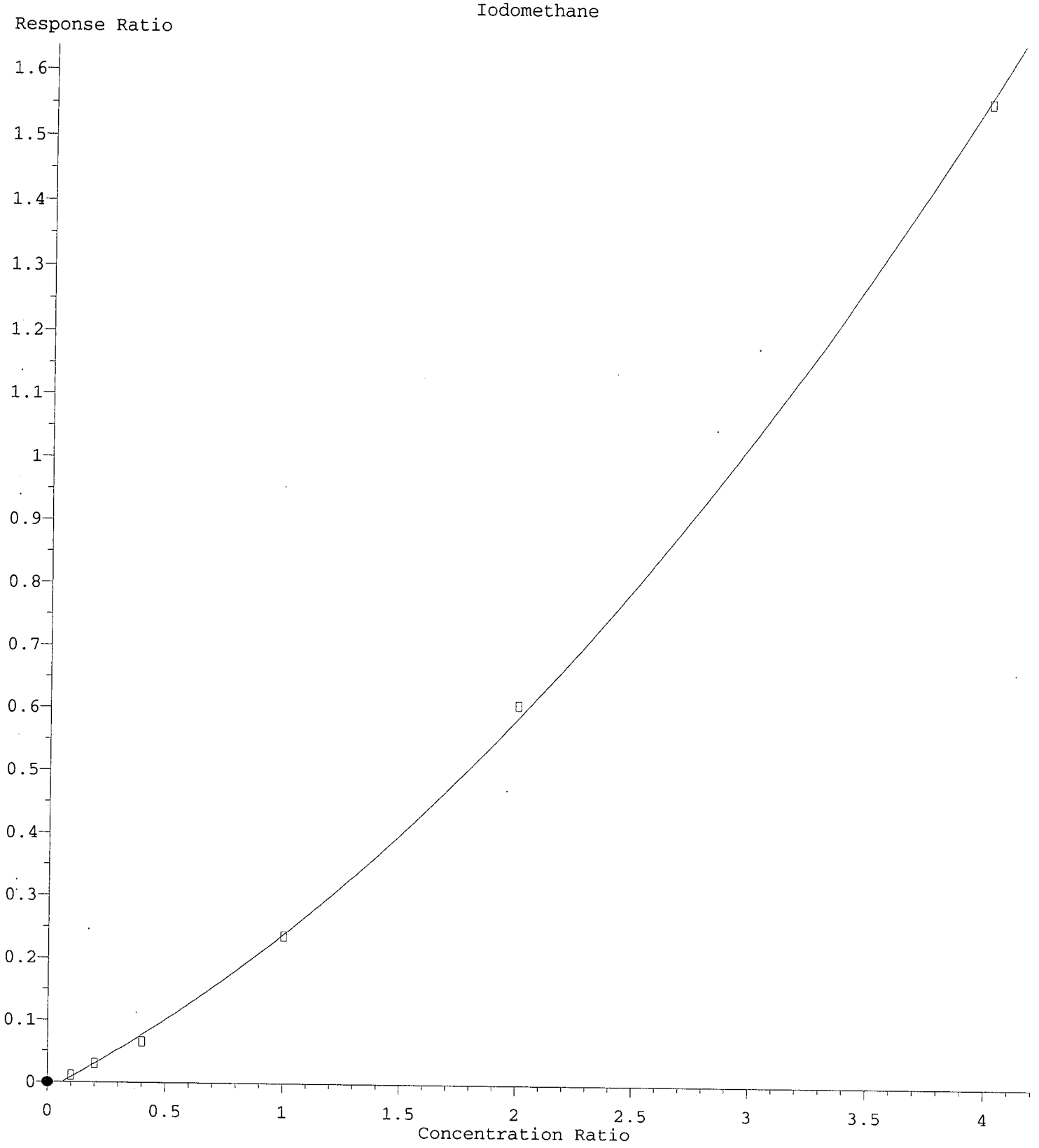
TIC: VJ20041409.D\data.ms

(7) Trichlorofluoromethane

2.615min (+ 0.024) 0.54 ug/L m

response 1188

Ion	Exp%	Act%
100.90	100.00	100.00
102.90	63.10	67.68
66.00	12.70	16.03
0.00	0.00	0.00



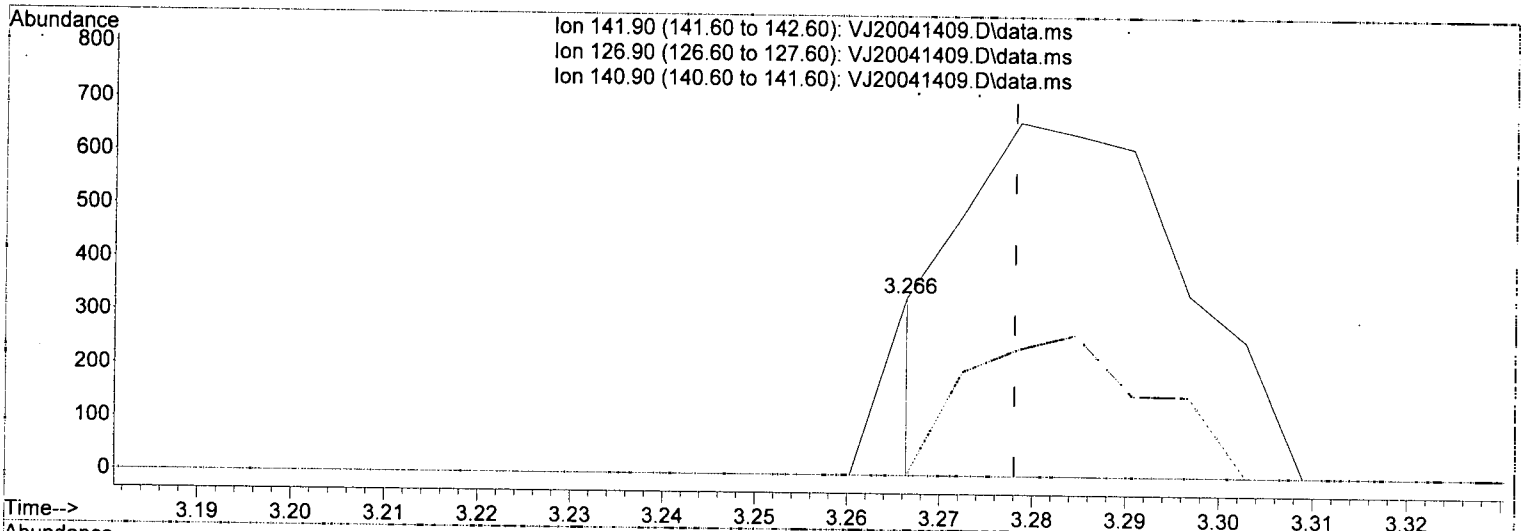
Int= 3.32

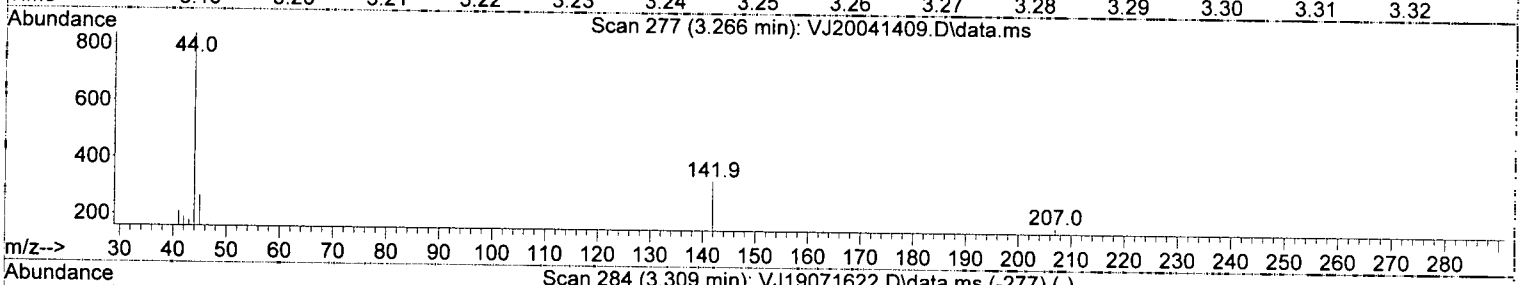
R = 4.76e-002 A*A + 2.07542001 A + 1.27e-002
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200414S.M
Calibration Table Last Updated: Wed Apr 15 14:19:47 2020

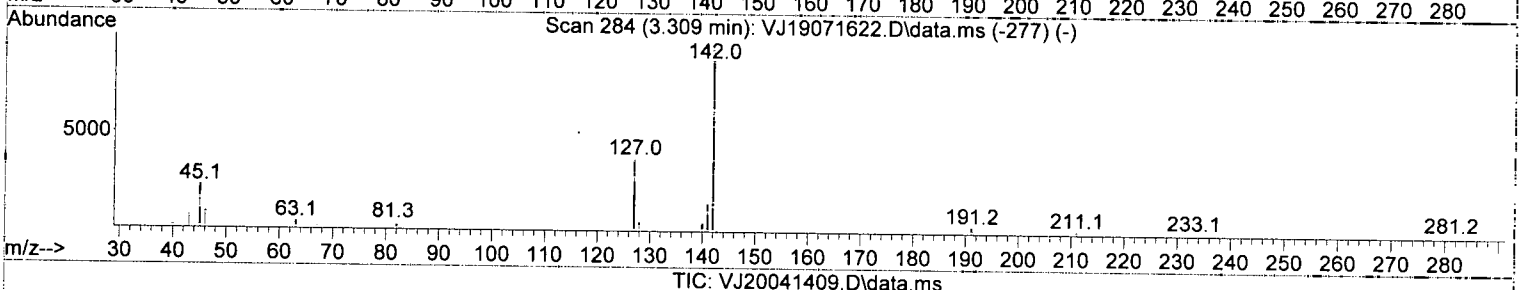
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







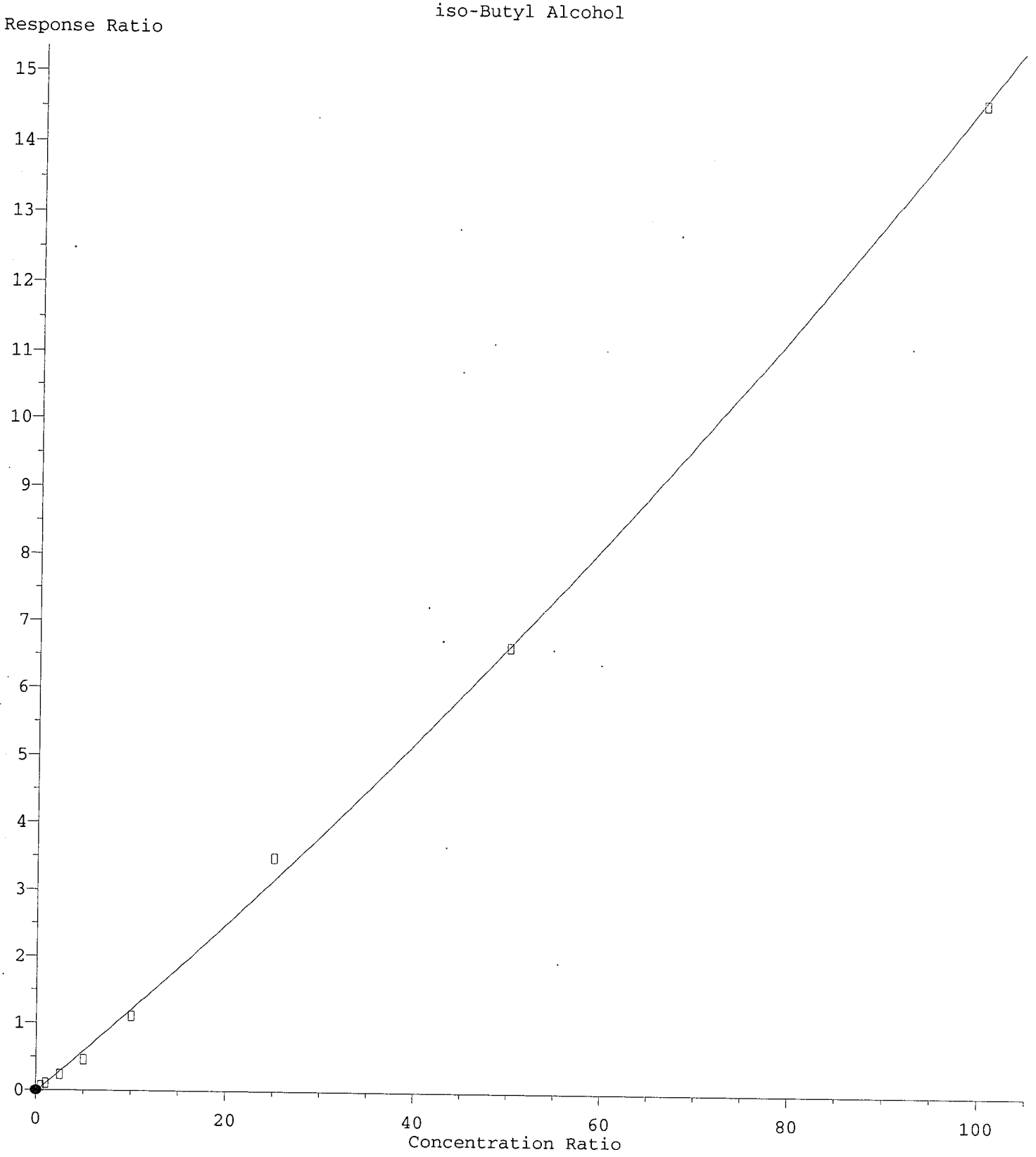
TIC: VJ20041409.D\data.ms

(12) Iodomethane

3.266min (-0.012) 3.32 ug/L m

response 122

Ion	Exp%	Act%
141.90	100.00	100.00
126.90	34.80	0.00#
140.90	15.30	0.00
0.00	0.00	0.00



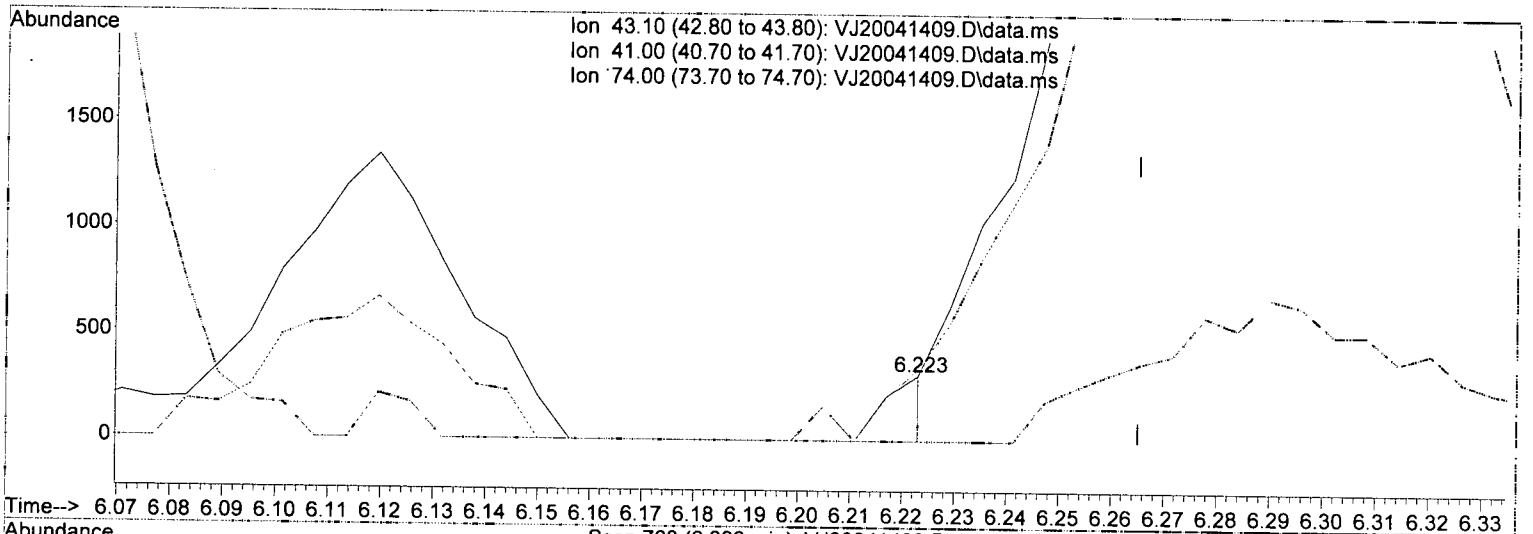
Int = 9.19

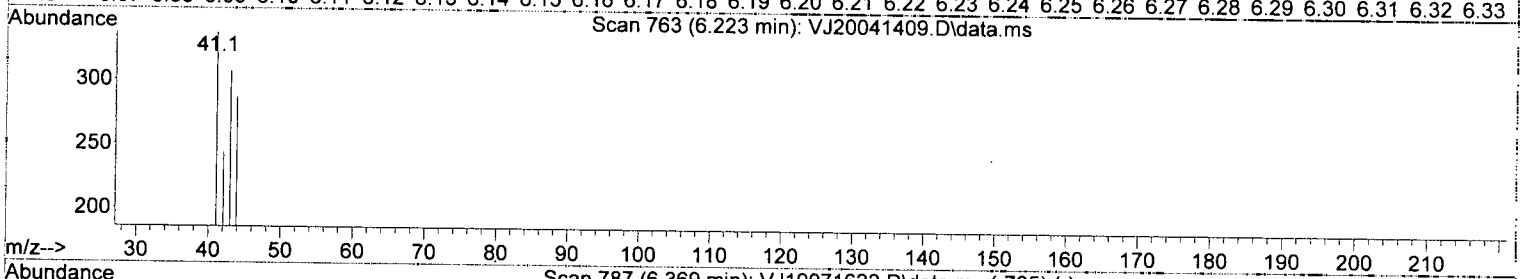
= 2.70e-004 A*A + 1.07e-001 A + 2.04e-002
oef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
ethod Name: C:\msdchem\1\methods\VJ200414S.M
alibration Table Last Updated: Wed Apr 15 14:19:47 2020

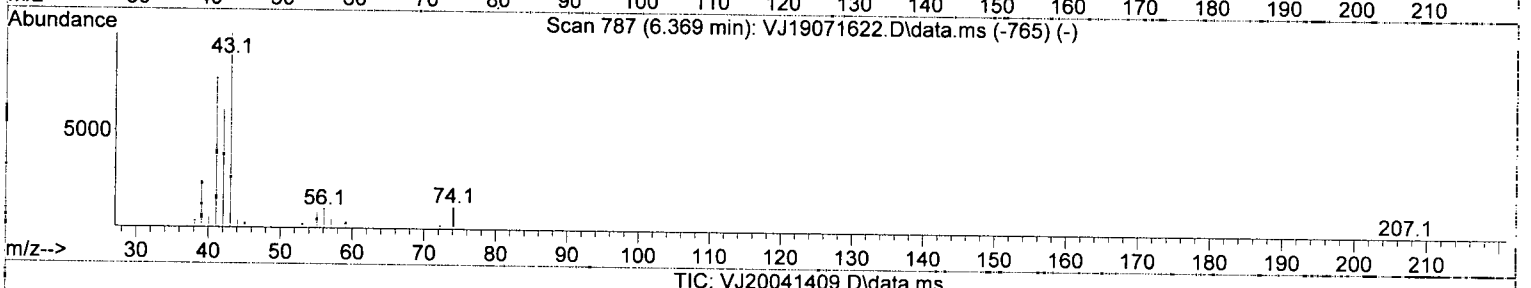
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







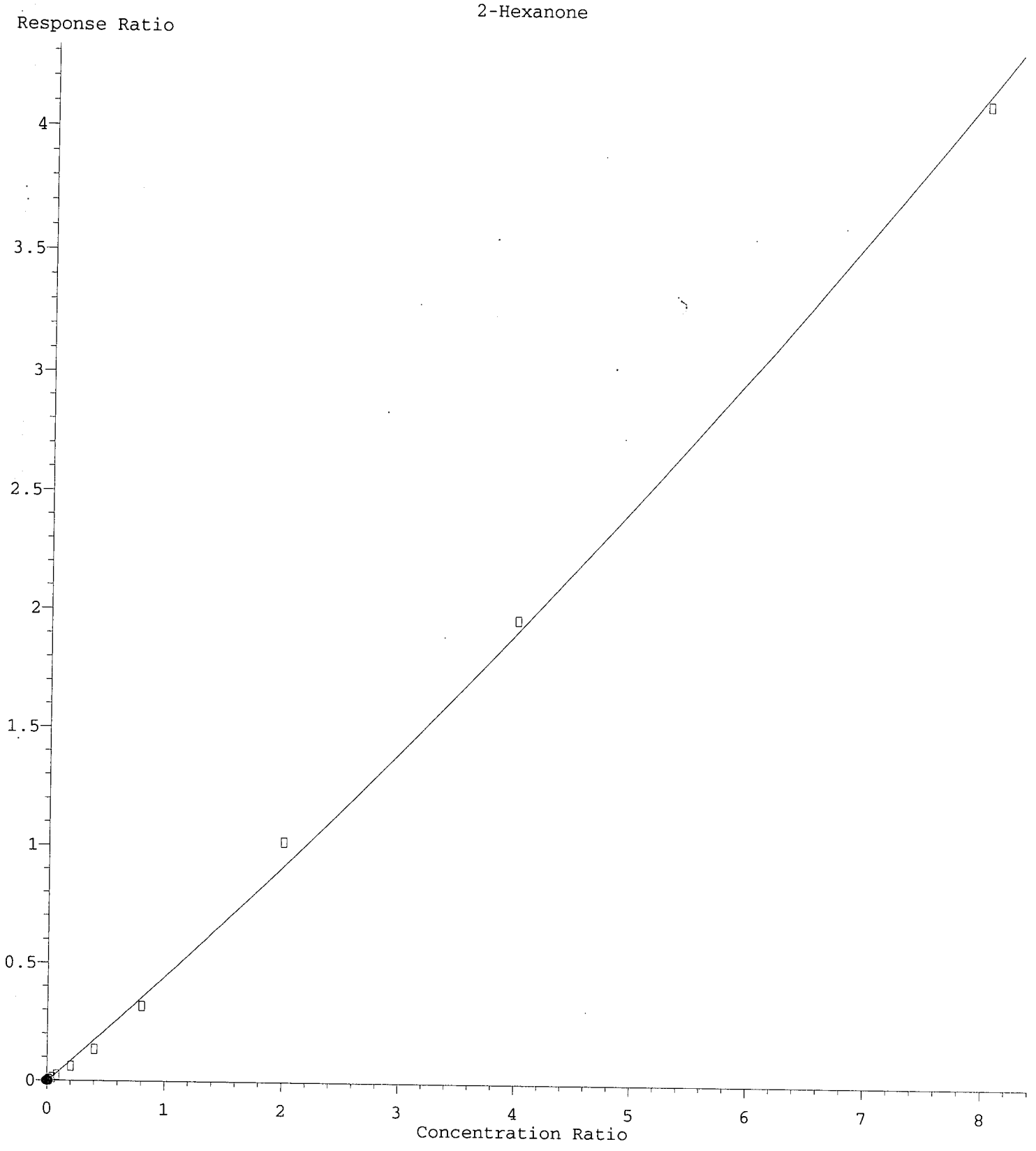
TIC: VJ20041409.D\data.ms

(36) iso-Butyl Alcohol

6.223min (-0.042) 9.19 ug/L m

response 188

Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	109.77#
74.00	11.60	0.00
0.00	0.00	0.00



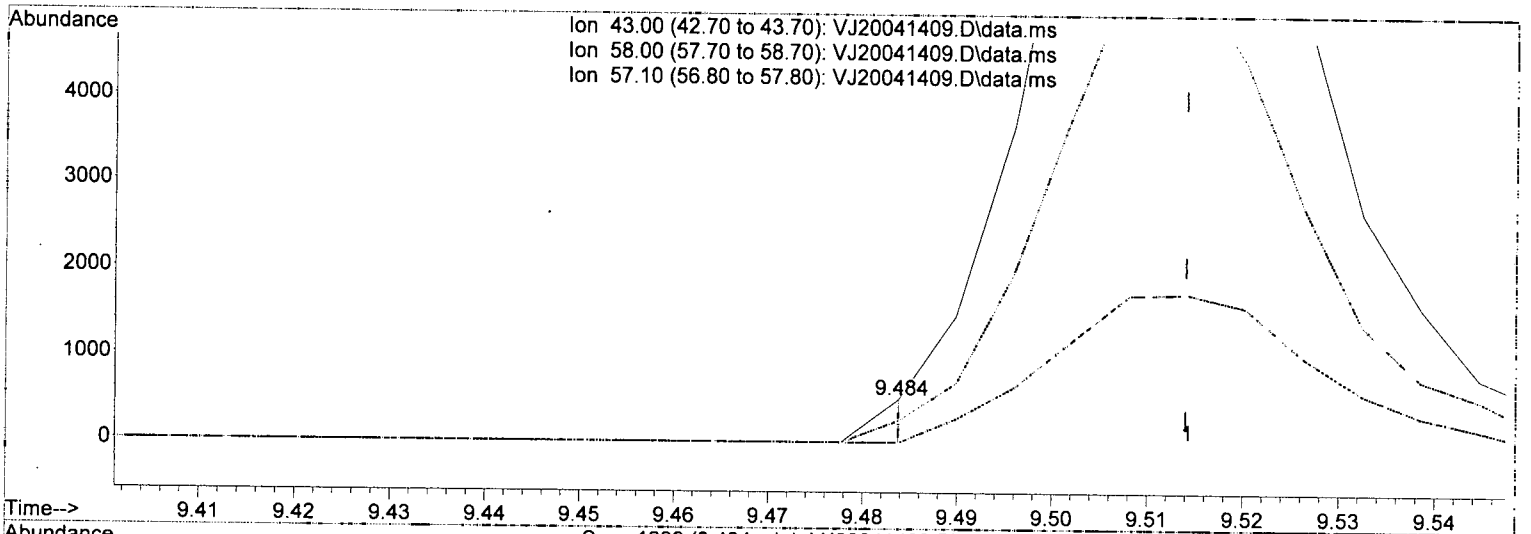
Int = 0.48

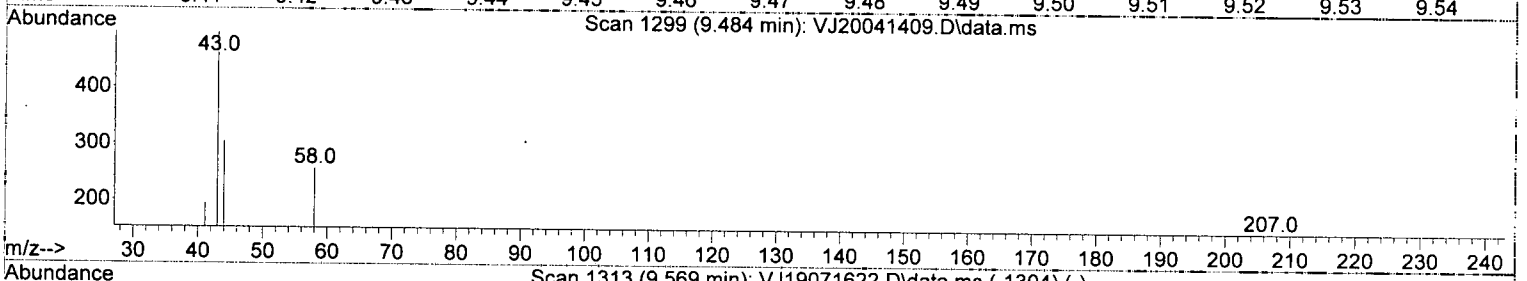
R = 1.02e-002 A*A + 4.07e-001 A + 3.67e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200414S.M
Calibration Table Last Updated: Wed Apr 15 14:19:47 2020

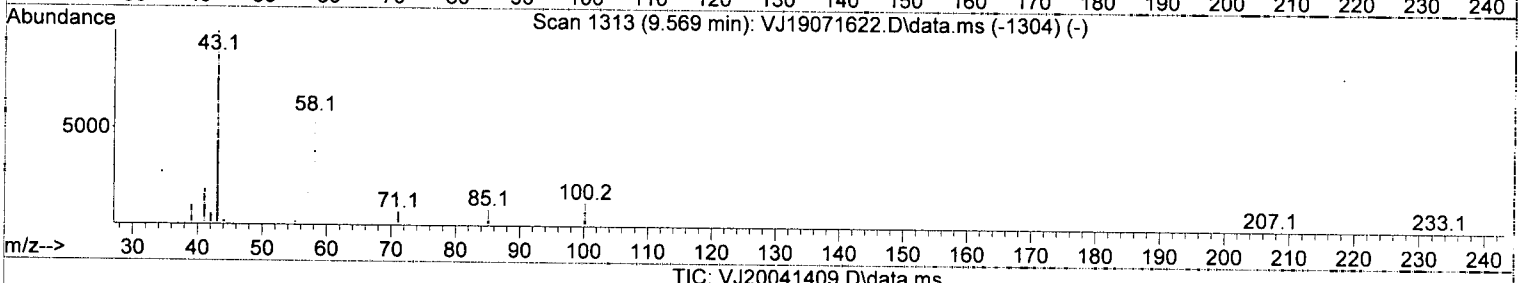
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







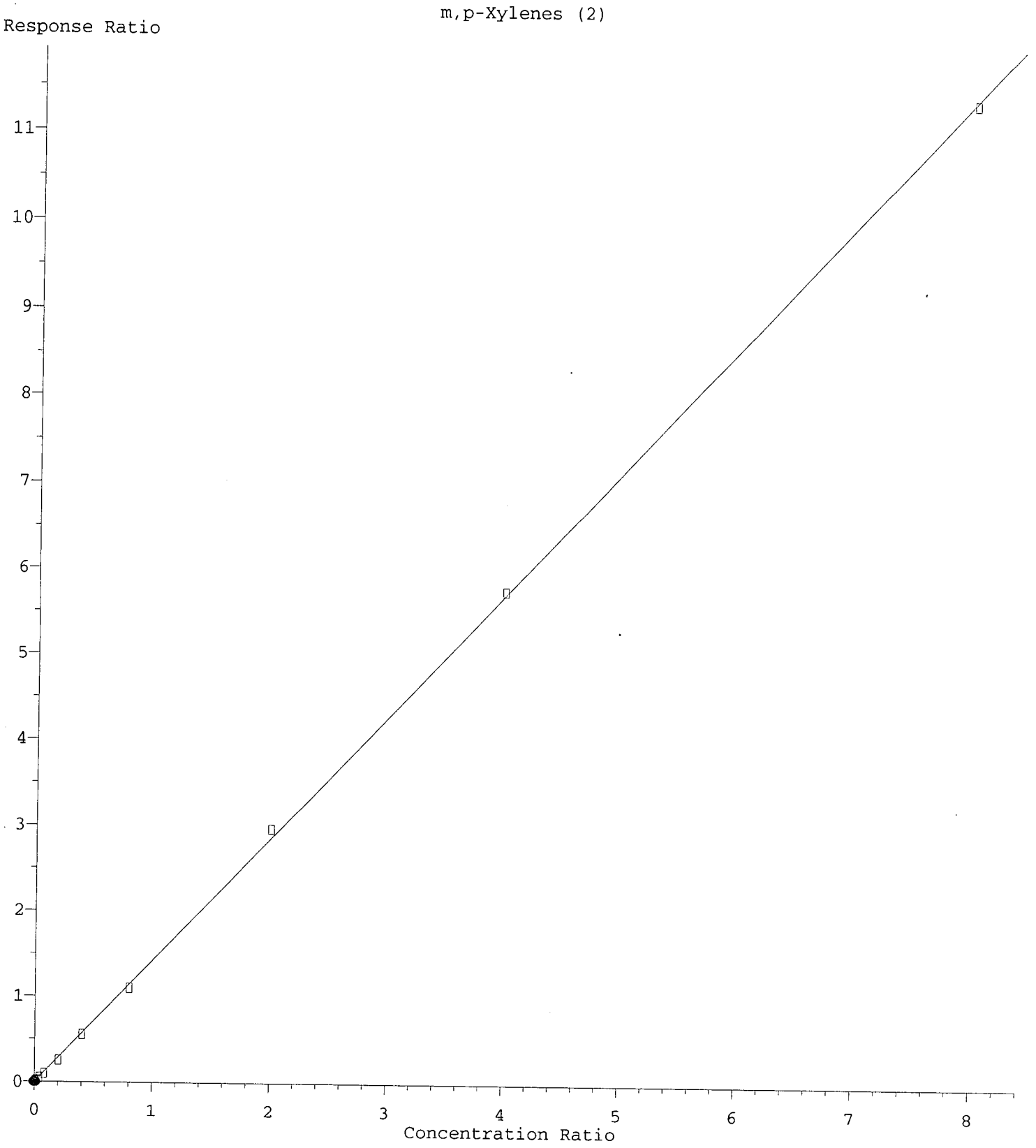
TIC: VJ20041409.D\data.ms

(54) 2-Hexanone

9.484min (-0.030) 0.48 ug/L m

response 182

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	55.80	51.30
57.10	18.50	0.00
0.00	0.00	0.00

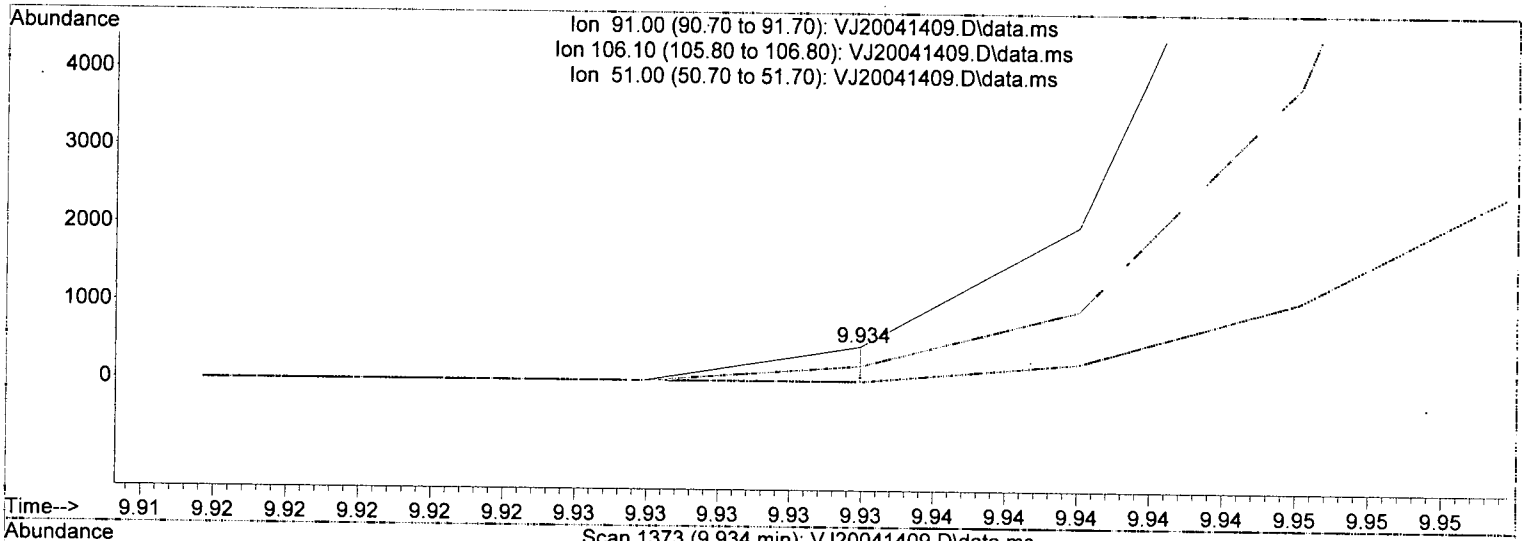

m,p-Xylenes (2)
Response Ratio
11
10
9
8
7
6
5
4
3
2
1
0
0
1
2
3
4
5
6
7
8
Concentration Ratio

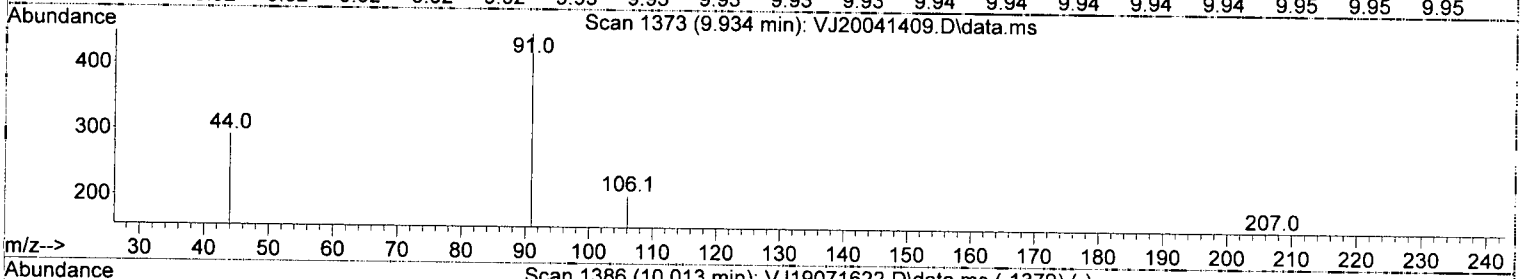
Int = 0.02

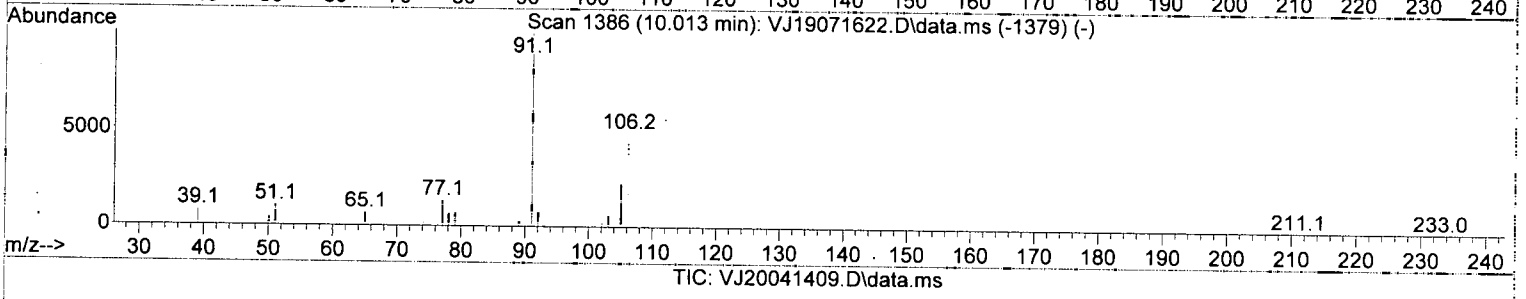
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20041409.D\data.ms

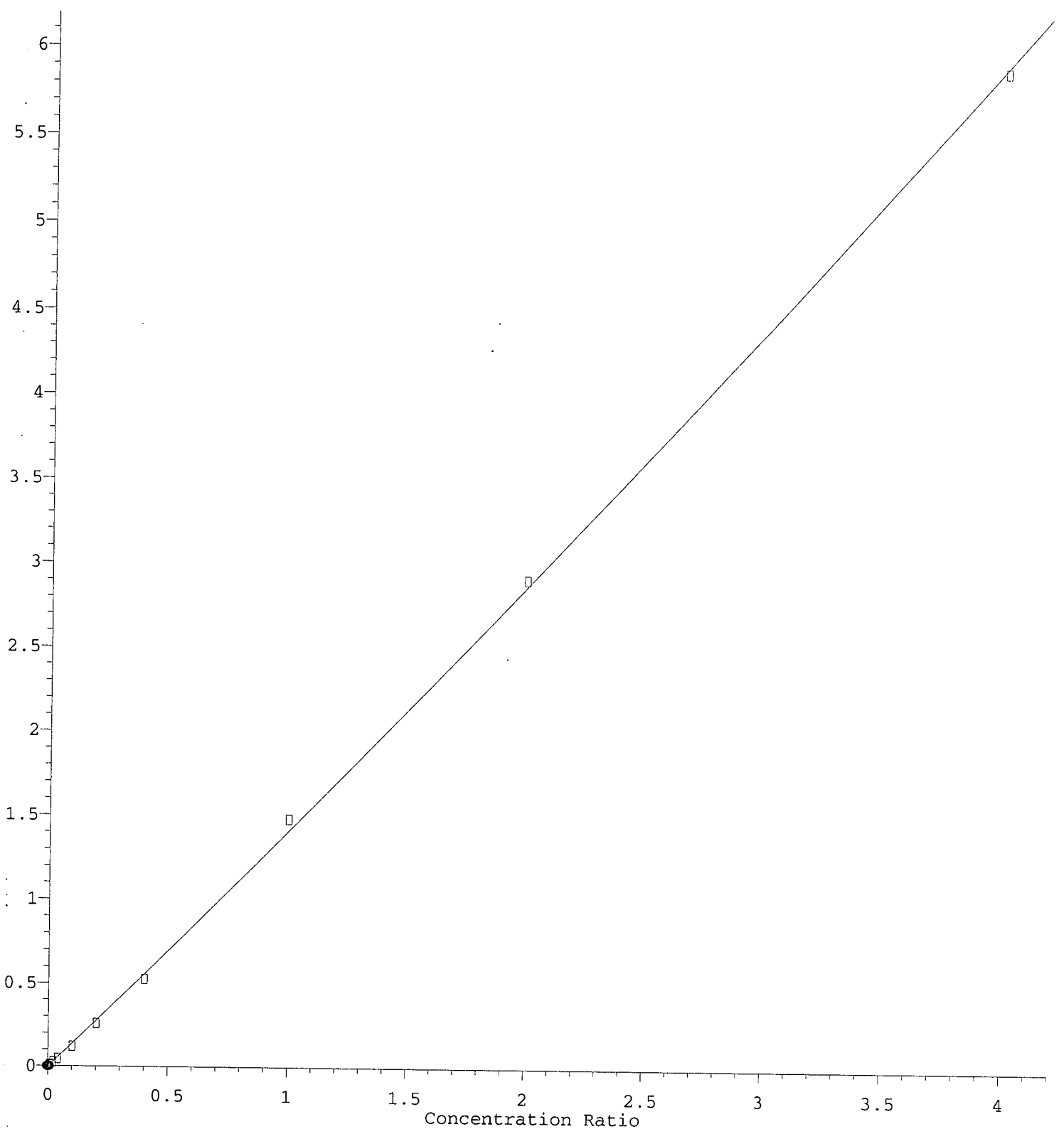
(58) m,p-Xylenes (2)

9.934min (-0.031) 0.02 ug/L m

response 164

Ion	Exp%	Act%
91.00	100.00	100.00
106.10	51.80	45.21
51.00	9.80	0.00
0.00	0.00	0.00

o-Xylene



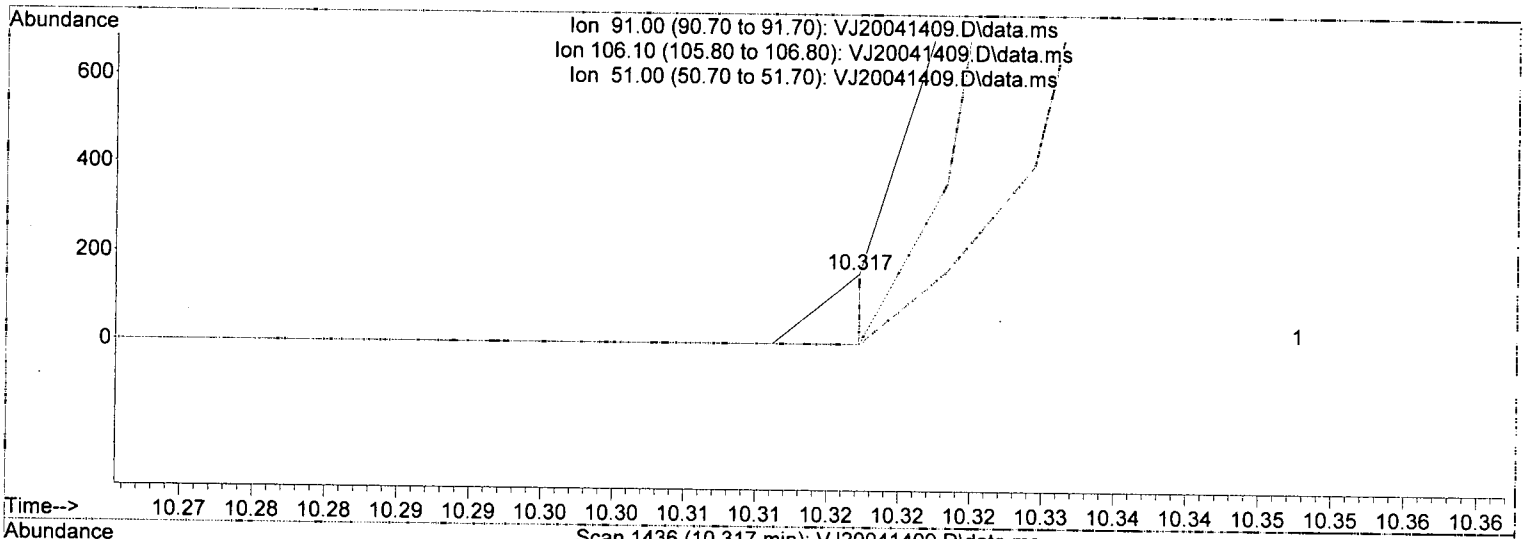
Int=0.10

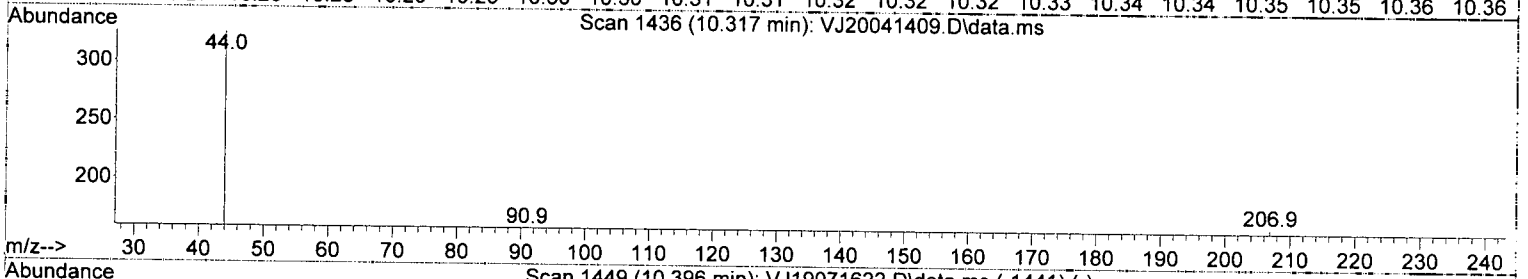
R = 2.26e-002 A*A + 1.07e+000 A + 2.70e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200414S.M
Calibration Table Last Updated: Wed Apr 15 14:23:26 2020

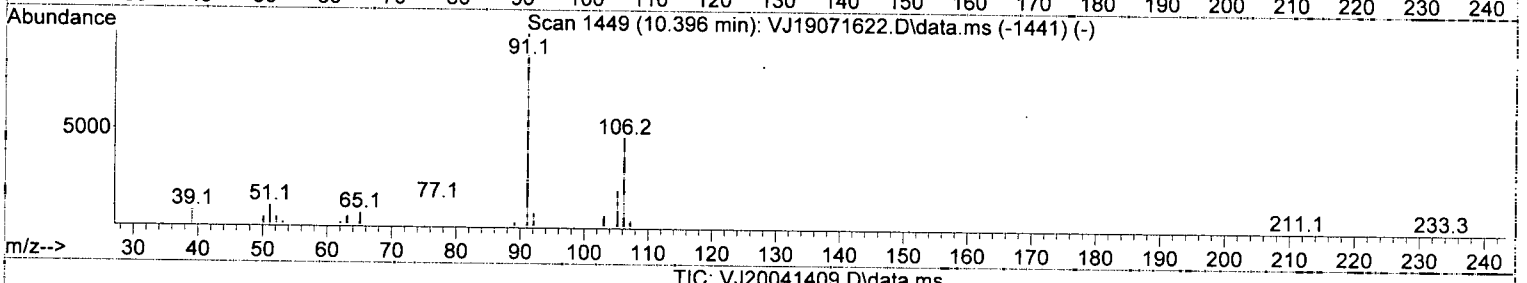
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







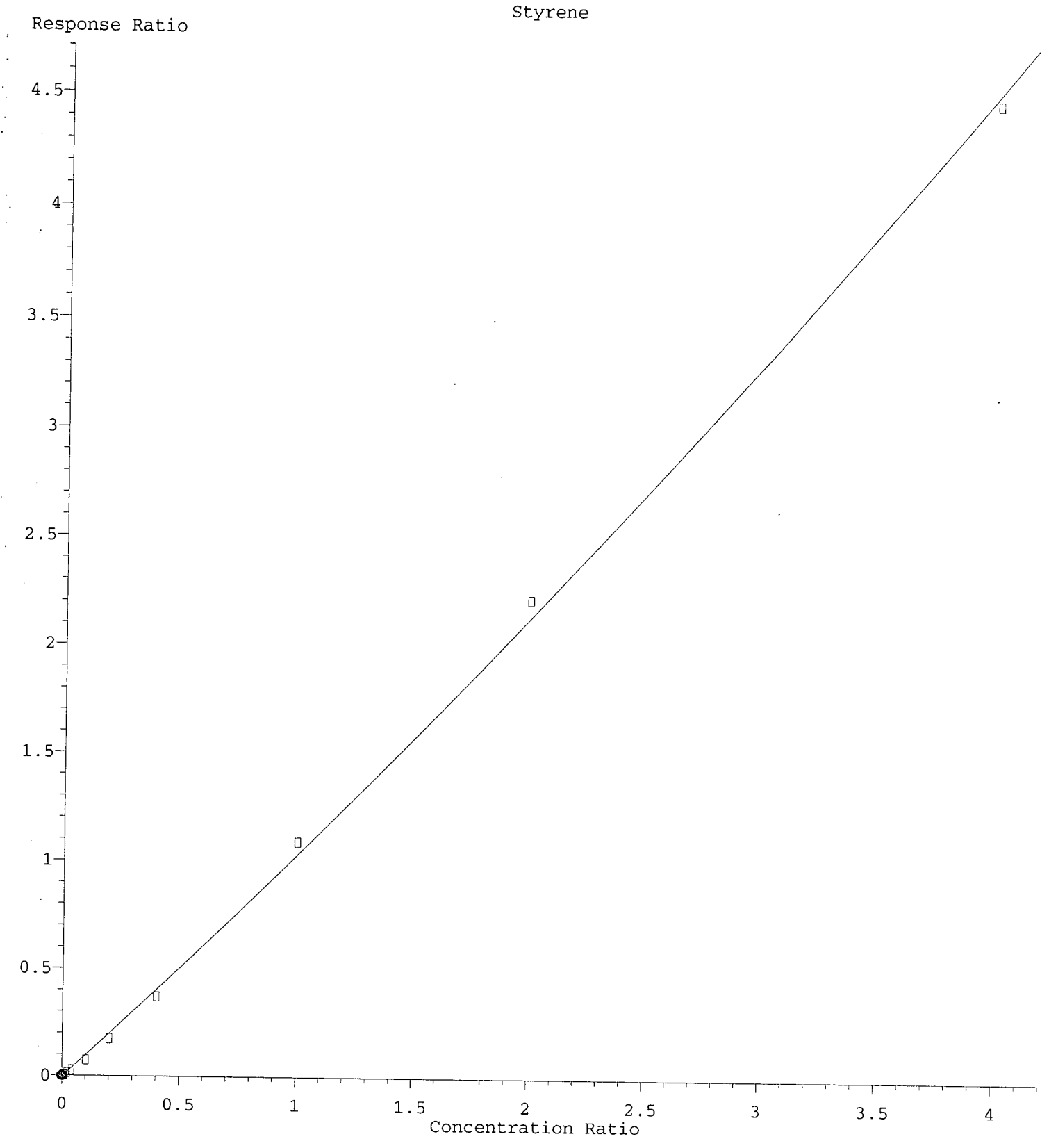
TIC: VJ20041409.D\data.ms

(59) o-Xylene

10.317min (-0.030) 0.10 ug/L m

response 58

Ion	Exp%	Act%
91.00	100.00	100.00
106.10	49.80	0.00#
51.00	9.70	0.00
0.00	0.00	0.00



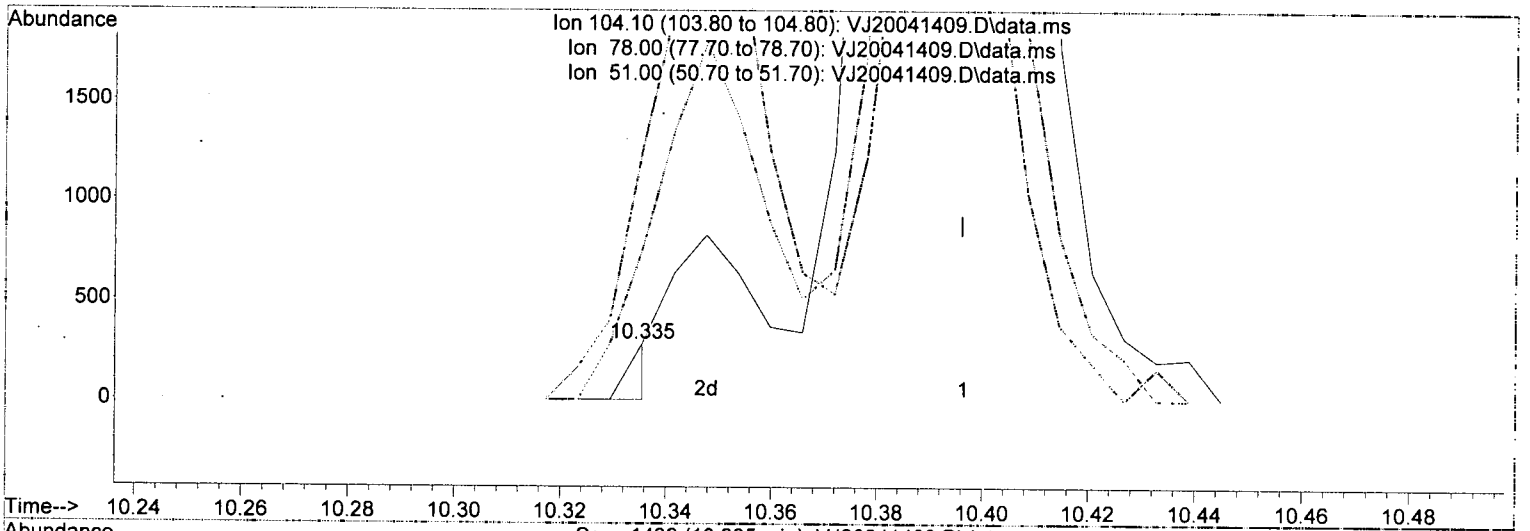
Int = 0,21

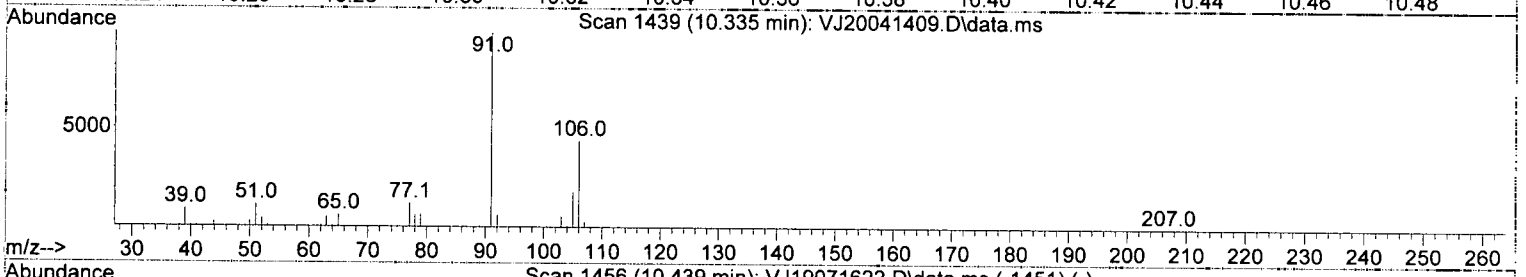
R = 3.26e-002 A*A + 1.07e-002 A + 3.17e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200414S.M
Calibration Table Last Updated: Wed Apr 15 14:23:26 2020

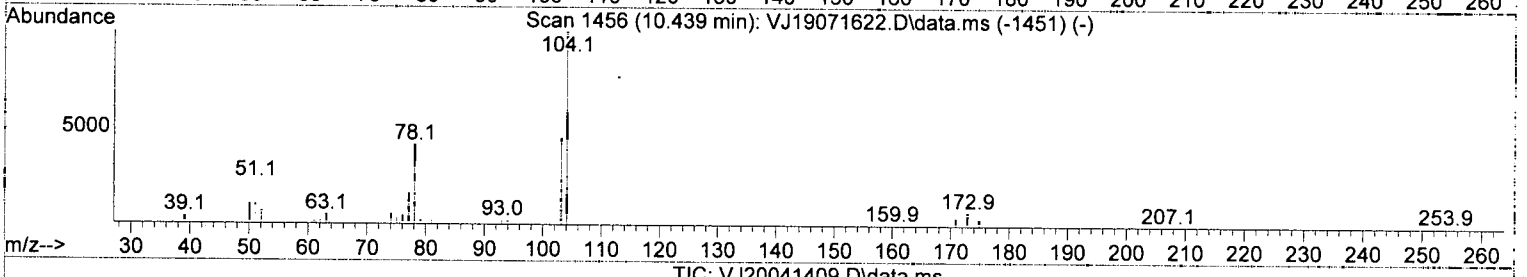
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







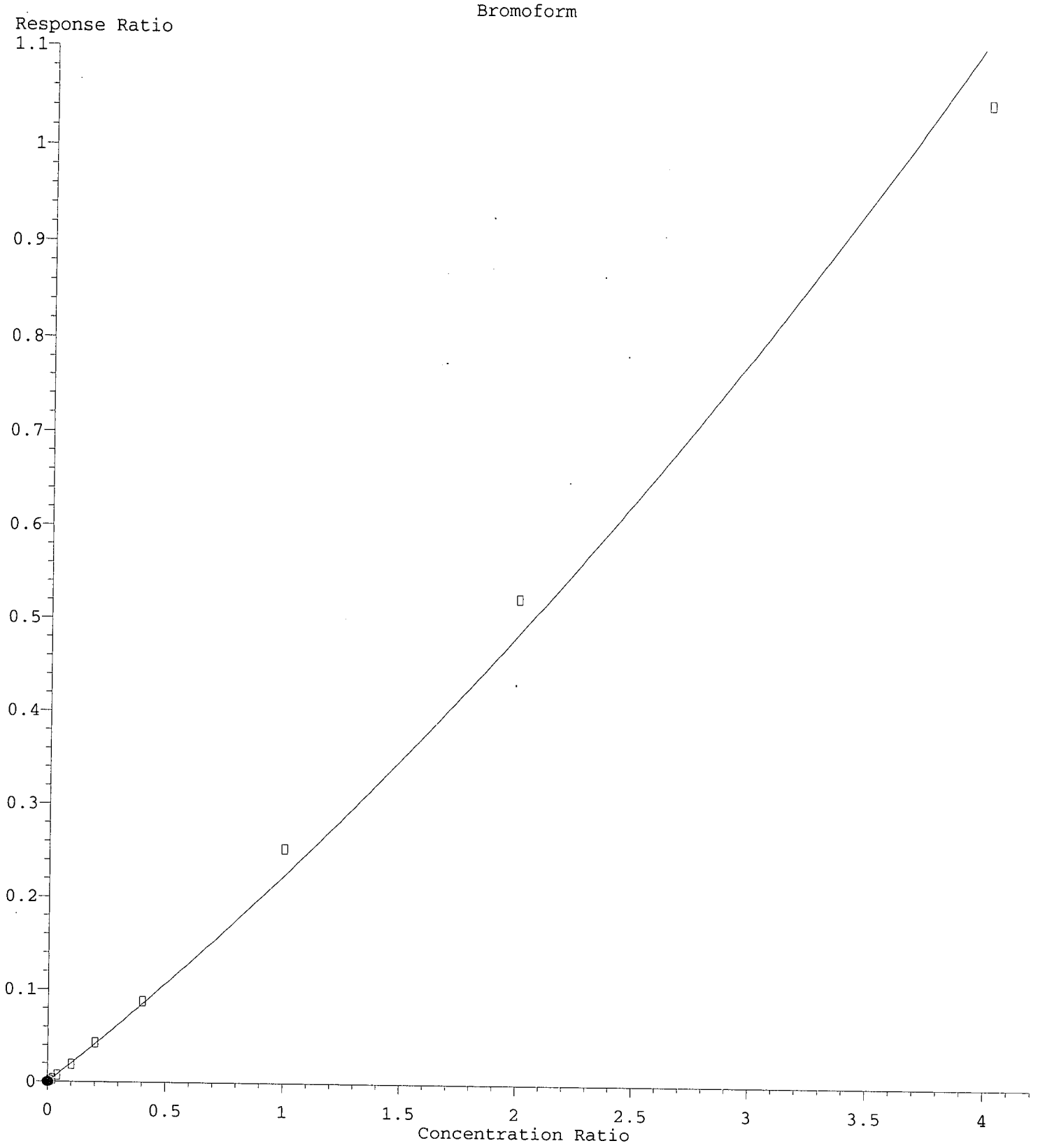
TIC: VJ20041409.D\data.ms

(60) Styrene

10.335min (-0.061) 0.21 ug/L m

response 103

Ion	Exp%	Act%
104.10	100.00	100.00
78.00	42.20	266.43#
51.00	24.70	443.46#
0.00	0.00	0.00



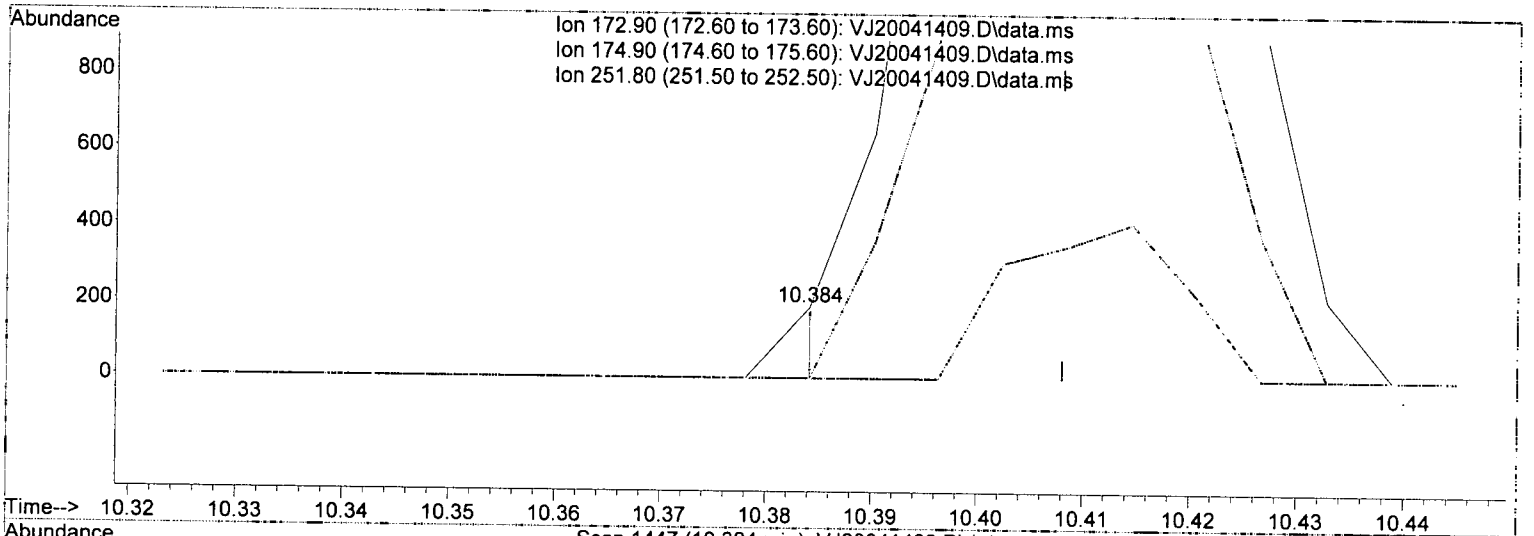
Int = 0.20

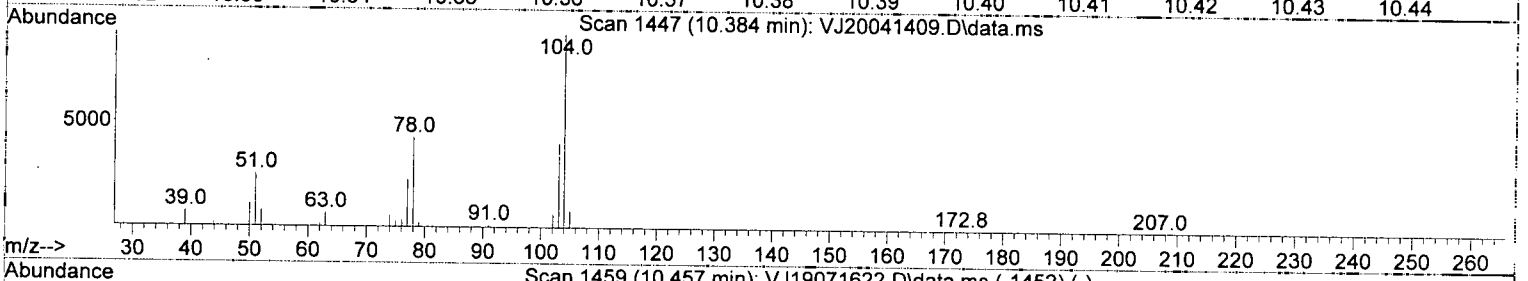
R = 1.80e-002 A*A + 2.07e-001 A + 6.03e-004
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\VJ200414S.M
Calibration Table Last Updated: Wed Apr 15 14:23:48 2020

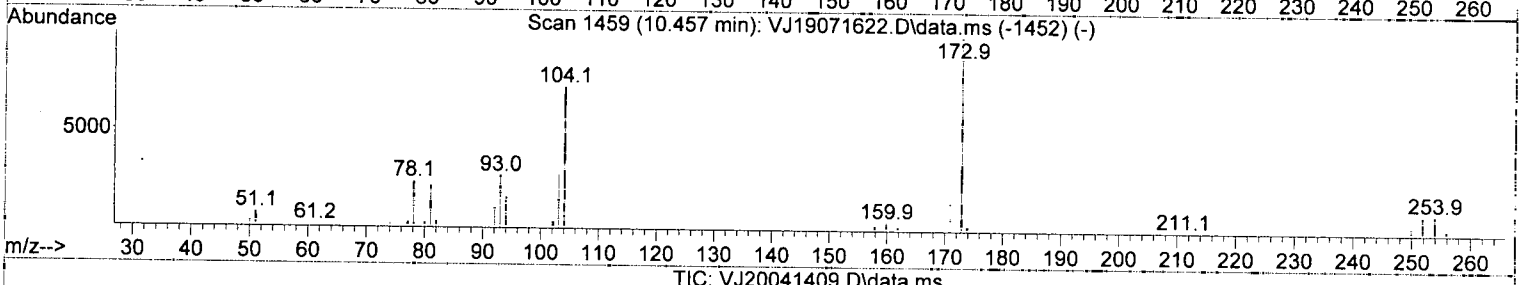
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







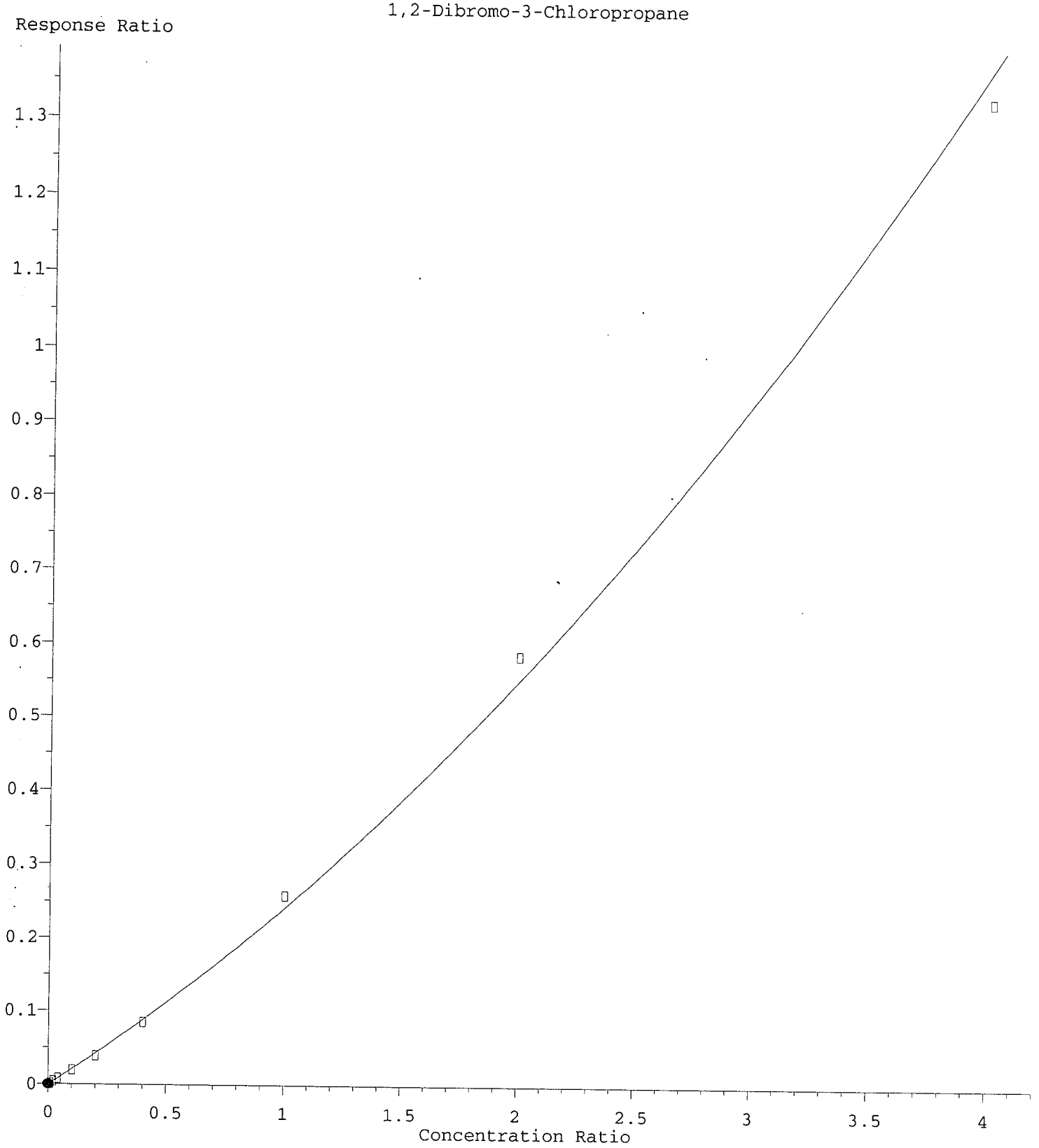
TIC: VJ20041409.D\data.ms

(61) Bromoform (P)

10.384min (-0.024) 0.20 ug/L m

response 69

Ion	Exp%	Act%
172.90	100.00	100.00
174.90	48.50	0.00#
251.80	13.90	0.00
0.00	0.00	0.00



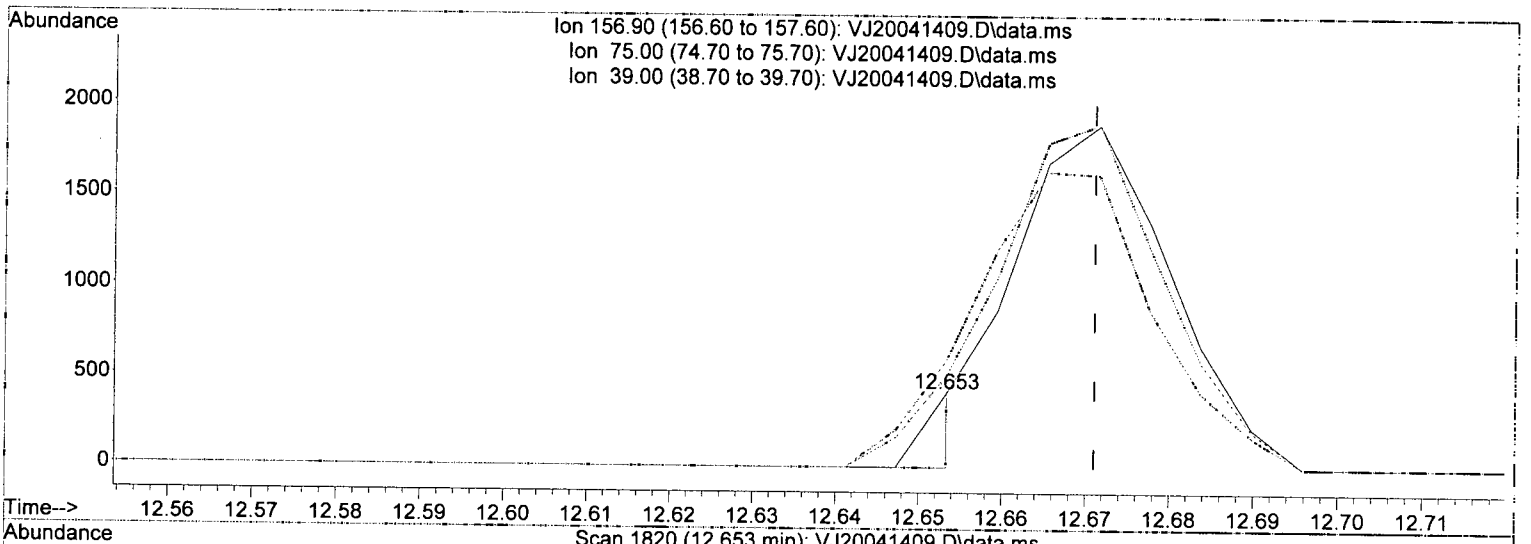
Int = ~~0.44~~ 0.43 4/15/20

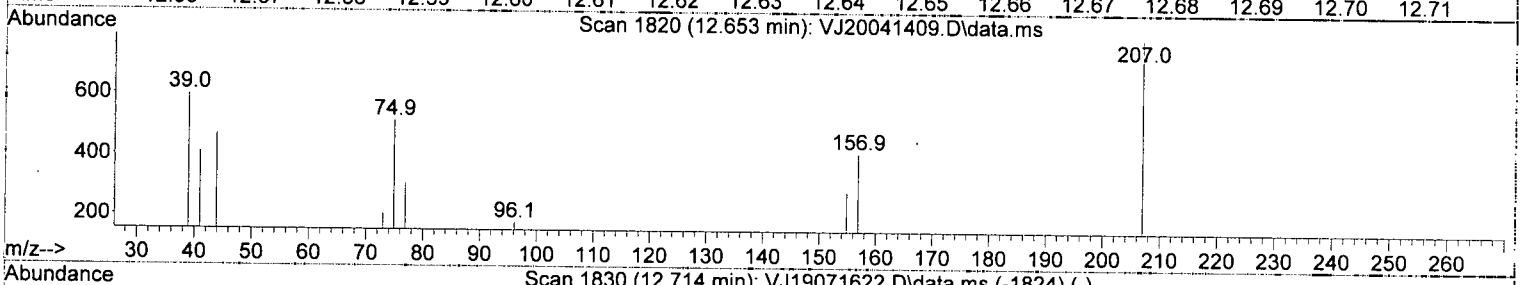
R = 3.31e-002 A*A + 2.09e-001 A + 6.67e-004
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\VJ200414S.M
Calibration Table Last Updated: Wed Apr 15 14:03:49 2020

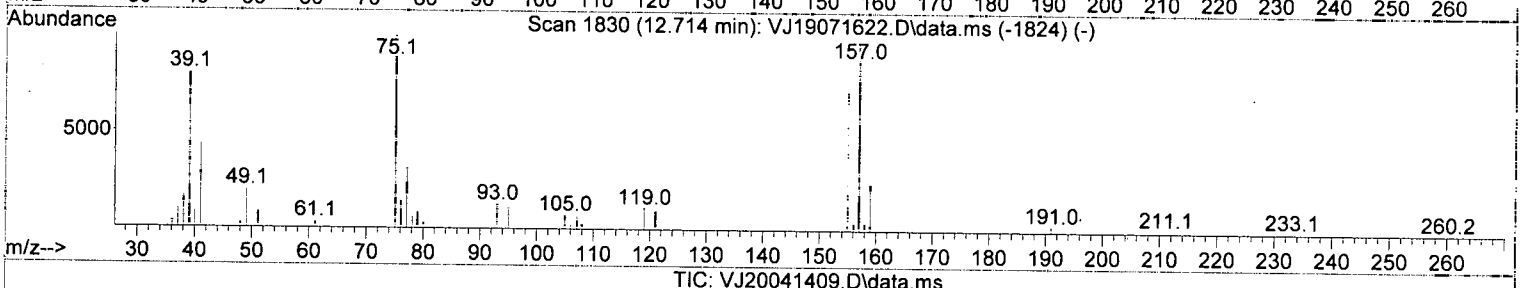
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







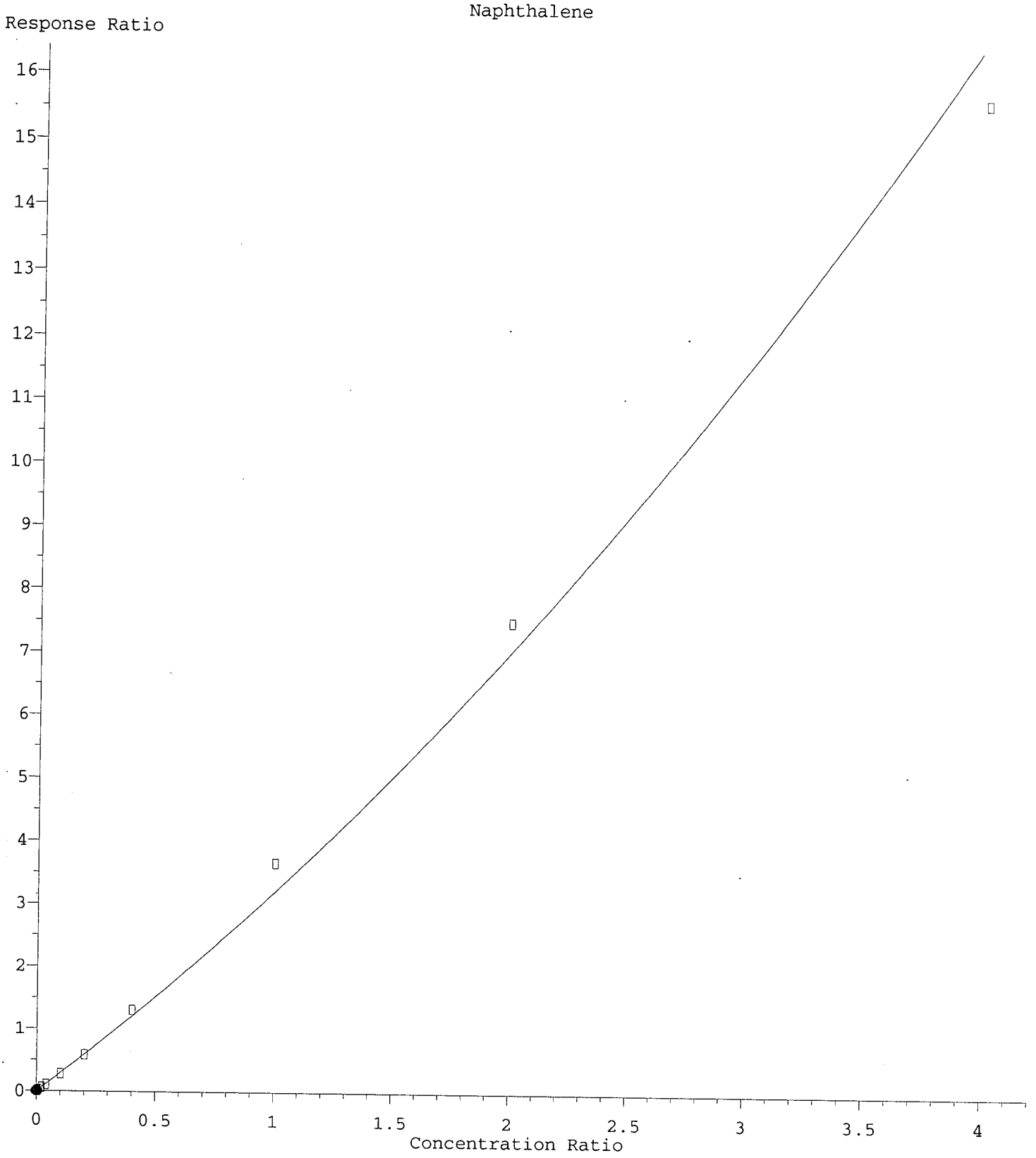
TIC: VJ20041409.D\data.ms

(81) 1,2-Dibromo-3-Chloropropane

12.653min (-0.018) 0.43 ug/L m

response 151

Ion	Exp%	Act%
156.90	100.00	100.00
75.00	73.10	123.86#
39.00	54.70	144.10#
0.00	0.00	0.00



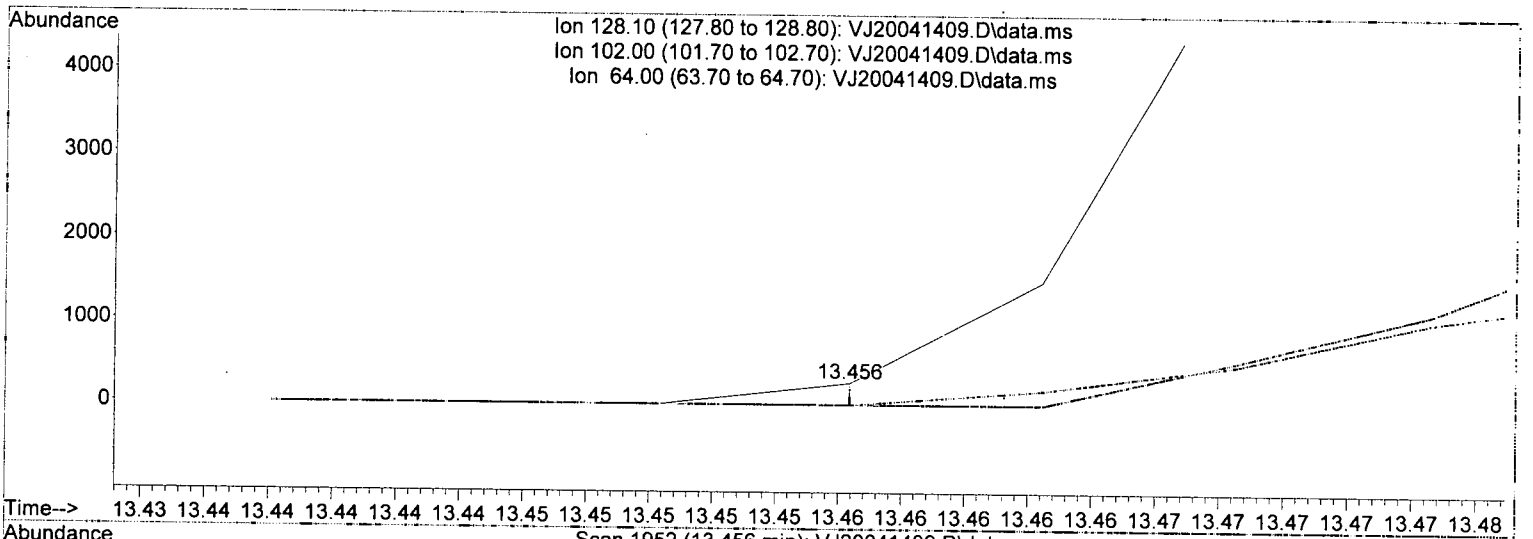
Int = 0.02

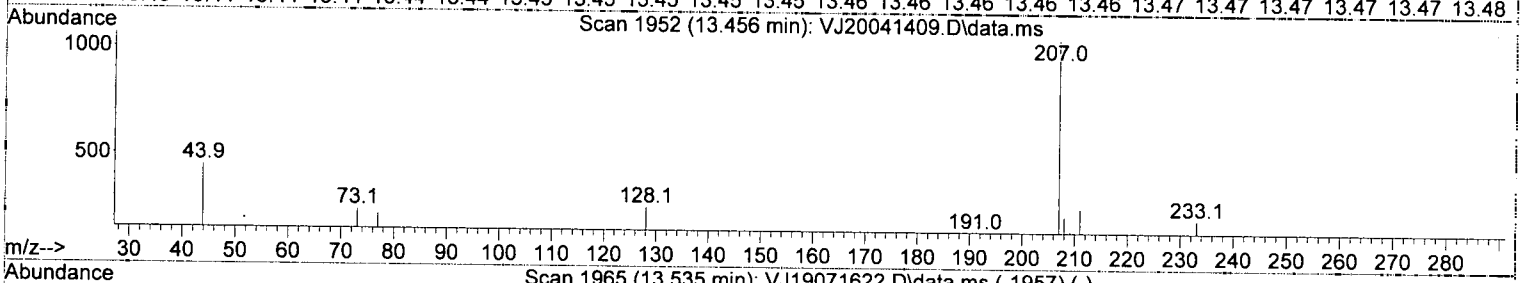
= 3.14e-001 A*A + 2.078e+000 A + 3.16e-004
oef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
ethod Name: C:\msdchem\1\methods\VJ200414S.M
alibration Table Last Updated: Wed Apr 15 14:23:48 2020

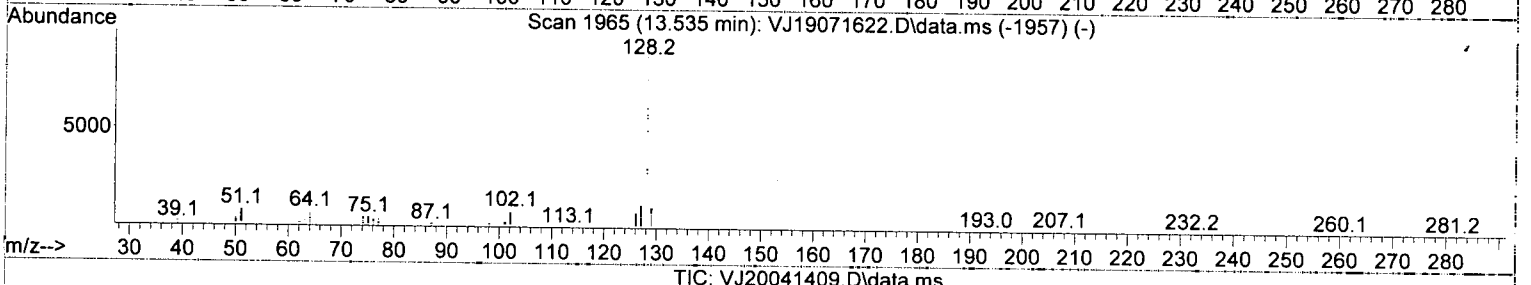
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\Requant\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 14:20:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20041409.D\data.ms

(84) Naphthalene

13.456min (-0.030) 0.02 ug/L m

response 96

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	0.00
64.00	6.30	0.00
0.00	0.00	0.00

Calibration Status Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200414G.M
Title : NWTPH-Gx by GC/MS
Last Update : Wed Apr 15 18:44:39 2020
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	50	50	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041424.D
2	100	100	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041425.D
3	250	250	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041426.D
4	500	500	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041427.D
5	1000	1000	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041428.D
6	2500	2500	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041429.D
7	5000	5000	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041430.D
8	10K	10000	50	C:\msdchem\1\data\2020-04\0D14058\VJ20041431.D

#	ID	Update Time	Quant Time	Acquisition Time
1	50	Apr 15 18:44 2020	Apr 15 18:43 2020	15 Apr 2020 3:29
2	100	Apr 15 18:44 2020	Apr 15 18:43 2020	15 Apr 2020 3:56
3	250	Apr 15 18:44 2020	Apr 15 18:43 2020	15 Apr 2020 4:23
4	500	Apr 15 18:44 2020	Apr 15 18:43 2020	15 Apr 2020 4:50
5	1000	Apr 15 18:44 2020	Apr 15 18:43 2020	15 Apr 2020 5:16
6	2500	Apr 15 18:44 2020	Apr 15 18:43 2020	15 Apr 2020 5:43
7	5000	Apr 15 18:44 2020	Apr 15 18:43 2020	15 Apr 2020 6:10
8	10K	Apr 15 18:44 2020	Apr 15 18:43 2020	15 Apr 2020 6:37

VJ200414G.M Thu Apr 16 09:59:20 2020

Method Path : C:\msdchem\1\methods\
Method File : VJ200414G.M
Title : NWTPH-Gx by GC/MS
Last Update : Wed Apr 15 18:44:39 2020
Response Via : Initial Calibration

Calibration Files
50 =VJ20041424.D 100 =VJ20041425.D 250 =VJ20041426.D 500 =VJ20041427.D 1000=VJ20041428.D 2500=VJ20041429.D
5000=VJ20041430.D 10K =VJ20041431.D

		Compound	50	100	250	500	1000	2500	5000	10K	Avg	%RSD
1)	I	Pentafluorobenzene...	----------ISTD----------									
2)	S	1,4-Difluorobe...	1.823	1.842	1.811	1.814	1.816	1.826	1.803	1.814	1.819	0.65
3)	S	4-Bromofluorob...	0.532	0.538	0.515	0.514	0.512	0.538	0.540	0.529	0.527	2.27
4)	H	NWTPH-Gx (TPH)	2.174	1.926	2.089	2.319	2.305	2.408	2.547	2.651	2.302	10.34
5)	H	TPHg (C5-C9)	4.777	3.716	3.092	2.903	2.829	2.804	2.916	2.951	3.249	21.05
6)	H	TPHg (C6-C10)	3.948	2.890	2.595	2.582	2.518	2.491	2.589	2.632	2.781	17.51
7)	H	CA-LUFT (C5-C12)	5.123	4.109	3.570	3.483	3.405	3.438	3.587	3.652	3.796	15.27
8)		Benzene (NR)									0.000	-1.00
9)	S	Toluene-d8 (NR)									0.000	-1.00
10)		Toluene (NR)									0.000	-1.00
11)	S	Chlorobenzene-...									0.000	-1.00
12)	S	1,4-Dichlorobe...									0.000	-1.00
13)		Naphthalene (NR)									0.000	-1.00

(#) = Out of Range

Compound List Report VOA-GCMS10

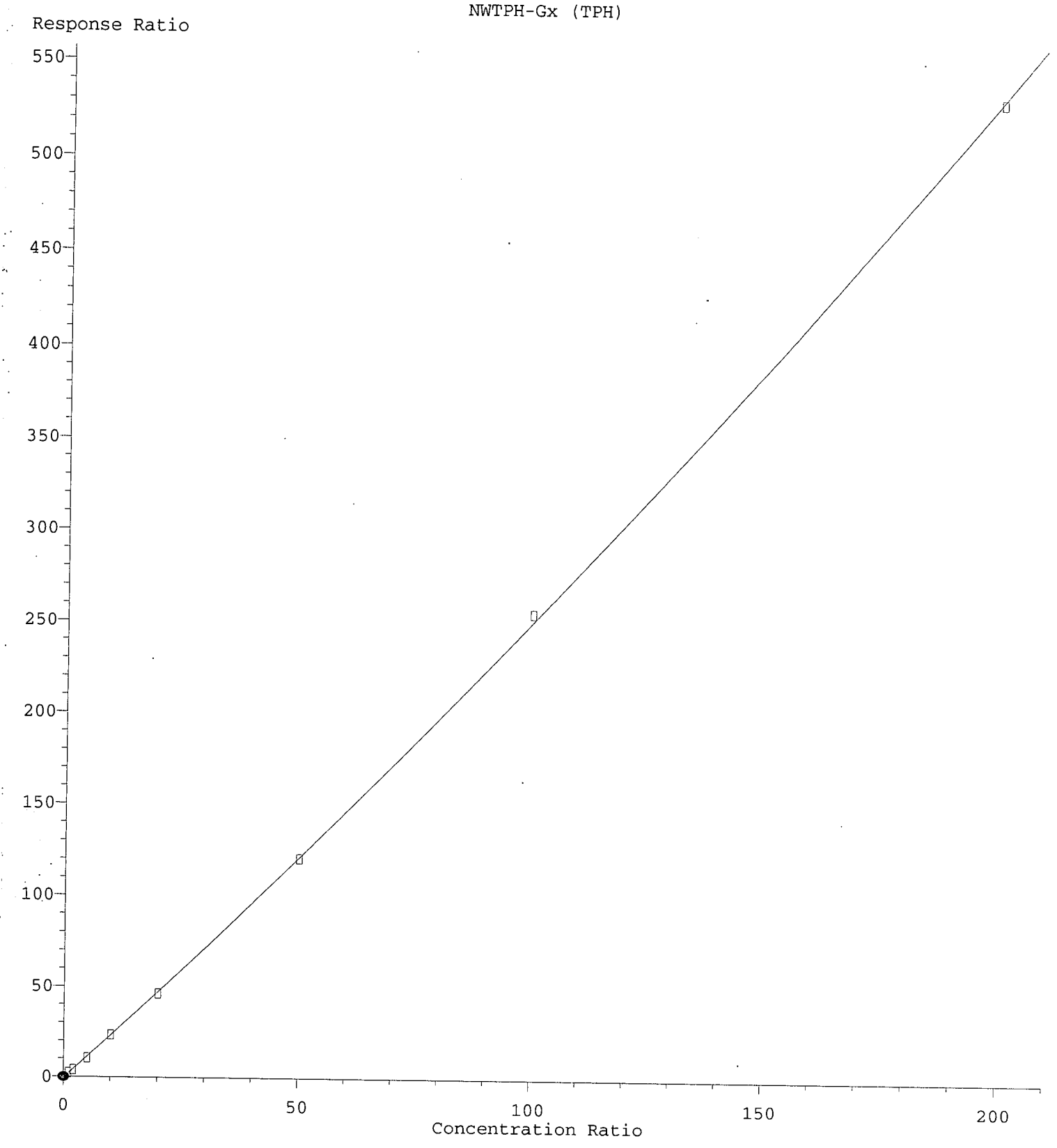
Method Path : C:\msdchem\1\methods\
Method File : VJ200414G.M
Title : NWTPH-Gx by GC/MS
Last Update : Wed Apr 15 18:44:39 2020
Response Via : Initial Calibration

Total Cpnds : 13

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Pentafluorobenzene (IS)	168	6.059	1.000	A	2	A	B
2	S	1,4-Difluorobenzene (Sur)	114	6.619	1.092	A	2	A	B
3	S	4-Bromofluorobenzene (Sur)	174	10.853	1.791	A	2	A	B
4	H	NWTPH-Gx (TPH)	TIC	9.780	1.614	Q	0	A	B
5	H	TPHg (C5-C9)	TIC	9.780	1.614	Q	0	A	B
6	H	TPHg (C6-C10)	TIC	9.780	1.614	Q	0	A	B
7	H	CA-LUFT (C5-C12)	TIC	9.780	1.614	Q	0	A	B
8		Benzene (NR)	78	5.974	0.986	A	2	A	B
9	S	Toluene-d8 (NR)	98	8.133	1.342	A	2	A	B
10		Toluene (NR)	91	8.188	1.351	A	2	A	B
11	S	Chlorobenzene-d5 (NR)	117	9.776	1.613	A	2	A	B
12	S	1,4-Dichlorobenzene-d4 (NR)	150	11.741	1.938	A	2	A	B
13		Naphthalene (NR)	128	13.487	2.226	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VJ200414G.M Thu Apr 16 09:59:33 2020



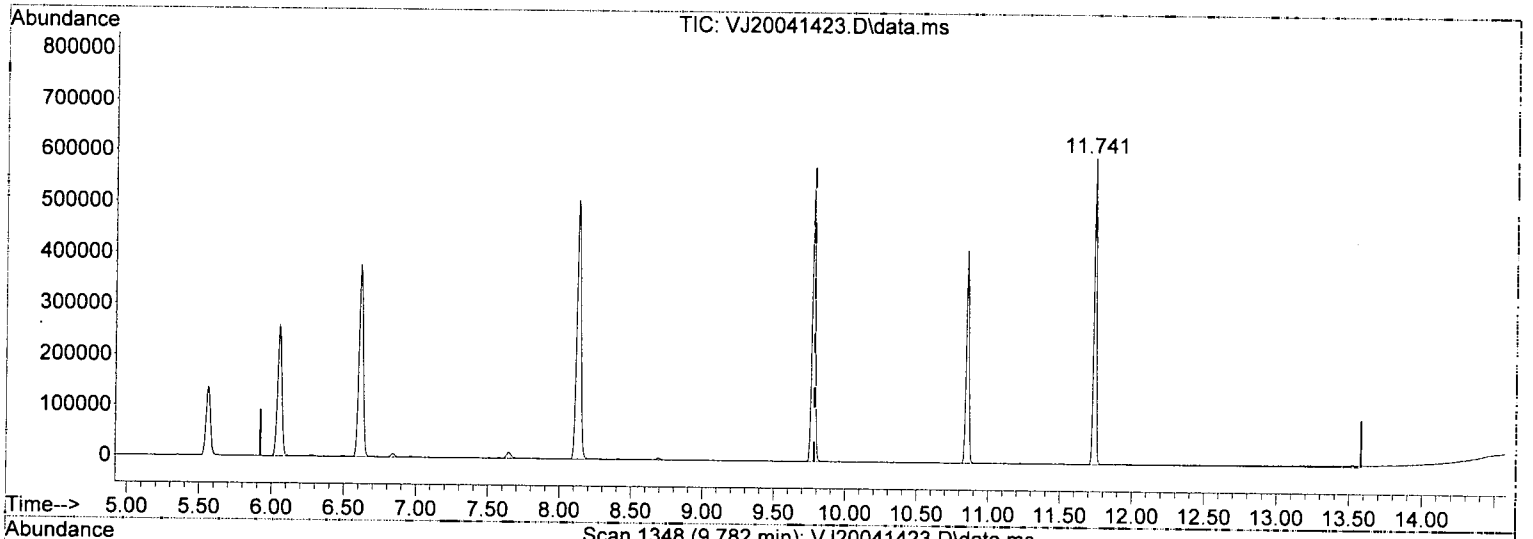
Int= 20.89

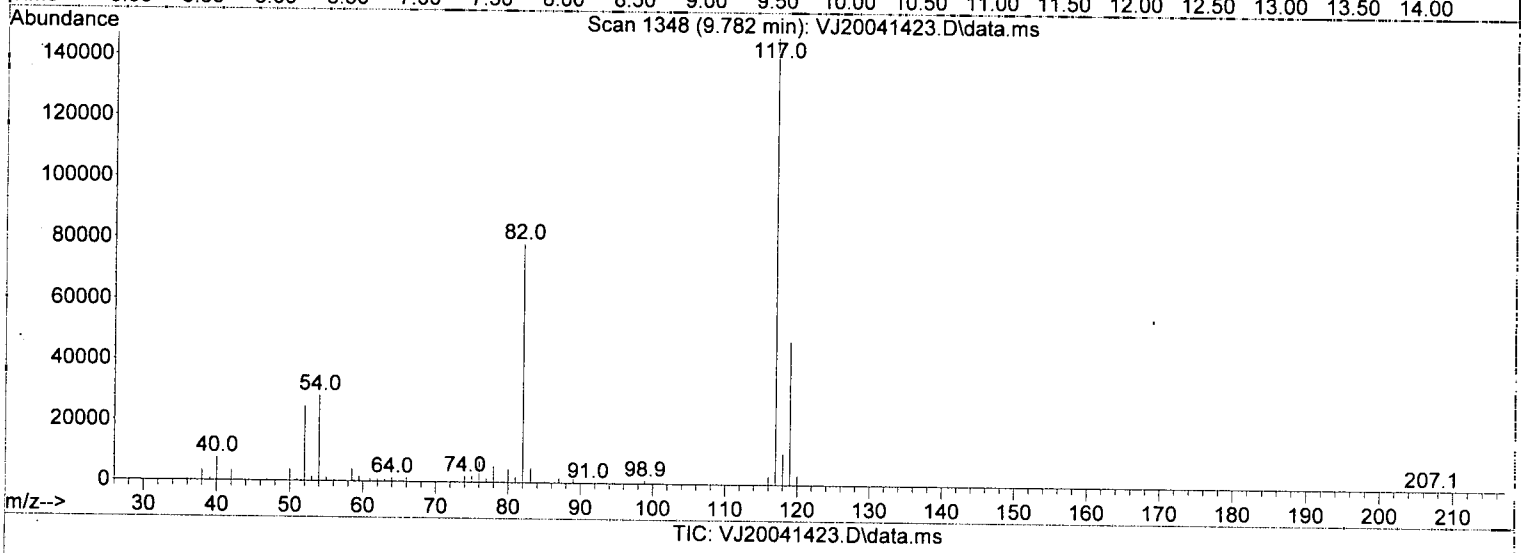
R = 1.55e-003 A*A + 2.71e-001 A + 5.38e-001
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200414G.M
Calibration Table Last Updated: Wed Apr 15 18:45:20 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041423.D
Acq On : 15 Apr 2020 3:02
Operator : tb
Sample : 0D14058-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 16 09:59:04 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration





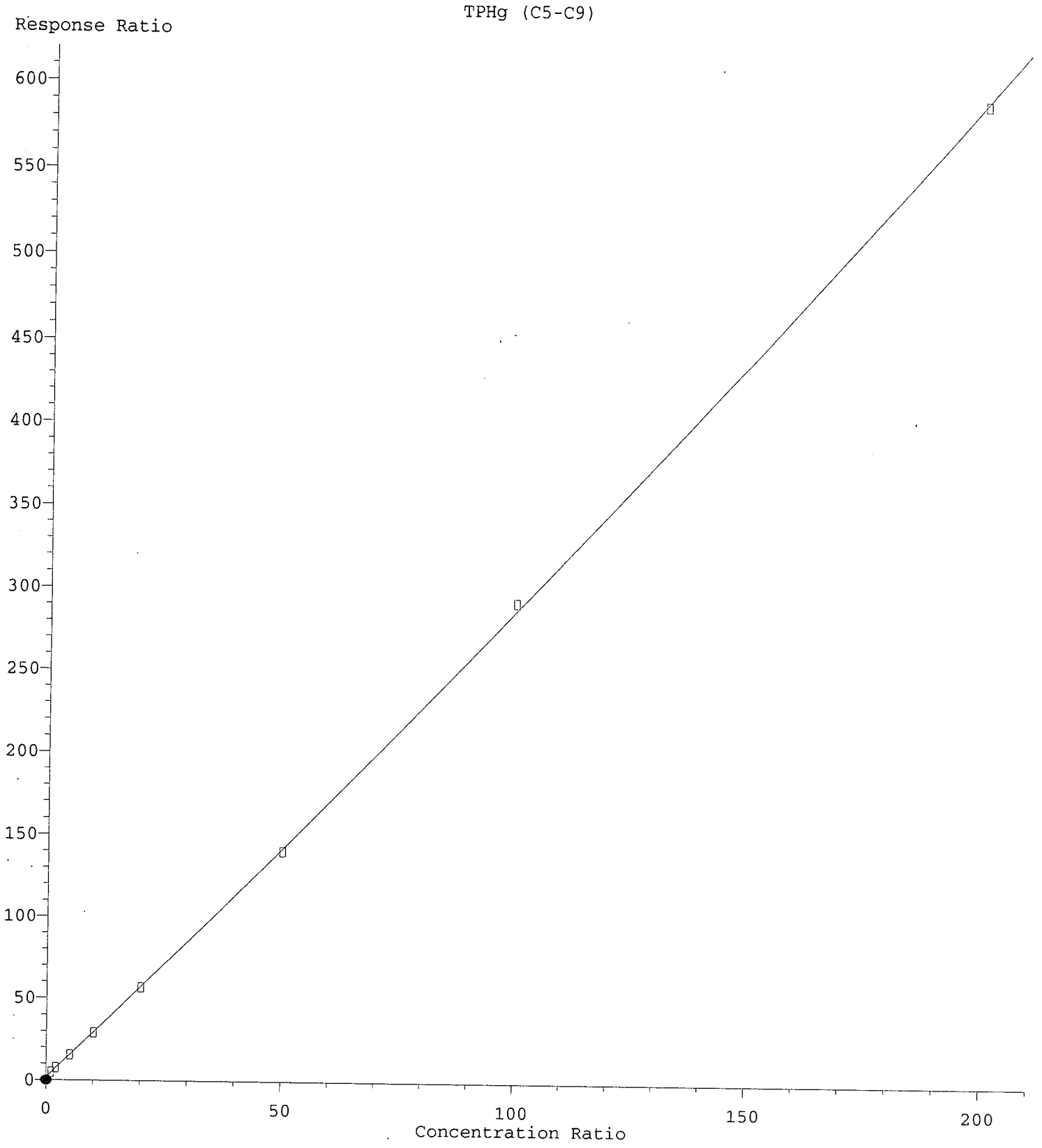
TIC: VJ20041423.D\data.ms

(4) NWTPH-Gx (TPH) (H)

9.780min (0.000) 20.89 ug/L m

response 82313

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00



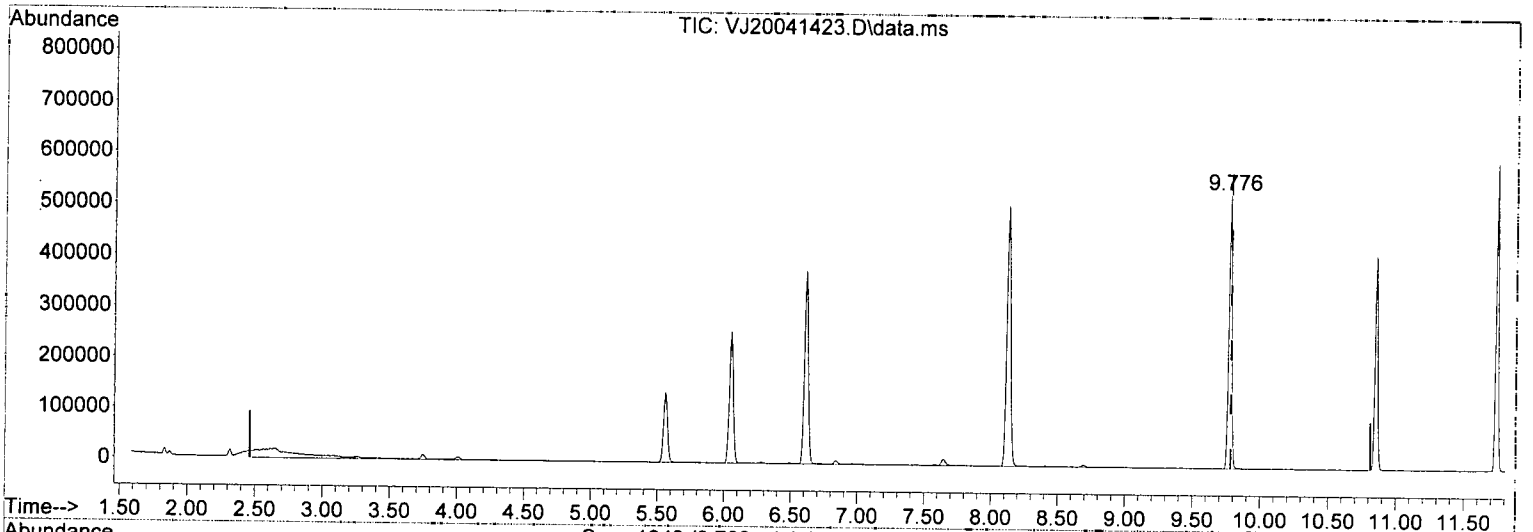
Fwt=5.62

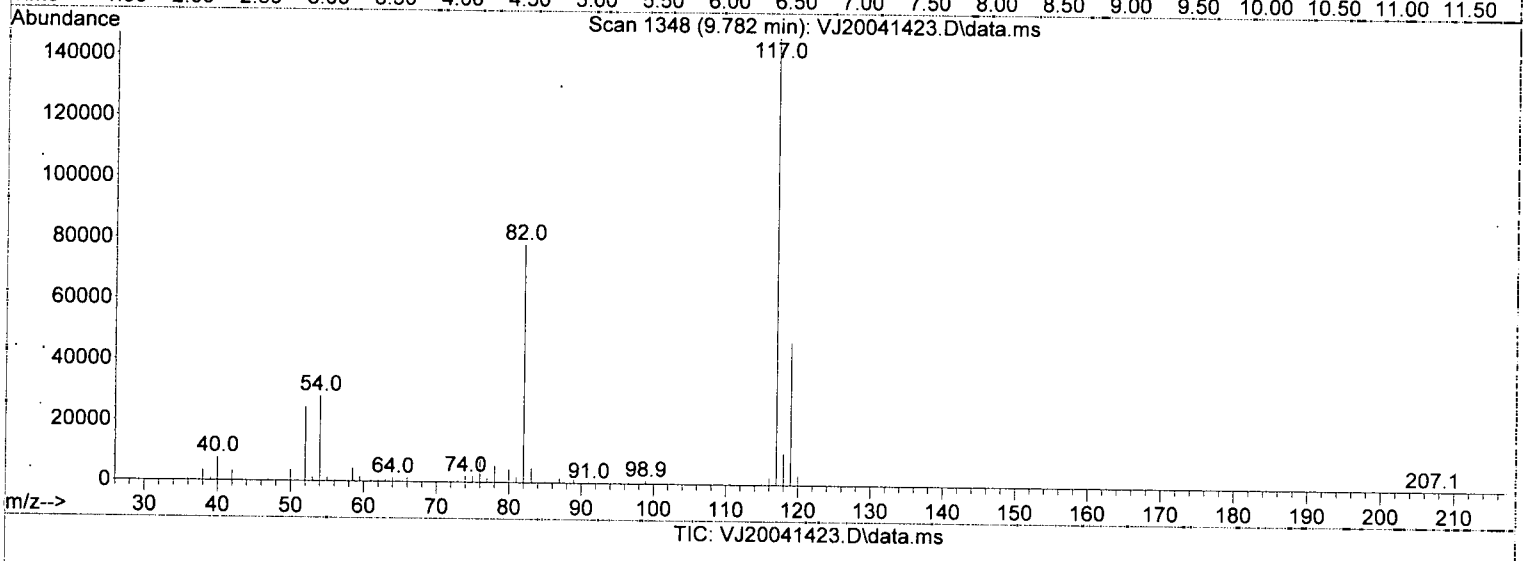
R = 1.01e-003 A*A + 2.07e-001 A + 1.92e+000
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200414G.M
Calibration Table Last Updated: Wed Apr 15 18:45:20 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041423.D
Acq On : 15 Apr 2020 3:02
Operator : tb
Sample : 0D14058-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 16 09:59:04 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration





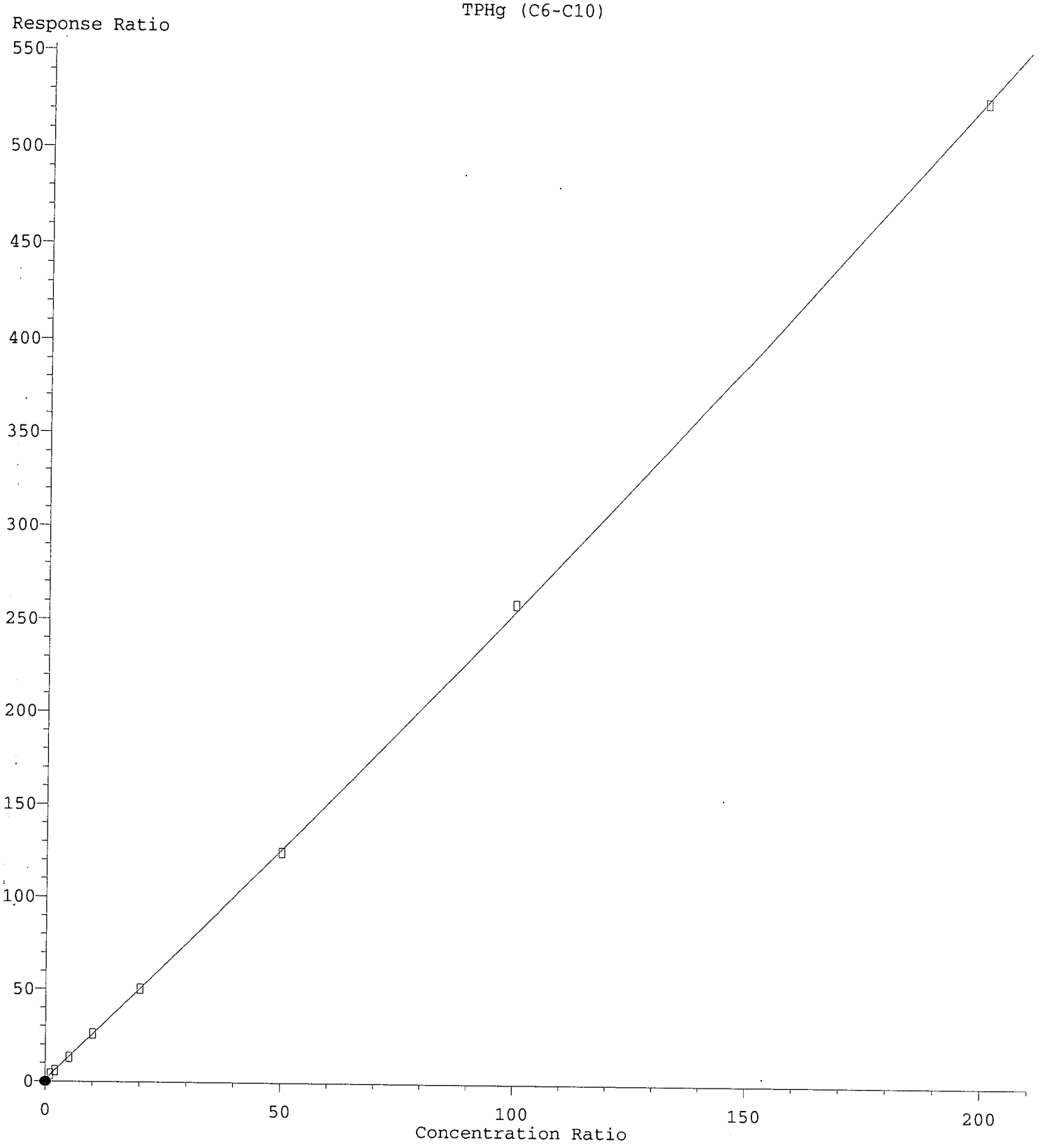
TIC: VJ20041423.D\data.ms

(5) TPHg (C5-C9) (H)

9.780min (0.000) 5.26 ug/L m

response 406978

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00



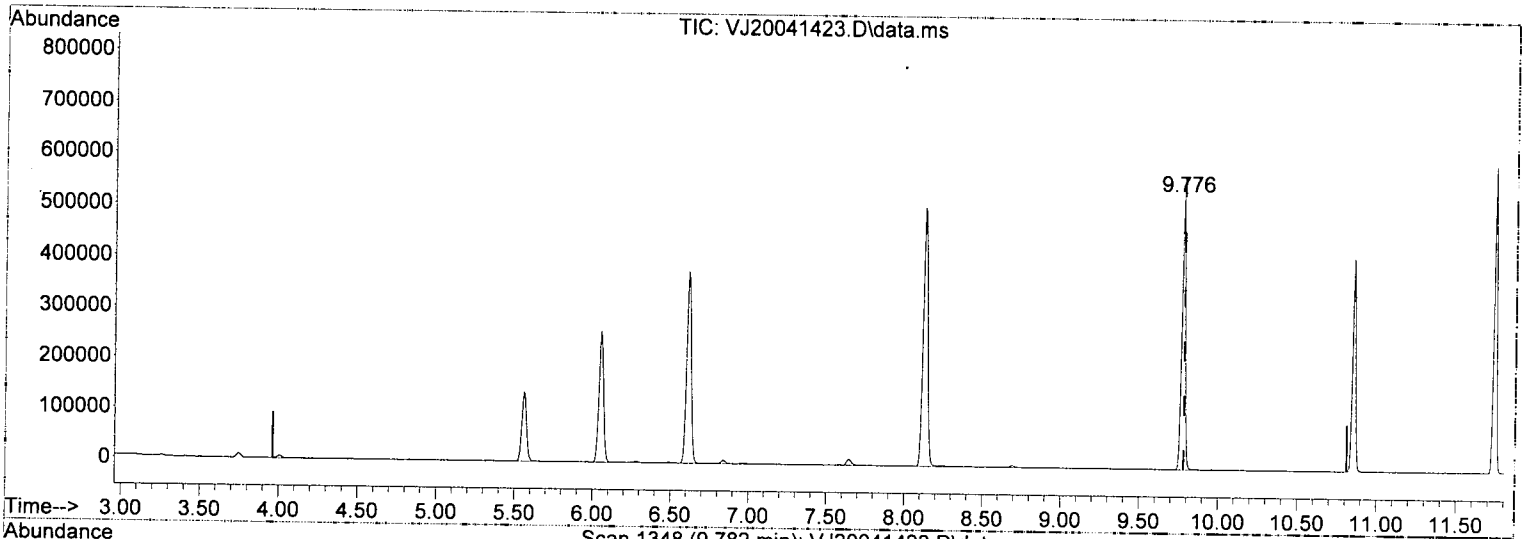
Int = 16.45

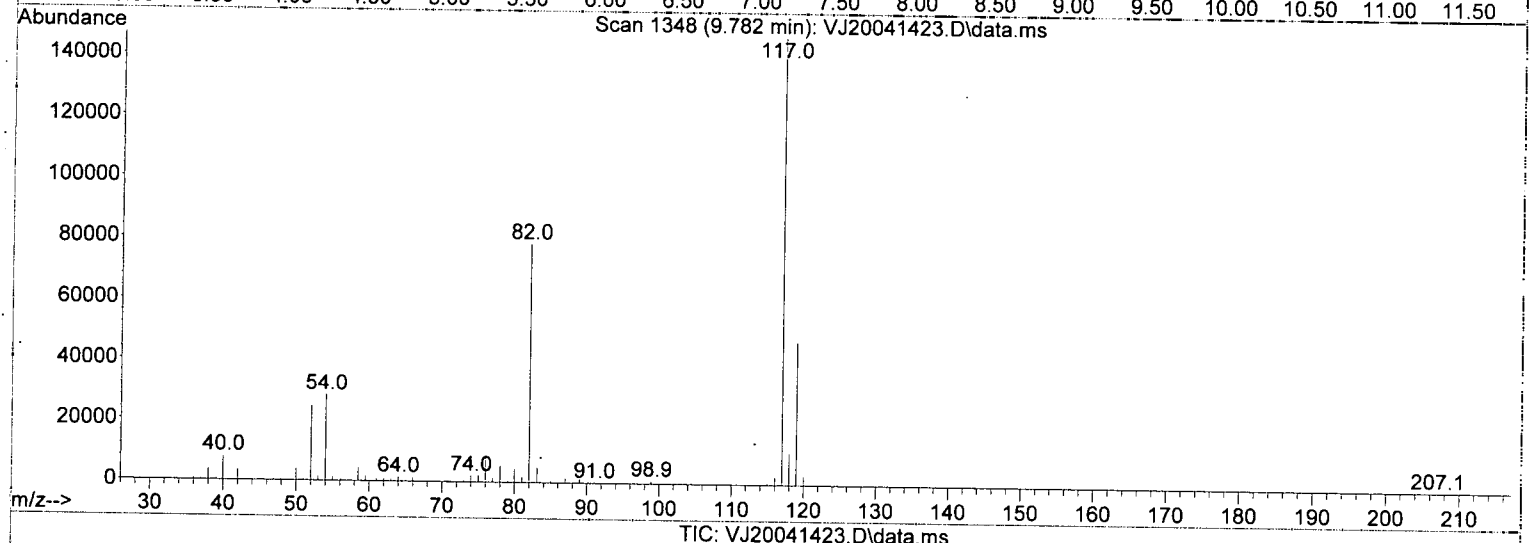
R = 9.17e-004 A*A + 2.15e-001 A + 1.22e+000
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200414G.M
Calibration Table Last Updated: Wed Apr 15 18:45:20 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041423.D
Acq On : 15 Apr 2020 3:02
Operator : tb
Sample : 0D14058-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 16 09:59:04 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration





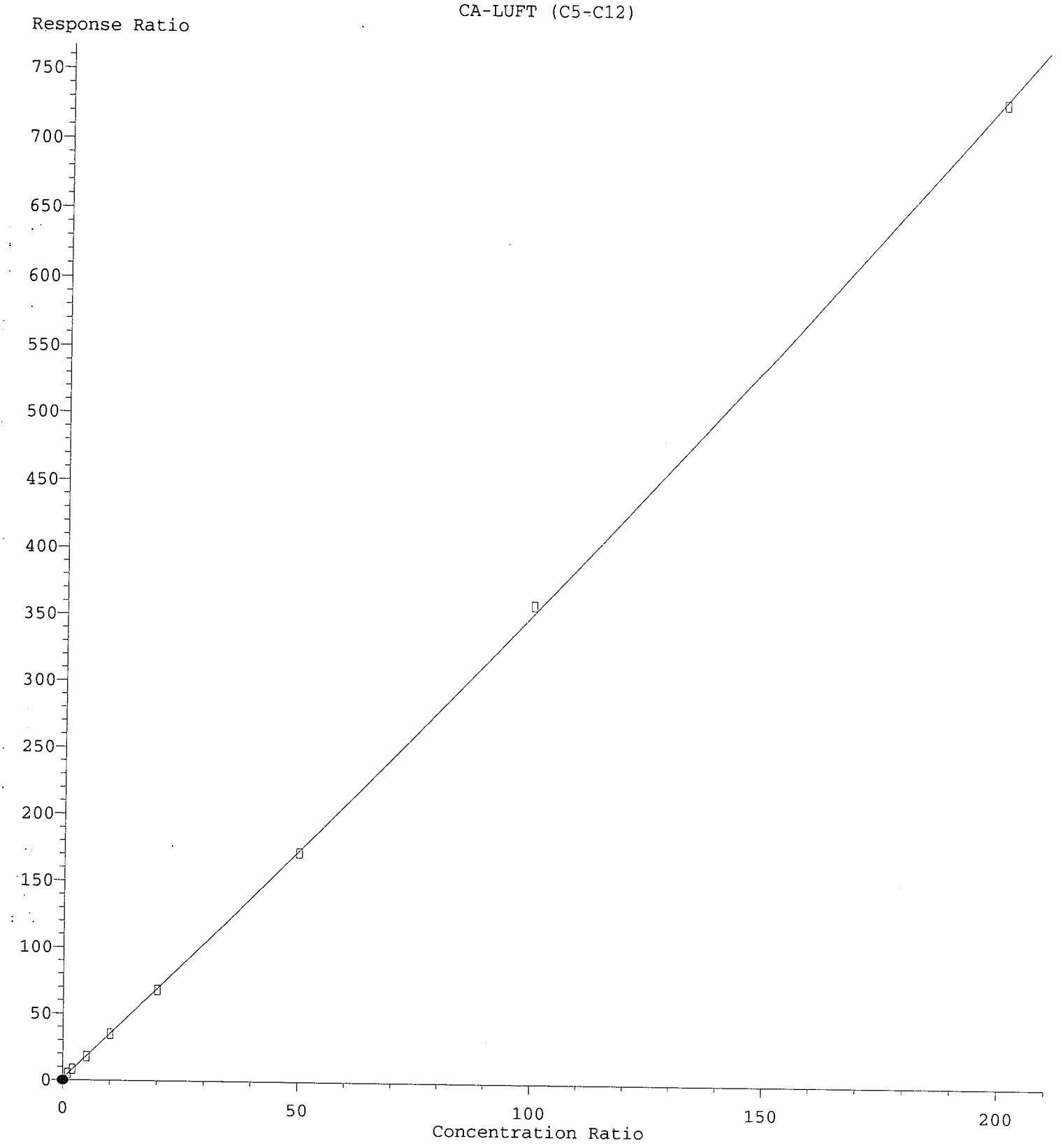
TIC: VJ20041423.D\data.ms

(6) TPHg (C6-C10) (H)

9.780min (0.000) 16.45 ug/L m

response 373170

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00



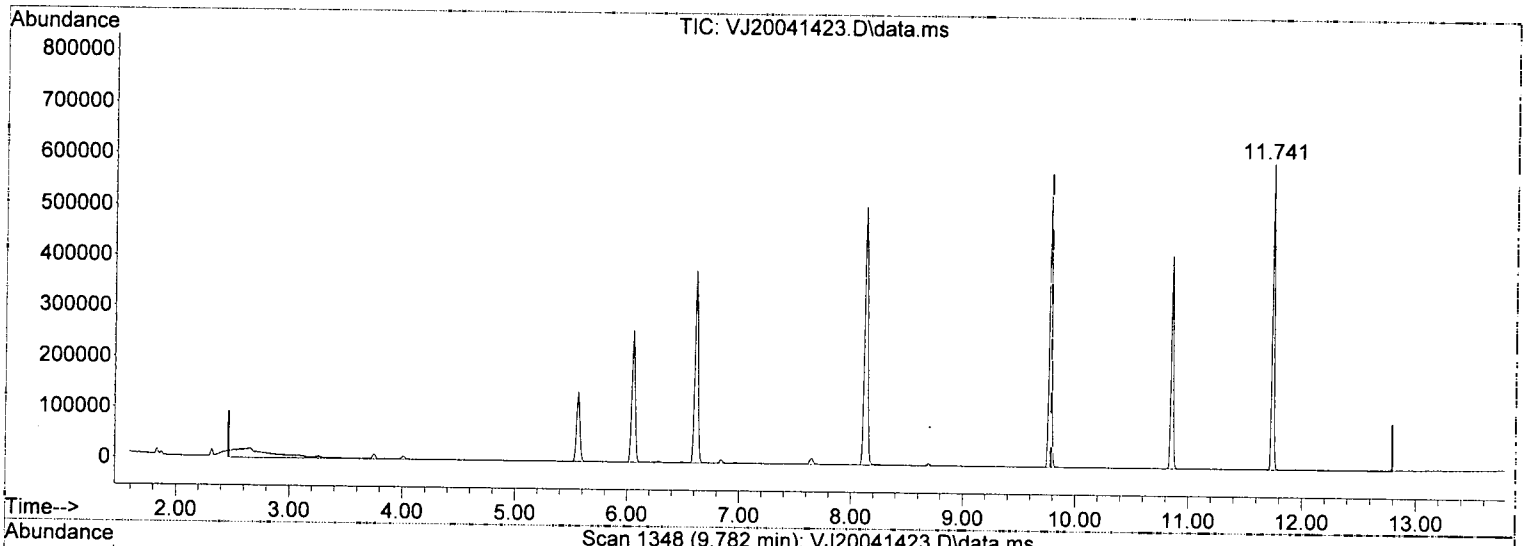
IwT= 9,69

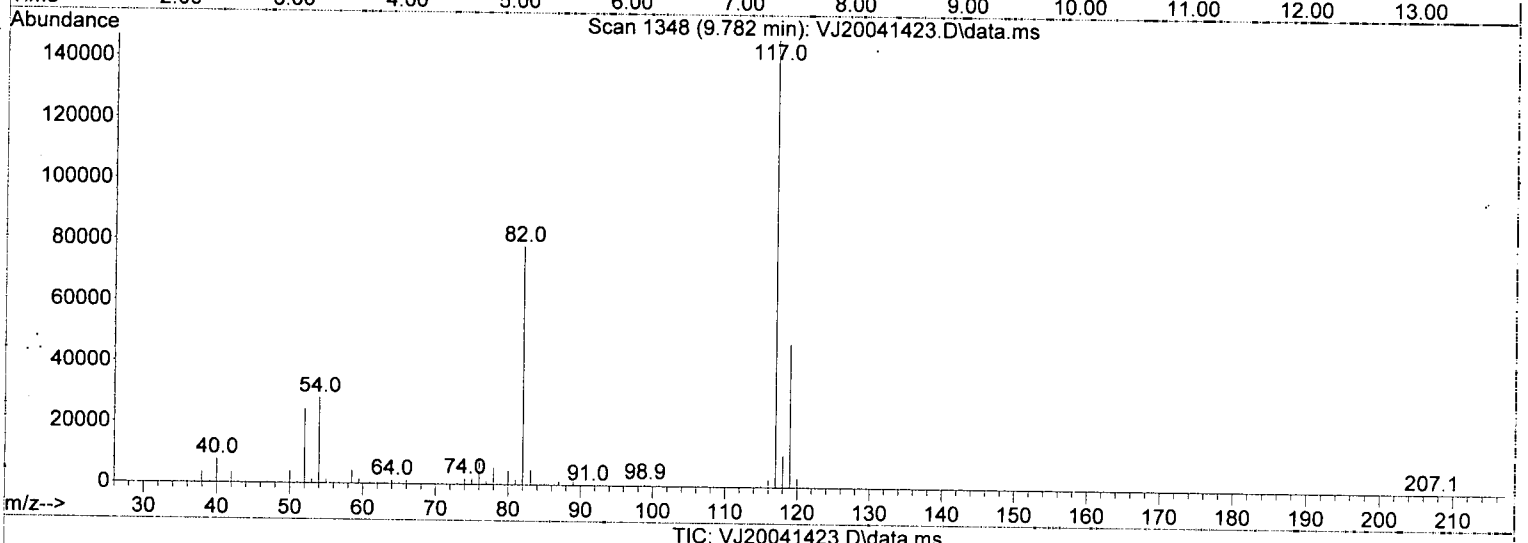
R = 1.47e-003 A*A + 3.07e-001 A + 1.53e+000
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200414G.M
Calibration Table Last Updated: Wed Apr 15 18:45:20 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041423.D
Acq On : 15 Apr 2020 3:02
Operator : tb
Sample : 0D14058-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 16 09:59:04 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration





TIC: VJ20041423.D\data.ms

(7) CA-LUFT (C5-C12) (H)

9.780min (0.000) 9.69 ug/L m

response 403028

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0D14058 **Seq. Date: 4/15/2020**

SEQUENCE LOG

SampleID	Analysis	Matrix	STDID	Analyzed
0D14058-TUN2	8015D-Mod Gasoline (C6-C10) by	Soil		4/15/2020 2:09:00AM
"	+CA LUFT GRO	"		"
"	+NWTPH-Gx	"		"
0D14058-ICB2	8015D-Mod Gasoline (C6-C10) by	Soil		4/15/2020 3:02:00AM
"	+CA LUFT GRO	"		"
"	+NWTPH-Gx	"		"
0D14058-CALC	8015D-Mod Gasoline (C6-C10) by	Soil	A20B402	4/15/2020 3:29:00AM
"	+CA LUFT GRO	"	A20B402	"
"	+NWTPH-Gx	"	A20B402	"
0D14058-CALD	8015D-Mod Gasoline (C6-C10) by	Soil	A20B403	4/15/2020 3:56:00AM
"	+CA LUFT GRO	"	A20B403	"
"	+NWTPH-Gx	"	A20B403	"
0D14058-CALE	8015D-Mod Gasoline (C6-C10) by	Soil	A20B404	4/15/2020 4:23:00AM
"	+CA LUFT GRO	"	A20B404	"
"	+NWTPH-Gx	"	A20B404	"
0D14058-CALF	8015D-Mod Gasoline (C6-C10) by	Soil	A20B405	4/15/2020 4:50:00AM
"	+CA LUFT GRO	"	A20B405	"
"	+NWTPH-Gx	"	A20B405	"
0D14058-CALG	8015D-Mod Gasoline (C6-C10) by	Soil	A20B406	4/15/2020 5:16:00AM
"	+CA LUFT GRO	"	A20B406	"
"	+NWTPH-Gx	"	A20B406	"
0D14058-CALH	8015D-Mod Gasoline (C6-C10) by	Soil	A20B407	4/15/2020 5:43:00AM
"	+CA LUFT GRO	"	A20B407	"
"	+NWTPH-Gx	"	A20B407	"
0D14058-CALI	8015D-Mod Gasoline (C6-C10) by	Soil	A20B408	4/15/2020 6:10:00AM
"	+CA LUFT GRO	"	A20B408	"
"	+NWTPH-Gx	"	A20B408	"
0D14058-CALJ	8015D-Mod Gasoline (C6-C10) by	Soil	A20B409	4/15/2020 6:37:00AM
"	+CA LUFT GRO	"	A20B409	"
"	+NWTPH-Gx	"	A20B409	"
0D14058-ICV2	8015D-Mod Gasoline (C6-C10) by	Soil	A20A357	4/15/2020 7:57:00AM
"	+CA LUFT GRO	"	A20A357	"
"	+NWTPH-Gx	"	A20A357	"

CALIBRATION STANDARD RECOVERIES

Calibration: **A0D1605** Instrument: **VOA-GCMS10**

8015D-Mod Gasoline (C6-C1(Sequence: **0D14058** Matrix: **Soil**

0D14058-CALC	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0D14058-CALD	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0D14058-CALE	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0D14058-CALF	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0D14058

Seq. Date: 4/15/2020

0D14058-CALG	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D14058-CALH	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0D14058-CALI	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0D14058-CALJ	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**

Compounds listed above have recalculated recoveries outside 85-115% of the true values, and the calibration levels are above the reporting level. If no compounds are listed, all are OK. Please see the next section for quadatic fit compounds.

Analytes With Quadratic Curve Fits

Qualifier	MRL	Recalc Value	OK?	Raise MRL to ?
		_____	☐	☐ _____

Analytes listed above have quadratic curve fits. If they are using a weighting otpion, they must be checked against the requanted curve points to determine if the recalculated results are within limits (85-115 or as specified).

ICV RECOVERIES

Calibration: **A0D1605** Instrument: **VOA-GCMS10**

NWTPH-Gx Sequence: **0D14058** Matrix: **Soil**

0D14058-ICV2	Inst. MRL	ICV Level	Result	%Rec.	Qual

Compounds listed above have Initial Calibration Verification standard recoveries outside 70-130% of the true values. If no compounds are listed, all have passing recoveries.

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041434.D
Acq On : 15 Apr 2020 7:57
Operator : tb
Sample : 0D14058-ICV2
Misc : 1X 500ppb 5mL DI+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Apr 16 09:59:10 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

4/16/20

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene (IS)	50.000	50.000	0.0	110	0.00
2	S	1,4-Difluorobenzene (Sur)	50.000	49.514	1.0	109	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	49.072	1.9	110	0.00
4	H	NWTPH-Gx (TPH)	500.000	506.715	-1.3	111	0.00
5	H	TPHg (C5-C9)	500.000	499.537	0.1	111	0.00
6	H	TPHg (C6-C10)	500.000	509.379	-1.9	111	0.00
7	H	CA-LUFT (C5-C12)	500.000	502.445	-0.5	112	0.00
8		Benzene (NR)	-1.000	0.000	0.0	112	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	108	0.00
10		Toluene (NR)	-1.000	0.000	0.0	112	0.00
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	109	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	108	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	107	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

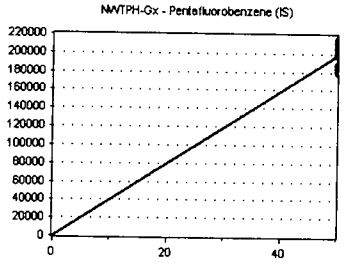
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **NWTPH-Gx** Instrument Cal ID: **VJ200414S VJ200414G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

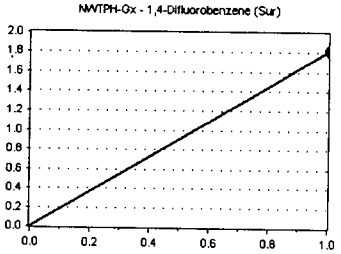


Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	180730	3614.600	6.06
0D14058-CALD	50	183916	3678.320	6.05
0D14058-CALE	50	188219	3764.380	6.05
0D14058-CALF	50	200322	4006.440	6.06
0D14058-CALG	50	198303	3966.060	6.05
0D14058-CALH	50	206043	4120.860	6.05
0D14058-CALI	50	215192	4303.840	6.06
0D14058-CALJ	50	211849	4236.980	6.06

AVE RF **3961.435** RF RSD **6.47** AVE RT **6.06**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

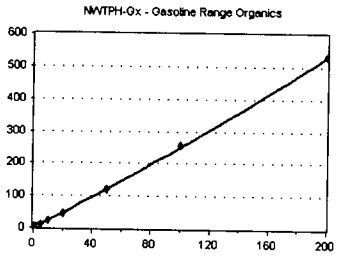


Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	329542	1.823	6.62
0D14058-CALD	50	338767	1.842	6.62
0D14058-CALE	50	340956	1.811	6.62
0D14058-CALF	50	363347	1.814	6.62
0D14058-CALG	50	360202	1.816	6.62
0D14058-CALH	50	376211	1.826	6.62
0D14058-CALI	50	387892	1.803	6.62
0D14058-CALJ	50	384211	1.814	6.62

AVE RF **1.819** RF RSD **0.65** AVE RT **6.62**

Gasoline Range Organics

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

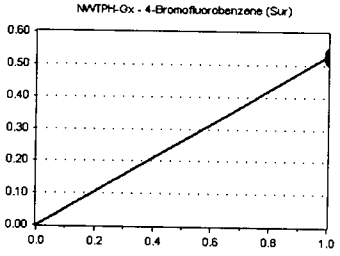


Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	392885	2.174	9.78
0D14058-CALD	100	708495	1.926	9.78
0D14058-CALE	250	1965892	2.089	9.78
0D14058-CALF	500	4644560	2.319	9.78
0D14058-CALG	1000	9140971	2.305	9.78
0D14058-CALH	2500	2.480773E+07	2.408	9.78
0D14058-CALI	5000	5.480525E+07	2.547	9.78
0D14058-CALJ	10000	1.123426E+08	2.651	9.78

AVE RF **2.302** RF RSD **10.34** AVE RT **9.78**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	96165	0.532	10.85
0D14058-CALD	50	99023	0.538	10.85
0D14058-CALE	50	96895	0.515	10.85
0D14058-CALF	50	102889	0.514	10.85
0D14058-CALG	50	101586	0.512	10.85
0D14058-CALH	50	110917	0.538	10.85
0D14058-CALI	50	116207	0.540	10.85
0D14058-CALJ	50	112073	0.529	10.85

AVE RF **0.527** RF RSD **2.27** AVE RT **10.85**

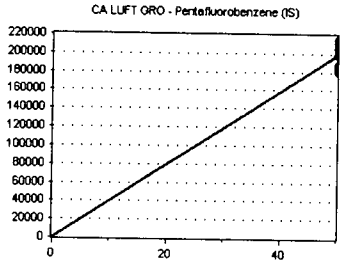
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **CA LUFT GRO** Instrument Cal ID: **VJ200414S VJ200414G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

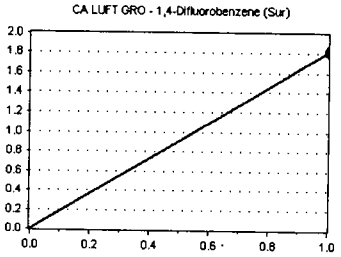


Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	180730	3614.600	6.06
0D14058-CALD	50	183916	3678.320	6.05
0D14058-CALE	50	188219	3764.380	6.05
0D14058-CALF	50	200322	4006.440	6.06
0D14058-CALG	50	198303	3966.060	6.05
0D14058-CALH	50	206043	4120.860	6.05
0D14058-CALI	50	215192	4303.840	6.06
0D14058-CALJ	50	211849	4236.980	6.06

AVE RF **3961.435** RF RSD **6.47** AVE RT **6.06**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

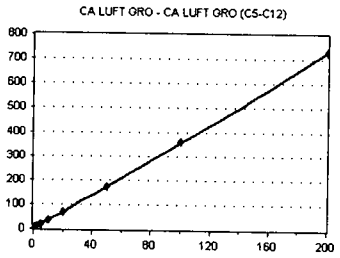


Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	329542	1.823	6.62
0D14058-CALD	50	338767	1.842	6.62
0D14058-CALE	50	340956	1.811	6.62
0D14058-CALF	50	363347	1.814	6.62
0D14058-CALG	50	360202	1.816	6.62
0D14058-CALH	50	376211	1.826	6.62
0D14058-CALI	50	387892	1.803	6.62
0D14058-CALJ	50	384211	1.814	6.62

AVE RF **1.819** RF RSD **0.65** AVE RT **6.62**

CA LUFT GRO (C5-C12)

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

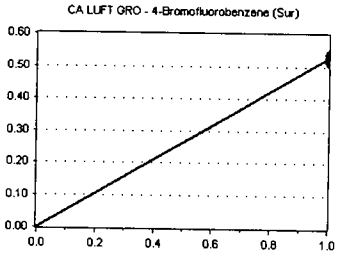


Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	925840	5.123	9.78
0D14058-CALD	100	1511274	4.109	9.78
0D14058-CALE	250	3359508	3.570	9.78
0D14058-CALF	500	6978049	3.483	9.78
0D14058-CALG	1000	1.350496E+07	3.405	9.78
0D14058-CALH	2500	3.541704E+07	3.438	9.78
0D14058-CALI	5000	7.718659E+07	3.587	9.78
0D14058-CALJ	10000	1.547384E+08	3.652	9.78

AVE RF **3.796** RF RSD **15.27** AVE RT **9.78**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	96165	0.532	10.85
0D14058-CALD	50	99023	0.538	10.85
0D14058-CALE	50	96895	0.515	10.85
0D14058-CALF	50	102889	0.514	10.85
0D14058-CALG	50	101586	0.512	10.85
0D14058-CALH	50	110917	0.538	10.85
0D14058-CALI	50	116207	0.540	10.85
0D14058-CALJ	50	112073	0.529	10.85

AVE RF **0.527** RF RSD **2.27** AVE RT **10.85**

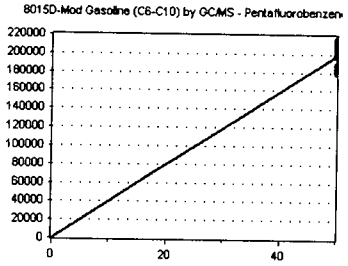
Element Calibration Review Sheet

Calibration ID: **A0D1605** Instrument: **VOA-GCMS10** Calibration Date: **04/16/2020**

Analysis: **8015D-Mod Gasoline (C6-C1** Instrument Cal ID: **VJ200414S VJ200414G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

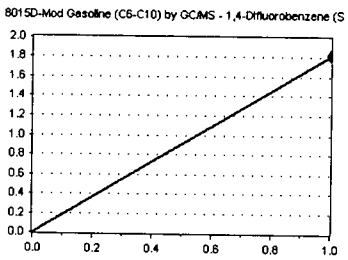


Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	180730	3614.600	6.06
0D14058-CALD	50	183916	3678.320	6.05
0D14058-CALE	50	188219	3764.380	6.05
0D14058-CALF	50	200322	4006.440	6.06
0D14058-CALG	50	198303	3966.060	6.05
0D14058-CALH	50	206043	4120.860	6.05
0D14058-CALI	50	215192	4303.840	6.06
0D14058-CALJ	50	211849	4236.980	6.06

AVE RF **3961.435** RF RSD **6.47** AVE RT **6.06**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

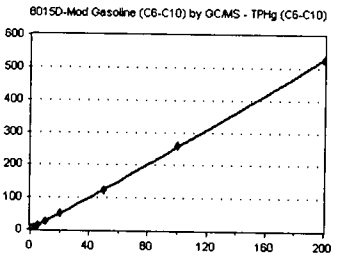


Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	329542	1.823	6.62
0D14058-CALD	50	338767	1.842	6.62
0D14058-CALE	50	340956	1.811	6.62
0D14058-CALF	50	363347	1.814	6.62
0D14058-CALG	50	360202	1.816	6.62
0D14058-CALH	50	376211	1.826	6.62
0D14058-CALI	50	387892	1.803	6.62
0D14058-CALJ	50	384211	1.814	6.62

AVE RF **1.819** RF RSD **0.65** AVE RT **6.62**

TPHg (C6-C10)

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

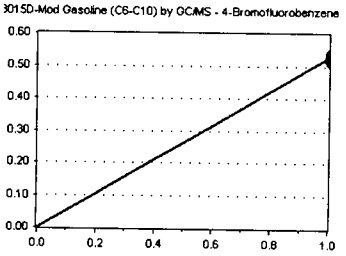


Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	713439	3.948	9.78
0D14058-CALD	100	1063071	2.890	9.78
0D14058-CALE	250	2442606	2.595	9.78
0D14058-CALF	500	5171623	2.582	9.78
0D14058-CALG	1000	9985887	2.518	9.78
0D14058-CALH	2500	2.565818E+07	2.491	9.78
0D14058-CALI	5000	5.571928E+07	2.589	9.78
0D14058-CALJ	10000	1.115021E+08	2.632	9.78

AVE RF **2.781** RF RSD **17.51** AVE RT **9.78**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D14058-CALC	50	96165	0.532	10.85
0D14058-CALD	50	99023	0.538	10.85
0D14058-CALE	50	96895	0.515	10.85
0D14058-CALF	50	102889	0.514	10.85
0D14058-CALG	50	101586	0.512	10.85
0D14058-CALH	50	110917	0.538	10.85
0D14058-CALI	50	116207	0.540	10.85
0D14058-CALJ	50	112073	0.529	10.85

AVE RF **0.527** RF RSD **2.27** AVE RT **10.85**

Injection Log

Directory: w:\data\2020-04\0D14058

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Vj20041401.d	1.	0D14058-IBL1	1X 5mL DI+MeOH	14 Apr 2020 17:11
2	2	Vj20041402.d	1.	0D14058-TUN1	1X 5mL A19L199 IS...	14 Apr 2020 17:38
3	3	Vj20041403.d	1.	0D14058-ICB1	1X 5mL DI+MeOH	14 Apr 2020 18:05
4	4	Vj20041404.d	1.	0D14058-CAL1	1X 0.1ppb 5mL DI+...	14 Apr 2020 18:32
5	5	Vj20041405.d	1.	0D14058-CAL2	1X 0.2ppb 5mL DI+...	14 Apr 2020 18:59
6	6	Vj20041406.d	1.	0D14058-CAL3	1X 0.4ppb 5mL DI+...	14 Apr 2020 19:26
7	7	Vj20041407.d	1.	0D14058-CAL4	1X 1ppb 5mL DI+MeOH	14 Apr 2020 19:52
8	8	Vj20041408.d	1.	0D14058-CAL5	1X 2ppb 5mL DI+MeOH	14 Apr 2020 20:19
9	9	Vj20041409.d	1.	0D14058-CAL6	1X 5ppb 5mL DI+MeOH	14 Apr 2020 20:46
10	10	Vj20041410.d	1.	0D14058-CAL7	1X 10ppb 5mL DI+MeOH	14 Apr 2020 21:13
11	11	Vj20041411.d	1.	0D14058-CAL8	1X 20ppb 5mL DI+MeOH	14 Apr 2020 21:40
12	12	Vj20041412.d	1.	0D14058-CAL9	1X 50ppb 5mL DI+MeOH	14 Apr 2020 22:07
13	13	Vj20041413.d	1.	0D14058-IBL2	1X 5mL DI+MeOH	14 Apr 2020 22:34
14	14	Vj20041414.d	1.	0D14058-CALA	1X 100ppb 5mL DI+...	14 Apr 2020 23:00
15	15	Vj20041415.d	1.	0D14058-IBL3	1X 5mL DI+MeOH	14 Apr 2020 23:27
16	16	Vj20041416.d	1.	0D14058-CALB	1X 200ppb 5mL DI+...	14 Apr 2020 23:54
17	17	Vj20041417.d	1.	0D14058-IBL4	1X 5mL DI+MeOH	15 Apr 2020 00:21
18	18	Vj20041418.d	1.	0D14058-IBL5	1X 5mL DI+MeOH	15 Apr 2020 00:48
19	19	Vj20041419.d	1.	0D14058-ICV1	1X 20ppb 5mL DI+MeOH	15 Apr 2020 01:15
20	20	Vj20041420.d	1.	0D14058-IBL6	1X 5mL DI+MeOH	15 Apr 2020 01:42
21	21	Vj20041421.d	1.	0D14058-TUN2	1X 5mL DI+MeOH	15 Apr 2020 02:09
22	22	Vj20041422.d	1.	0D14058-IBL7	1X 5mL DI+MeOH	15 Apr 2020 02:35
23	23	Vj20041423.d	1.	0D14058-ICB2	1X 5mL DI+MeOH	15 Apr 2020 03:02
24	24	Vj20041424.d	1.	0D14058-CALC	1X 50ppb 5mL DI+MeOH	15 Apr 2020 03:29
25	25	Vj20041425.d	1.	0D14058-CALD	1X 100ppb 5mL DI+...	15 Apr 2020 03:56
26	26	Vj20041426.d	1.	0D14058-CALE	1X 250ppb 5mL DI+...	15 Apr 2020 04:23
27	27	Vj20041427.d	1.	0D14058-CALF	1X 500ppb 5mL DI+...	15 Apr 2020 04:50
28	28	Vj20041428.d	1.	0D14058-CALG	1X 1000ppb 5mL DI...	15 Apr 2020 05:16
29	29	Vj20041429.d	1.	0D14058-CALH	1X 2500ppb 5mL DI...	15 Apr 2020 05:43
30	30	Vj20041430.d	1.	0D14058-CALI	1X 5000ppb 5mL DI...	15 Apr 2020 06:10
31	31	Vj20041431.d	1.	0D14058-CALJ	1X 10000ppb 5mL D...	15 Apr 2020 06:37
32	32	Vj20041432.d	1.	0D14058-IBL8	1X 5mL DI+MeOH	15 Apr 2020 07:04
33	33	Vj20041433.d	1.	0D14058-IBL9	1X 5mL DI+MeOH	15 Apr 2020 07:31
34	34	Vj20041434.d	1.	0D14058-ICV2	1X 500ppb 5mL DI+...	15 Apr 2020 07:57
35	35	Vj20041435.d	1.	0D14058-IBLA	1X 5mL DI+MeOH	15 Apr 2020 08:24

4/15/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041401.D
Acq On : 14 Apr 2020 17:11
Operator : tb
Sample : 0D14058-IBL1
Misc : 1X 5mL DI+MeOH
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 14:25:24 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

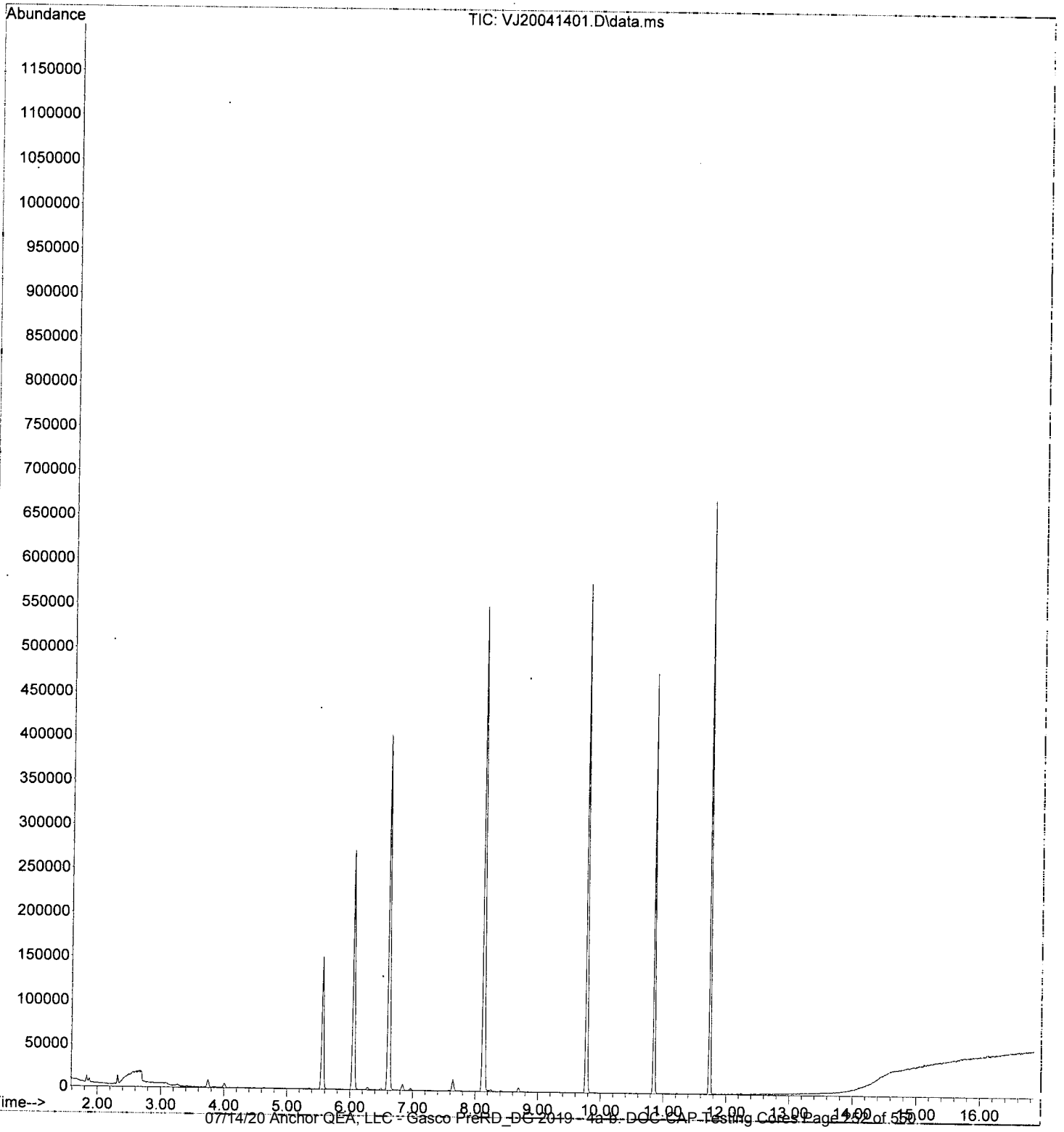
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	113748	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	314623	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	141120	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	100832	50.49	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.612	114	359811	50.49	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	430240	50.29	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	106303	49.59	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.873	50	3554	0.97	ug/L		93
5) Bromomethane	2.317	96	4768	Below Cal			99
6) Chloroethane	2.555	64	55	0.09	ug/L	#	1
8) Ethanol	3.267	45	2464	34.87	ug/L		91
12) Iodomethane	3.267	142	73	3.22	ug/L	#	47
13) Methylene Chloride	3.747	84	4312	1.73	ug/L		97
14) Acetone	3.832	43	1468	1.04	ug/L	#	42
16) n-Hexane	4.009	86	273	0.51	ug/L	#	82
18) tert-Butanol (TBA)	4.234	59	260	0.38	ug/L	#	1
36) iso-Butyl Alcohol	6.278	43	1125	12.63	ug/L		91
39) tert-Amyl ethyl ether ...	6.844	59	1306	0.21	ug/L	#	57

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041401.D
Acq On : 14 Apr 2020 17:11
Operator : tb
Sample : 0D14058-IBL1
Misc : 1X 5mL DI+MeOH
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 14:25:24 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



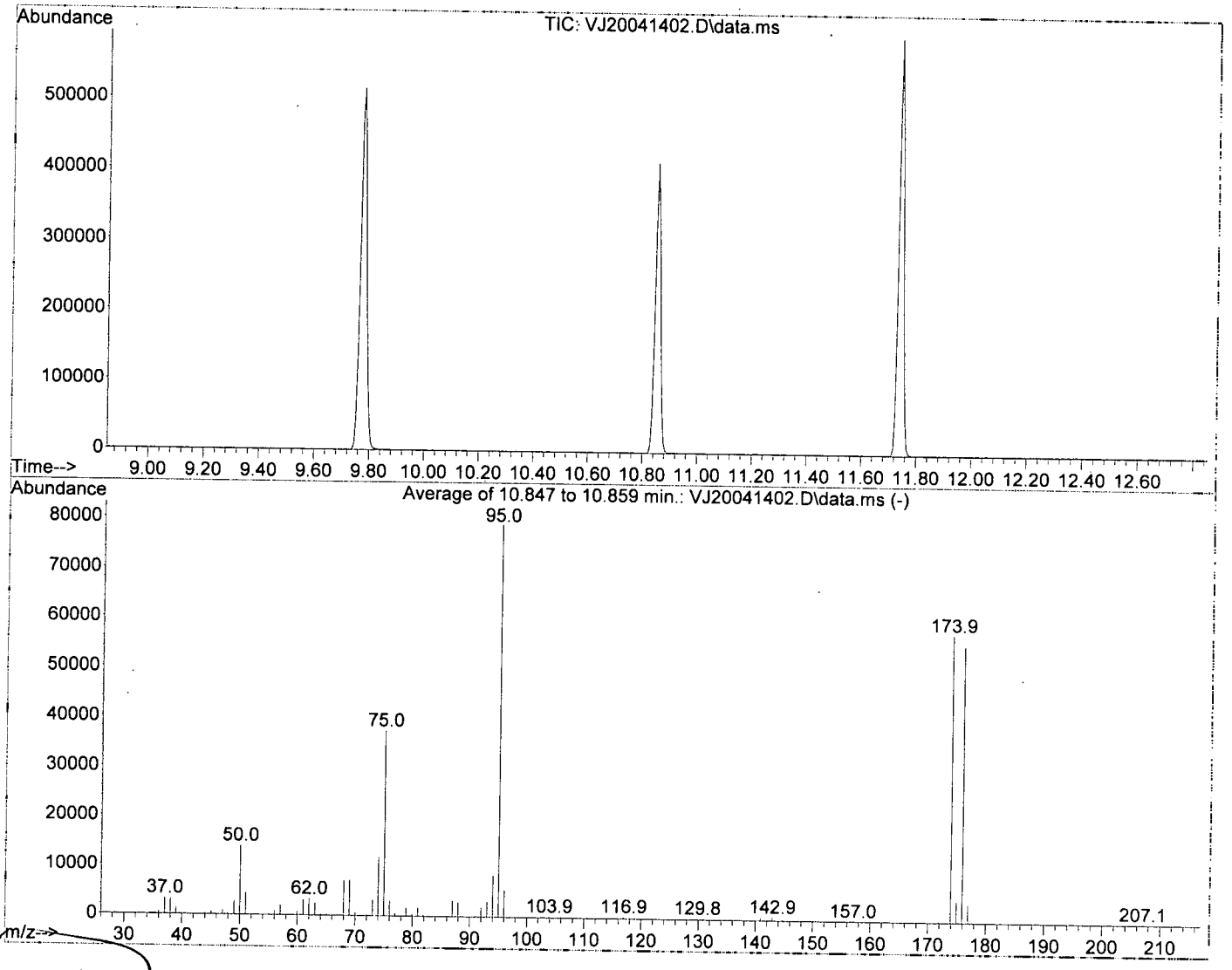
BFB

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041402.D
Acq On : 14 Apr 2020 17:38
Operator : tb
Sample : 0D14058-TUN1
Misc : 1X 5mL A19L199 IS/SUR DI+MeOH
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VJ200414S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Wed Apr 15 13:36:53 2020

4/15/20



AutoFind: Scans 1523, 1524, 1525; Background Corrected with Scan 1516

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	136.8	79096	PASS
96	95	5	9	7.0	5524	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	200	73.1	57835	PASS
175	174	5	9	7.3	4216	PASS
176	174	95	105	96.2	55661	PASS
177	176	5	10	6.6	3699	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041402.D
Acq On : 14 Apr 2020 17:38
Operator : tb
Sample : 0D14058-TUN1
Misc : 1X 5mL A19L199 IS/SUR DI+MeOH
ALS Vial : 2 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 14:25:27 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

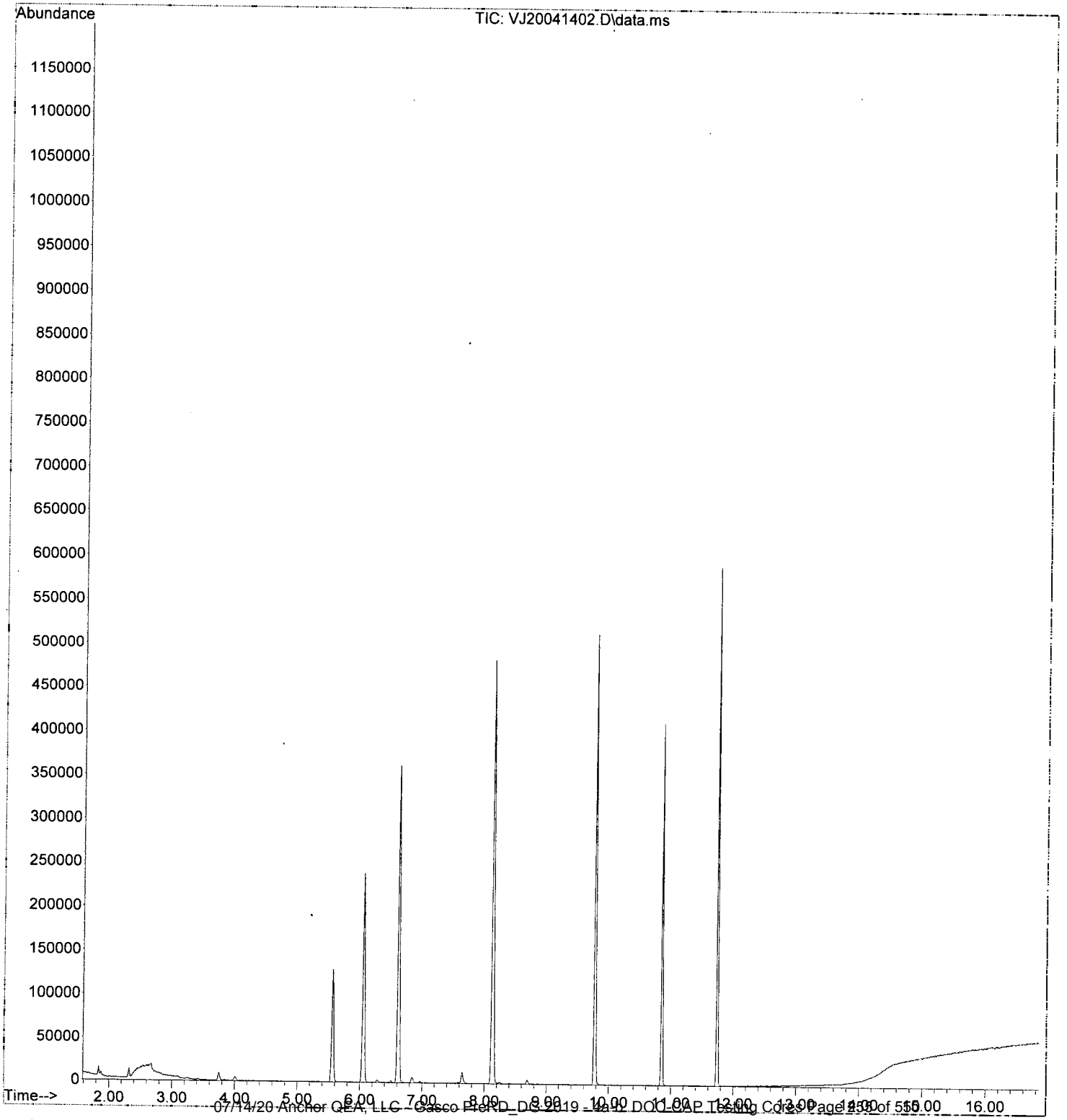
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	102988	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	279754	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	124143	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	89557	49.53	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	320963	49.74	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	~~382016~~	50.22	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	93219	49.43	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.879	50	3493	1.05	ug/L		99
5) Bromomethane	2.323	96	5006	0.78	ug/L		95
8) Ethanol	3.321	45	265	4.14	ug/L	#	29
12) Iodomethane	3.266	142	244	3.63	ug/L	#	47
13) Methylene Chloride	3.747	84	4371	1.93	ug/L		97
14) Acetone	3.844	43	1096	0.85	ug/L		87
16) n-Hexane	4.009	86	157	0.32	ug/L	#	82
36) iso-Butyl Alcohol	6.278	43	1190	13.32	ug/L		92
39) tert-Amyl ethyl ether ...	6.838	59	1255	0.22	ug/L	#	63

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041402.D
Acq On : 14 Apr 2020 17:38
Operator : tb
Sample : 0D14058-TUN1
Misc : 1X 5mL A19L199 IS/SUR DI+MeOH
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 14:25:27 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041403.D
Acq On : 14 Apr 2020 18:05
Operator : tb
Sample : 0D14058-ICB1
Misc : 1X 5mL DI+MeOH
ALS Vial : 3 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 14:25:30 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	110676	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	298287	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	129828	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	94592	48.68	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.618	114	348488	50.26	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	412105	50.81	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	99361	50.38	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.879	50	3439	0.96	ug/L		98
5) Bromomethane	2.323	96	5111	0.49	ug/L		99
8) Ethanol	3.327	45	441	6.41	ug/L	#	29
12) Iodomethane	3.272	142	212	3.52	ug/L	#	47
13) Methylene Chloride	3.759	84	2620	1.08	ug/L		94
14) Acetone	3.838	43	1225	0.89	ug/L	#	42
36) iso-Butyl Alcohol	6.284	43	1155	12.85	ug/L		84
39) tert-Amyl ethyl ether ...	6.843	59	1245	0.21	ug/L	#	67

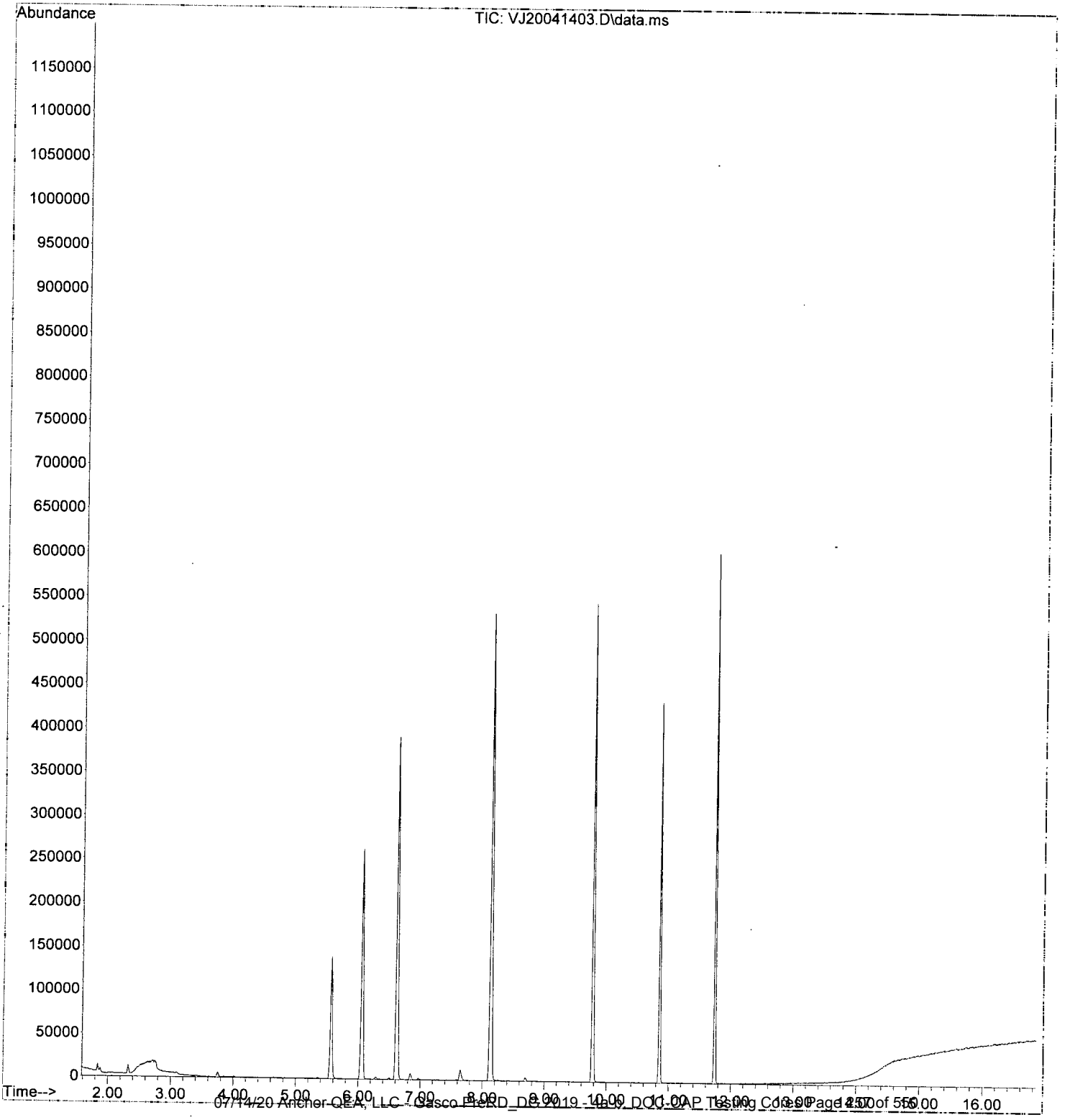
<MDL

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041403.D
Acq On : 14 Apr 2020 18:05
Operator : tb
Sample : 0D14058-ICB1
Misc : 1X 5mL DI+MeOH
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 14:25:30 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041404.D
Acq On : 14 Apr 2020 18:32
Operator : tb
Sample : 0D14058-CAL1
Misc : 1X 0.1ppb 5mL DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 12:55:12 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.053	99	105642	50.00 ug/L	0.00
43) Chlorobenzene-d5 (I)	9.776	117	288314	50.00 ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	128408	50.00 ug/L	0.00
System Monitoring Compounds					
30) Dibromofluoromethane (S)	5.560	111	92990	50.74 ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.619	114	331750	50.66 ug/L	0.00
45) Toluene-d8 (S)	8.127	98	393483	50.46 ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.853	174	96219	48.53 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D. d	
3) Chloromethane	1.879	50	3332	1.09 ug/L	89
4) Vinyl Chloride	0.000		0	N.D. d	
5) Bromomethane	2.317	96	4627	4.01 ug/L	93
6) Chloroethane	0.000		0	N.D. d	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethanol	0.000		0	N.D. d	
9) 1,1-Dichloroethene	0.000		0	N.D. d	
10) Carbon Disulfide	3.127	76	662	0.15 ug/L	78
11) Freon 113	0.000		0	N.D.	
12) Iodomethane	0.000		0	N.D. d	
13) Methylene Chloride	3.747	84	2946	1.36 ug/L	97
14) Acetone	0.000		0	N.D. d	
15) t-1,2-Dichloroethene	0.000		0	N.D. d	
16) n-Hexane	0.000		0	N.D.	
17) Methyl-tert-butyl-ether	4.076	73	932	0.12 ug/L	57
18) tert-Butanol (TBA)	0.000		0	N.D. d	
19) Diisopropyl ether (DIPE)	0.000		0	N.D. d	
20) 1,1-Dichloroethane	0.000		0	N.D. d	
21) Acrylonitrile	0.000		0	N.D.	
22) Ethyl-tert-butyl ether...	0.000		0	N.D.	
23) c-1,2-Dichloroethene	0.000		0	N.D. d	
24) 2,2-Dichloropropane	5.201	77	441	0.13 ug/L	67
25) Bromochloromethane	0.000		0	N.D. d	
26) Chloroform	5.384	83	440	0.11 ug/L	82
27) Carbon Tetrachloride	0.000		0	N.D.	
28) Tetrahydrofuran	0.000		0	N.D. d	
29) 1,1,1-Trichloroethane	0.000		0	N.D. d	
31) 1,1-Dichloropropene	0.000		0	N.D. d	
32) 2-Butanone (MEK)	5.700	43	471	0.23 ug/L	52
33) Benzene	5.968	78	1318	0.13 ug/L	82
34) tert-Amyl methyl ether...	0.000		0	N.D. d	
35) 1,2-Dichloroethane (EDC)	0.000		0	N.D. d	
36) iso-Butyl Alcohol	6.278	43	1674	7.18 ug/L	78
38) Trichloroethene (TCE)	0.000		0	N.D. d	
39) tert-Amyl ethyl ether ...	0.000		0	N.D. d	
40) Dibromomethane	0.000		0	N.D.	
41) 1,2-Dichloropropane	0.000		0	N.D. d	
42) Bromodichloromethane	0.000		0	N.D.	
44) c-1,3-Dichloropropene	0.000		0	N.D. d	
46) Toluene	8.182	91	1320	0.13 ug/L	91
47) Tetrachloroethene (PCE)	0.000		0	N.D. d	
48) 4-Methyl-2-Pentanone (	0.000		0	N.D. d	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041404.D
Acq On : 14 Apr 2020 18:32
Operator : tb
Sample : 0D14058-CAL1
Misc : 1X 0.1ppb 5mL DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 12:55:12 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	0.000		0	N.D. d	
50) 1,1,2-Trichloroethane	0.000		0	N.D. d	
51) Dibromochloromethane	0.000		0	N.D.	
52) 1,3-Dichloropropane	0.000		0	N.D. d	
53) 1,2-Dibromoethane (EDB)	0.000		0	N.D. d	
54) 2-Hexanone	0.000		0	N.D. d	
55) Chlorobenzene	9.788	112	781	0.12 ug/L #	1
56) Ethylbenzene	9.825	91	1221	0.11 ug/L	90
57) 1,1,1,2-Tetrachloroethane	0.000		0	N.D. d	
58) m,p-Xylenes (2)	9.965	91	1568	0.20 ug/L	88
59) o-Xylene	10.348	91	727	0.10 ug/L	89
60) Styrene	10.397	104	376	0.07 ug/L #	40
61) Bromoform	0.000		0	N.D.	
62) Isopropylbenzene	10.628	105	769	0.08 ug/L	82
65) Bromobenzene	10.938	156	210	0.09 ug/L #	62
66) n-Propylbenzene	10.968	91	1151	0.10 ug/L	88
67) 1,1,2,2-Tetrachloroethane	11.023	83	300	0.11 ug/L	91
68) 2-Chlorotoluene	0.000		0	N.D. d	
69) 1,3,5-Trimethylbenzene	11.127	105	727	0.09 ug/L	81
70) 1,2,3-Trichloropropane	0.000		0	N.D.	
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.	
72) 4-Chlorotoluene	11.224	91	672	0.10 ug/L	91
73) tert-Butylbenzene	11.382	91	403	0.09 ug/L	81
74) 1,2,4-Trimethylbenzene	11.437	105	710	0.09 ug/L	83
75) sec-Butylbenzene	11.522	105	745	0.08 ug/L	85
76) 4-Isopropyltoluene	11.631	119	638	0.08 ug/L	51
77) 1,3-Dichlorobenzene	11.686	146	344	0.08 ug/L	83
78) 1,4-Dichlorobenzene	11.753	146	456	0.11 ug/L #	17
79) n-Butylbenzene	11.948	91	756	0.11 ug/L	90
80) 1,2-Dichlorobenzene	12.069	146	307	0.08 ug/L	86
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	
82) Hexachlorobutadiene	0.000		0	N.D.	
83) 1,2,4-Trichlorobenzene	13.219	180	169	0.07 ug/L	78
84) Naphthalene	13.487	128	714	0.09 ug/L	79
85) 1,2,3-Trichlorobenzene	13.645	180	128	0.06 ug/L	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041404.D
Acq On : 14 Apr 2020 18:32
Operator : tb
Sample : 0D14058-CAL1
Misc : 1X 0.1ppb 5mL DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 12:39:49 2020
Quant Method : C:\msdchem\1\methods\~~VJ200414S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

4/15/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	105642	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	288314	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	128408	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	92990	50.74	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	331750	50.66	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	393483	50.46	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	96219	48.53	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	235	0.12	ug/L	#	51
3) Chloromethane	1.879	50	3332	1.09	ug/L		89
4) Vinyl Chloride	1.971	62	253	0.12	ug/L	#	46
5) Bromomethane	2.317	96	4627	4.01	ug/L		93
6) Chloroethane	2.439	64	68	0.13	ug/L	#	1
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Ethanol	3.340	45	118	1.94	ug/L	#	29
9) 1,1-Dichloroethene	3.121	61	537	0.21	ug/L	#	65
10) Carbon Disulfide	3.127	76	662	0.15	ug/L		78
11) Freon 113	0.000		0	N.D.			
12) Iodomethane	3.260	142	197	0.57	ug/L	#	47
13) Methylene Chloride	3.747	84	2946	1.36	ug/L		97
14) Acetone	3.844	43	1707	1.36	ug/L		97
15) t-1,2-Dichloroethene	3.917	61	412	0.12	ug/L	#	65
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.076	73	932	0.12	ug/L		57
18) tert-Butanol (TBA)	4.295	59	740	1.20	ug/L	#	55
19) Diisopropyl ether (DIPE)	4.465	45	55	0.01	ug/L	#	33
20) 1,1-Dichloroethane	4.544	63	381	0.09	ug/L	#	50
21) Acrylonitrile	0.000		0	N.D.			
22) Ethyl-tert-butyl ether...	0.000		0	N.D.			
23) c-1,2-Dichloroethene	5.098	61	222	0.07	ug/L	#	71
24) 2,2-Dichloropropane	5.201	77	441	0.13	ug/L		67
25) Bromochloromethane	5.292	49	113	0.06	ug/L	#	14
26) Chloroform	5.384	83	440	0.11	ug/L		82
27) Carbon Tetrachloride	0.000		0	N.D.			
28) Tetrahydrofuran	5.560	42	303	0.21	ug/L	#	47
29) 1,1,1-Trichloroethane	5.578	97	257	0.07	ug/L	#	67
31) 1,1-Dichloropropene	5.712	75	273	0.08	ug/L	#	32
32) 2-Butanone (MEK)	5.700	43	471	0.23	ug/L		52
33) Benzene	5.968	78	1318	0.13	ug/L		82
34) tert-Amyl methyl ether...	6.114	73	55	0.01	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.181	62	260	0.08	ug/L	#	49
36) iso-Butyl Alcohol	6.278	43	1674	7.18	ug/L		78
38) Trichloroethene (TCE)	6.588	130	72	0.03	ug/L	#	67
39) tert-Amyl ethyl ether ...	6.838	59	1427	0.28	ug/L	#	61
40) Dibromomethane	0.000		0	N.D.			
41) 1,2-Dichloropropane	7.136	63	177	0.07	ug/L	#	40
42) Bromodichloromethane	0.000		0	N.D.			
44) c-1,3-Dichloropropene	7.914	75	197	0.06	ug/L	#	33
46) Toluene	8.182	91	1320	0.13	ug/L		91
47) Tetrachloroethene (PCE)	8.644	166	137	0.06	ug/L	#	24
48) 4-Methyl-2-Pentanone (	8.632	43	528	0.15	ug/L	#	42

Quantitation Report (Not Reviewed)

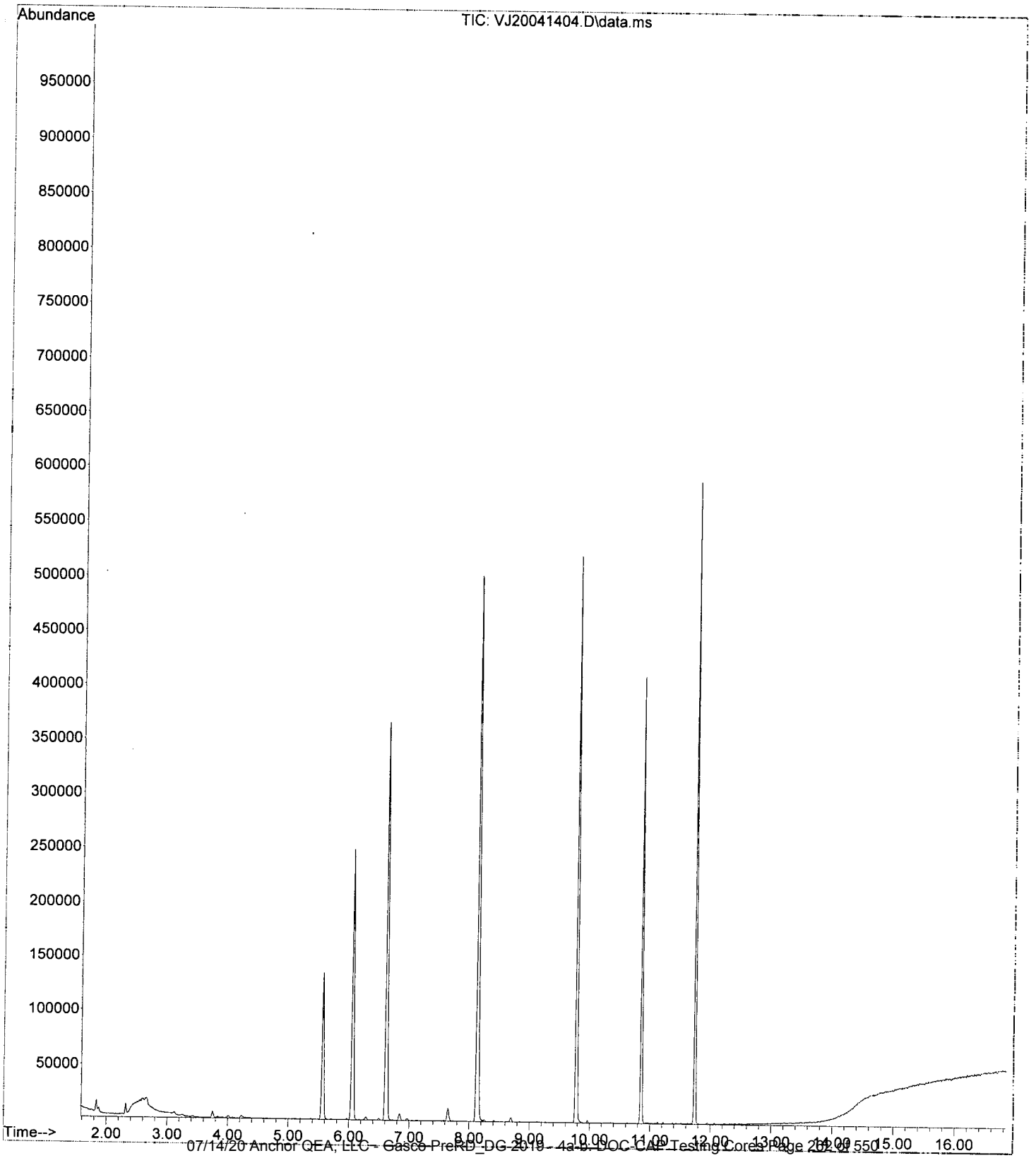
Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041404.D
Acq On : 14 Apr 2020 18:32
Operator : tb
Sample : 0D14058-CAL1
Misc : 1X 0.1ppb 5mL DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 12:39:49 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.669	75	144	0.04	ug/L #	45
50) 1,1,2-Trichloroethane	8.845	97	169	0.07	ug/L #	51
51) Dibromochloromethane	0.000		0	N.D.		
52) 1,3-Dichloropropane	9.131	76	475	0.12	ug/L #	67
53) 1,2-Dibromoethane (EDB)	9.271	107	62	0.03	ug/L #	7
54) 2-Hexanone	9.520	43	359	0.16	ug/L #	32
55) Chlorobenzene	9.788	112	781	0.12	ug/L #	1
56) Ethylbenzene	9.825	91	1221	0.11	ug/L	90
57) 1,1,1,2-Tetrachloroethane	9.861	131	55	0.03	ug/L #	52
58) m,p-Xylenes (2)	9.965	91	1568	0.20	ug/L	88
59) o-Xylene	10.348	91	727	0.10	ug/L	89
60) Styrene	10.397	104	376	0.07	ug/L #	40
61) Bromoform	0.000		0	N.D.		
62) Isopropylbenzene	10.628	105	769	0.08	ug/L	82
65) Bromobenzene	10.938	156	210	0.09	ug/L #	62
66) n-Propylbenzene	10.968	91	1151	0.10	ug/L	88
67) 1,1,2,2-Tetrachloroethane	11.023	83	300	0.11	ug/L	91
68) 2-Chlorotoluene	11.090	126	72	0.03	ug/L #	73
69) 1,3,5-Trimethylbenzene	11.127	105	727	0.09	ug/L	81
70) 1,2,3-Trichloropropane	0.000		0	N.D.		
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.		
72) 4-Chlorotoluene	11.224	91	672	0.10	ug/L	91
73) tert-Butylbenzene	11.382	91	403	0.09	ug/L	81
74) 1,2,4-Trimethylbenzene	11.437	105	710	0.09	ug/L	83
75) sec-Butylbenzene	11.522	105	745	0.08	ug/L	85
76) 4-Isopropyltoluene	11.631	119	638	0.08	ug/L	51
77) 1,3-Dichlorobenzene	11.686	146	344	0.08	ug/L	83
78) 1,4-Dichlorobenzene	11.753	146	456	0.11	ug/L #	17
79) n-Butylbenzene	11.948	91	756	0.11	ug/L	90
80) 1,2-Dichlorobenzene	12.069	146	307	0.08	ug/L	86
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
82) Hexachlorobutadiene	0.000		0	N.D.		
83) 1,2,4-Trichlorobenzene	13.219	180	169	0.07	ug/L	78
84) Naphthalene	13.487	128	714	0.09	ug/L	79
85) 1,2,3-Trichlorobenzene	13.645	180	128	0.06	ug/L	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

File :C:\msdchem\1\data\2020-04\0D14058\VJ20041404.D
Operator : tb
Acquired : 14 Apr 2020 18:32 using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0D14058-CAL1
Misc Info : 1X 0.1ppb 5mL DI+MeOH
Vial Number: 4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041405.D
Acq On : 14 Apr 2020 18:59
Operator : tb
Sample : 0D14058-CAL2
Misc : 1X 0.2ppb 5mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 12:59:20 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.053	99	103672	50.00	ug/L	0.00
43) Chlorobenzene-d5 (I)	9.776	117	284575	50.00	ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	126249	50.00	ug/L	0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.560	111	90223	50.17	ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.612	114	325315	50.62	ug/L	0.00
45) Toluene-d8 (S)	8.127	98	387254	50.32	ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.853	174	94121	48.29	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	d	
3) Chloromethane	1.873	50	3985	1.33	ug/L	97
4) Vinyl Chloride	0.000		0	N.D.	d	
5) Bromomethane	2.317	96	5411	4.77	ug/L	98
6) Chloroethane	0.000		0	N.D.	d	
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethanol	0.000		0	N.D.	d	
9) 1,1-Dichloroethene	3.102	61	757	0.30	ug/L	83
10) Carbon Disulfide	3.120	76	984	0.22	ug/L	54
11) Freon 113	0.000		0	N.D.	d	
12) Iodomethane	0.000		0	N.D.	d	
13) Methylene Chloride	3.747	84	3040	1.43	ug/L	91
14) Acetone	3.844	43	2232	1.82	ug/L	92
15) t-1,2-Dichloroethene	3.911	61	837	0.25	ug/L	91
16) n-Hexane	0.000		0	N.D.		
17) Methyl-tert-butyl-ether	4.082	73	1641	0.22	ug/L	96
18) tert-Butanol (TBA)	4.240	59	9827	16.29	ug/L #	99
19) Diisopropyl ether (DIPE)	4.471	45	407	0.05	ug/L	57
20) 1,1-Dichloroethane	4.538	63	799	0.20	ug/L #	50
21) Acrylonitrile	0.000		0	N.D.		
22) Ethyl-tert-butyl ether...	0.000		0	N.D.	d	
23) c-1,2-Dichloroethene	5.091	61	638	0.20	ug/L	94
24) 2,2-Dichloropropane	5.201	77	737	0.23	ug/L #	58
25) Bromochloromethane	5.298	49	403	0.20	ug/L #	53
26) Chloroform	5.377	83	773	0.19	ug/L	87
27) Carbon Tetrachloride	5.517	117	381	0.14	ug/L	75
28) Tetrahydrofuran	5.560	42	580	0.40	ug/L #	59
29) 1,1,1-Trichloroethane	5.590	97	618	0.17	ug/L #	69
31) 1,1-Dichloropropene	5.718	75	564	0.18	ug/L #	39
32) 2-Butanone (MEK)	5.700	43	1017	0.51	ug/L	52
33) Benzene	5.961	78	2137	0.21	ug/L	89
34) tert-Amyl methyl ether...	0.000		0	N.D.	d	
35) 1,2-Dichloroethane (EDC)	0.000		0	N.D.	d	
36) iso-Butyl Alcohol	6.272	43	2299	10.05	ug/L	86
38) Trichloroethene (TCE)	6.588	130	445	0.18	ug/L #	72
39) tert-Amyl ethyl ether ...	6.844	59	1511	0.30	ug/L #	66
40) Dibromomethane	0.000		0	N.D.		
41) 1,2-Dichloropropane	0.000		0	N.D.	d	
42) Bromodichloromethane	7.209	83	474	0.17	ug/L	74
44) c-1,3-Dichloropropene	7.908	75	662	0.19	ug/L #	73
46) Toluene	8.194	91	2322	0.23	ug/L	91
47) Tetrachloroethene (PCE)	8.632	166	331	0.15	ug/L #	78
48) 4-Methyl-2-Pentanone (	8.626	43	1079	0.33	ug/L	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041405.D
Acq On : 14 Apr 2020 18:59
Operator : tb
Sample : 0D14058-CAL2
Misc : 1X 0.2ppb 5mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 12:59:20 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	577	0.16	ug/L #	45
50) 1,1,2-Trichloroethane	8.839	97	404	0.18	ug/L	94
51) Dibromochloromethane	9.028	129	303	0.16	ug/L	85
52) 1,3-Dichloropropane	9.125	76	817	0.20	ug/L #	62
53) 1,2-Dibromoethane (EDB)	9.271	107	407	0.18	ug/L	81
54) 2-Hexanone	9.508	43	631	0.28	ug/L	87
55) Chlorobenzene	9.794	112	1379	0.22	ug/L #	67
56) Ethylbenzene	9.831	91	2007	0.19	ug/L	93
57) 1,1,1,2-Tetrachloroethane	9.855	131	241	0.11	ug/L #	72
58) m,p-Xylenes (2)	9.964	91	2782	0.36	ug/L	91
59) o-Xylene	10.348	91	1320	0.18	ug/L	93
60) Styrene	10.390	104	746	0.14	ug/L	88
61) Bromoform	0.000		0	N.D.		
62) Isopropylbenzene	10.621	105	1420	0.16	ug/L	92
65) Bromobenzene	10.938	156	461	0.20	ug/L #	84
66) n-Propylbenzene	10.968	91	2212	0.20	ug/L	91
67) 1,1,2,2-Tetrachloroethane	11.017	83	450	0.16	ug/L	96
68) 2-Chlorotoluene	11.090	126	412	0.19	ug/L #	78
69) 1,3,5-Trimethylbenzene	11.132	105	1214	0.16	ug/L	93
70) 1,2,3-Trichloropropane	0.000		0	N.D. d		
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.		
72) 4-Chlorotoluene	11.224	91	1242	0.18	ug/L	80
73) tert-Butylbenzene	11.376	91	694	0.16	ug/L #	69
74) 1,2,4-Trimethylbenzene	11.437	105	1205	0.15	ug/L	89
75) sec-Butylbenzene	11.522	105	1416	0.15	ug/L	99
76) 4-Isopropyltoluene	11.631	119	1118	0.15	ug/L	89
77) 1,3-Dichlorobenzene	11.686	146	842	0.20	ug/L	94
78) 1,4-Dichlorobenzene	11.753	146	908	0.22	ug/L #	36
79) n-Butylbenzene	11.948	91	1303	0.19	ug/L	86
80) 1,2-Dichlorobenzene	12.069	146	695	0.19	ug/L	88
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
82) Hexachlorobutadiene	0.000		0	N.D.		
83) 1,2,4-Trichlorobenzene	13.213	180	447	0.19	ug/L	75
84) Naphthalene	13.481	128	1465	0.18	ug/L	79
85) 1,2,3-Trichlorobenzene	13.645	180	407	0.18	ug/L	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041405.D
Acq On : 14 Apr 2020 18:59
Operator : tb
Sample : 0D14058-CAL2
Misc : 1X 0.2ppb 5mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 12:39:52 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

4/15/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	103672	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	284575	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	126249	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	90223	50.17	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.612	114	325315	50.62	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	387254	50.32	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	94121	48.29	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	474	0.25	ug/L	#	51
3) Chloromethane	1.873	50	3985	1.33	ug/L		97
4) Vinyl Chloride	1.971	62	473	0.23	ug/L	#	46
5) Bromomethane	2.317	96	5411	4.77	ug/L		98
6) Chloroethane	2.439	64	76	0.15	ug/L	#	1
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Ethanol	3.339	45	58	0.97	ug/L	#	29
9) 1,1-Dichloroethene	3.102	61	757	0.30	ug/L		83
10) Carbon Disulfide	3.120	76	984	0.22	ug/L		54
11) Freon 113	3.151	101	288	0.15	ug/L	#	16
12) Iodomethane	3.260	142	290	0.86	ug/L	#	47
13) Methylene Chloride	3.747	84	3040	1.43	ug/L		91
14) Acetone	3.844	43	2232	1.82	ug/L		92
15) t-1,2-Dichloroethene	3.911	61	837	0.25	ug/L		91
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.082	73	1641	0.22	ug/L		96
18) tert-Butanol (TBA)	4.240	59	9827	16.29	ug/L	#	99
19) Diisopropyl ether (DIPE)	4.471	45	407	0.05	ug/L		57
20) 1,1-Dichloroethane	4.538	63	799	0.20	ug/L	#	50
21) Acrylonitrile	0.000		0	N.D.			
22) Ethyl-tert-butyl ether...	4.836	59	75	0.01	ug/L	#	38
23) c-1,2-Dichloroethene	5.091	61	638	0.20	ug/L		94
24) 2,2-Dichloropropane	5.201	77	737	0.28	ug/L	#	58
25) Bromochloromethane	5.298	49	403	0.20	ug/L	#	53
26) Chloroform	5.377	83	773	0.19	ug/L		87
27) Carbon Tetrachloride	5.517	117	381	0.14	ug/L		75
28) Tetrahydrofuran	5.560	42	580	0.40	ug/L	#	59
29) 1,1,1-Trichloroethane	5.590	97	618	0.17	ug/L	#	69
31) 1,1-Dichloropropene	5.718	75	564	0.18	ug/L	#	39
32) 2-Butanone (MEK)	5.700	43	1017	0.51	ug/L		52
33) Benzene	5.961	78	2137	0.21	ug/L		89
34) tert-Amyl methyl ether...	6.120	73	405	0.06	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.174	62	618	0.19	ug/L	#	49
36) iso-Butyl Alcohol	6.272	43	2299	10.05	ug/L		86
38) Trichloroethene (TCE)	6.588	130	445	0.18	ug/L	#	72
39) tert-Amyl ethyl ether ...	6.844	59	1511	0.30	ug/L	#	66
40) Dibromomethane	0.000		0	N.D.			
41) 1,2-Dichloropropane	7.123	63	465	0.19	ug/L	#	40
42) Bromodichloromethane	7.209	83	474	0.17	ug/L		74
44) c-1,3-Dichloropropene	7.908	75	662	0.19	ug/L	#	73
46) Toluene	8.194	91	2322	0.23	ug/L		91
47) Tetrachloroethene (PCE)	8.632	166	331	0.15	ug/L	#	78
48) 4-Methyl-2-Pentanone (	8.626	43	1079	0.33	ug/L		87

Quantitation Report (Not Reviewed)

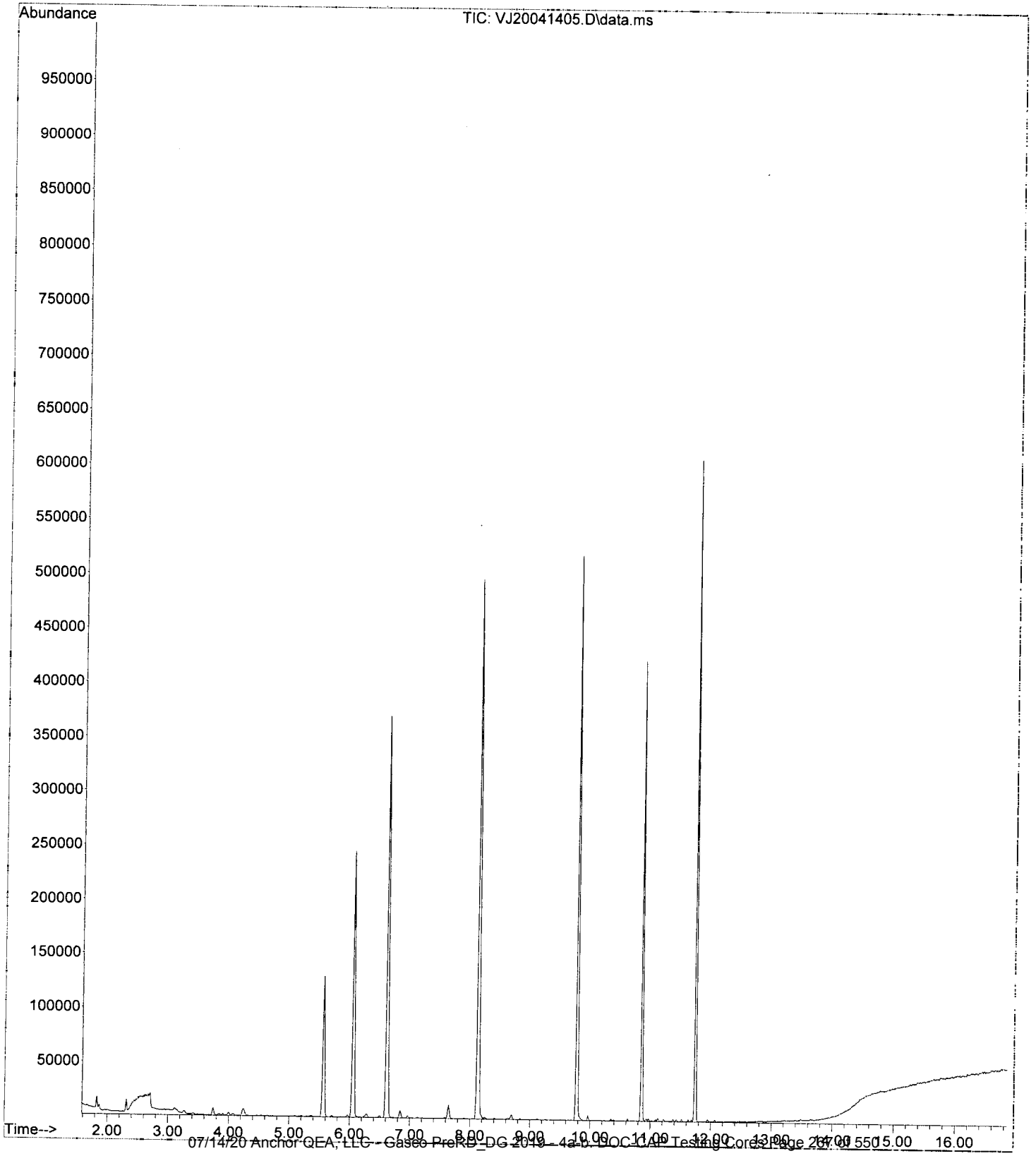
Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041405.D
Acq On : 14 Apr 2020 18:59
Operator : tb
Sample : 0D14058-CAL2
Misc : 1X 0.2ppb 5mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 12:39:52 2020
Quant Method : C:\msdchem\1\methods\VJ200414S_M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	577	0.16	ug/L	#	45
50) 1,1,2-Trichloroethane	8.839	97	404	0.18	ug/L		94
51) Dibromochloromethane	9.028	129	303	0.16	ug/L		85
52) 1,3-Dichloropropane	9.125	76	817	0.20	ug/L	#	62
53) 1,2-Dibromoethane (EDB)	9.271	107	407	0.18	ug/L		81
54) 2-Hexanone	9.508	43	631	0.28	ug/L		87
55) Chlorobenzene	9.794	112	1379	0.22	ug/L	#	67
56) Ethylbenzene	9.831	91	2007	0.19	ug/L		93
57) 1,1,1,2-Tetrachloroethane	9.855	131	241	0.11	ug/L	#	72
58) m,p-Xylenes (2)	9.964	91	2782	0.36	ug/L		91
59) o-Xylene	10.348	91	1320	0.18	ug/L		93
60) Styrene	10.390	104	746	0.14	ug/L		88
61) Bromoform	0.000		0	N.D.			
62) Isopropylbenzene	10.621	105	1420	0.16	ug/L		92
65) Bromobenzene	10.938	156	461	0.20	ug/L	#	84
66) n-Propylbenzene	10.968	91	2212	0.20	ug/L		91
67) 1,1,2,2-Tetrachloroethane	11.017	83	450	0.16	ug/L		96
68) 2-Chlorotoluene	11.090	126	412	0.19	ug/L	#	78
69) 1,3,5-Trimethylbenzene	11.132	105	1214	0.16	ug/L		93
70) 1,2,3-Trichloropropane	11.126	110	62	0.06	ug/L	#	73
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
72) 4-Chlorotoluene	11.224	91	1242	0.18	ug/L		80
73) tert-Butylbenzene	11.376	91	694	0.16	ug/L	#	69
74) 1,2,4-Trimethylbenzene	11.437	105	1205	0.15	ug/L		89
75) sec-Butylbenzene	11.522	105	1416	0.15	ug/L		99
76) 4-Isopropyltoluene	11.631	119	1118	0.15	ug/L		89
77) 1,3-Dichlorobenzene	11.686	146	842	0.20	ug/L		94
78) 1,4-Dichlorobenzene	11.753	146	908	0.22	ug/L	#	36
79) n-Butylbenzene	11.948	91	1303	0.19	ug/L		86
80) 1,2-Dichlorobenzene	12.069	146	695	0.19	ug/L		88
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
82) Hexachlorobutadiene	0.000		0	N.D.			
83) 1,2,4-Trichlorobenzene	13.213	180	447	0.19	ug/L		75
84) Naphthalene	13.481	128	1465	0.18	ug/L		79
85) 1,2,3-Trichlorobenzene	13.645	180	407	0.18	ug/L		84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

File :C:\msdchem\1\data\2020-04\0D14058\VJ20041405.D
Operator : tb
Acquired : 14 Apr 2020 18:59 using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0D14058-CAL2
Misc Info : 1X 0.2ppb 5mL DI+MeOH
Vial Number: 5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041406.D
Acq On : 14 Apr 2020 19:26
Operator : tb
Sample : 0D14058-CAL3
Misc : 1X 0.4ppb 5mL DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 13:03:17 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	105594	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	288887	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	131365	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	91779	50.10	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.612	114	332647	50.82	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	397845	50.92	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	98324	48.48	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	846	0.44	ug/L		90
3) Chloromethane	1.873	50	4050	1.33	ug/L		98
4) Vinyl Chloride	1.983	62	984	0.48	ug/L		93
5) Bromomethane	2.317	96	5015	4.34	ug/L		98
6) Chloroethane	0.000		0	N.D.	d		
7) Trichlorofluoromethane	2.567	101	116	0.19	ug/L	#	50
8) Ethanol	0.000		0	N.D.	d		
9) 1,1-Dichloroethene	3.102	61	1302	0.50	ug/L		97
10) Carbon Disulfide	3.126	76	1836	0.40	ug/L		69
11) Freon 113	3.163	101	755	0.38	ug/L		88
12) Iodomethane	0.000		0	N.D.	d		
13) Methylene Chloride	3.747	84	3388	1.56	ug/L		98
14) Acetone	3.838	43	2774	2.22	ug/L		92
15) t-1,2-Dichloroethene	3.911	61	1463	0.43	ug/L		92
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.075	73	3227	0.43	ug/L		93
18) tert-Butanol (TBA)	4.234	59	18003	29.31	ug/L	#	87
19) Diisopropyl ether (DIPE)	4.471	45	830	0.11	ug/L		77
20) 1,1-Dichloroethane	4.544	63	1750	0.42	ug/L		82
21) Acrylonitrile	4.611	53	214	0.14	ug/L	#	14
22) Ethyl-tert-butyl ether...	4.842	59	707	0.10	ug/L		88
23) c-1,2-Dichloroethene	5.097	61	1352	0.42	ug/L		89
24) 2,2-Dichloropropane	5.201	77	1557	0.47	ug/L		72
25) Bromochloromethane	5.292	49	830	0.41	ug/L		82
26) Chloroform	5.371	83	1657	0.40	ug/L		84
27) Carbon Tetrachloride	5.517	117	870	0.31	ug/L		76
28) Tetrahydrofuran	5.560	42	793	0.54	ug/L	#	63
29) 1,1,1-Trichloroethane	5.584	97	1456	0.40	ug/L		97
31) 1,1-Dichloropropene	5.712	75	1168	0.36	ug/L		96
32) 2-Butanone (MEK)	5.694	43	1806m	0.88	ug/L		
33) Benzene	5.967	78	4334	0.43	ug/L		99
34) tert-Amyl methyl ether...	0.000		0	N.D.	d		
35) 1,2-Dichloroethane (EDC)	6.168	62	1362	0.41	ug/L		91
36) iso-Butyl Alcohol	6.278	43	3401	14.60	ug/L		94
38) Trichloroethene (TCE)	6.588	130	1063	0.42	ug/L		86
39) tert-Amyl ethyl ether ...	6.850	59	1722	0.33	ug/L	#	73
40) Dibromomethane	7.026	93	419	0.28	ug/L		88
41) 1,2-Dichloropropane	7.135	63	1004	0.39	ug/L		85
42) Bromodichloromethane	7.215	83	1017	0.36	ug/L		93
44) c-1,3-Dichloropropene	7.902	75	1170	0.33	ug/L		99
46) Toluene	8.188	91	4260	0.41	ug/L		94
47) Tetrachloroethene (PCE)	8.644	166	848	0.38	ug/L		92
48) 4-Methyl-2-Pentanone (	8.632	43	2338	0.70	ug/L		83

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041406.D
Acq On : 14 Apr 2020 19:26
Operator : tb
Sample : 0D14058-CAL3
Misc : 1X 0.4ppb 5mL DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 13:03:17 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.662	75	1155	0.32	ug/L	68
50) 1,1,2-Trichloroethane	8.845	97	816	0.35	ug/L	96
51) Dibromochloromethane	9.027	129	594	0.31	ug/L	79
52) 1,3-Dichloropropane	9.131	76	1576	0.38	ug/L	94
53) 1,2-Dibromoethane (EDB)	9.265	107	777	0.34	ug/L	84
54) 2-Hexanone	9.508	43	1306	0.57	ug/L	81
55) Chlorobenzene	9.788	112	2671	0.42	ug/L #	44
56) Ethylbenzene	9.831	91	4040	0.38	ug/L	94
57) 1,1,1,2-Tetrachloroethane	9.849	131	680	0.32	ug/L	97
58) m,p-Xylenes (2)	9.964	91	5522	0.70	ug/L	91
59) o-Xylene	10.348	91	2679	0.35	ug/L	88
60) Styrene	10.396	104	1373	0.26	ug/L	91
61) Bromoform	0.000		0	N.D.	d	
62) Isopropylbenzene	10.621	105	2911	0.31	ug/L	91
65) Bromobenzene	10.938	156	946	0.39	ug/L #	74
66) n-Propylbenzene	10.968	91	4011	0.35	ug/L	95
67) 1,1,2,2-Tetrachloroethane	11.023	83	1053	0.36	ug/L	92
68) 2-Chlorotoluene	11.090	126	717	0.31	ug/L #	81
69) 1,3,5-Trimethylbenzene	11.126	105	2401	0.30	ug/L	90
70) 1,2,3-Trichloropropane	11.120	110	379	0.35	ug/L #	77
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.		
72) 4-Chlorotoluene	11.224	91	2337	0.33	ug/L	98
73) tert-Butylbenzene	11.382	91	1461	0.33	ug/L	82
74) 1,2,4-Trimethylbenzene	11.437	105	2372	0.29	ug/L	96
75) sec-Butylbenzene	11.522	105	2931	0.30	ug/L	93
76) 4-Isopropyltoluene	11.631	119	2371	0.30	ug/L	96
77) 1,3-Dichlorobenzene	11.680	146	1596	0.37	ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	1846	0.43	ug/L #	76
79) n-Butylbenzene	11.948	91	2438	0.34	ug/L	93
80) 1,2-Dichlorobenzene	12.069	146	1566	0.40	ug/L	96
81) 1,2-Dibromo-3-Chloropr...	12.665	157	122	0.22	ug/L #	50
82) Hexachlorobutadiene	13.189	223	124	0.21	ug/L #	76
83) 1,2,4-Trichlorobenzene	13.213	180	872	0.35	ug/L	97
84) Naphthalene	13.487	128	2697	0.31	ug/L	88
85) 1,2,3-Trichlorobenzene	13.645	180	851	0.36	ug/L	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041406.D
Acq On : 14 Apr 2020 19:26
Operator : tb
Sample : 0D14058-CAL3
Misc : 1X 0.4ppb 5mL DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 12:39:55 2020
Quant Method : C:\msdchem\1\methods\VJ~~200414S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

4/15/20

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.053	99	105594	50.00	ug/L	0.00
43) Chlorobenzene-d5 (I)	9.776	117	288887	50.00	ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	131365	50.00	ug/L	0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.560	111	91779	50.10	ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.612	114	332647	50.82	ug/L	0.00
45) Toluene-d8 (S)	8.133	98	397845	50.92	ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.853	174	98324	48.48	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.679	85	846	0.44	ug/L	90
3) Chloromethane	1.873	50	4050	1.33	ug/L	98
4) Vinyl Chloride	1.983	62	984	0.48	ug/L	93
5) Bromomethane	2.317	96	5015	4.34	ug/L	98
6) Chloroethane	2.433	64	384	0.73	ug/L #	1
7) Trichlorofluoromethane	2.567	101	116	0.19	ug/L #	50
8) Ethanol	3.333	45	407	6.70	ug/L #	29
9) 1,1-Dichloroethene	3.102	61	1302	0.50	ug/L	97
10) Carbon Disulfide	3.126	76	1836	0.40	ug/L	69
11) Freon 113	3.163	101	755	0.38	ug/L	88
12) Iodomethane	3.254	142	191	0.55	ug/L #	47
13) Methylene Chloride	3.747	84	3388	1.56	ug/L	98
14) Acetone	3.838	43	2774	2.22	ug/L	92
15) t-1,2-Dichloroethene	3.911	61	1463	0.43	ug/L	92
16) n-Hexane	0.000		0	N.D.		
17) Methyl-tert-butyl-ether	4.075	73	3227	0.43	ug/L	93
18) tert-Butanol (TBA)	4.234	59	18003	29.31	ug/L #	87
19) Diisopropyl ether (DIPE)	4.471	45	830	0.11	ug/L	77
20) 1,1-Dichloroethane	4.544	63	1750	0.42	ug/L	82
21) Acrylonitrile	4.611	53	214	0.14	ug/L #	14
22) Ethyl-tert-butyl ether...	4.842	59	707	0.10	ug/L	88
23) c-1,2-Dichloroethene	5.097	61	1352	0.42	ug/L	89
24) 2,2-Dichloropropane	5.201	77	1557	0.47	ug/L	72
25) Bromochloromethane	5.292	49	830	0.41	ug/L	82
26) Chloroform	5.371	83	1657	0.40	ug/L	84
27) Carbon Tetrachloride	5.517	117	870	0.31	ug/L	76
28) Tetrahydrofuran	5.560	42	793	0.54	ug/L #	63
29) 1,1,1-Trichloroethane	5.584	97	1456	0.40	ug/L	97
31) 1,1-Dichloropropene	5.712	75	1168	0.36	ug/L	96
32) 2-Butanone (MEK)	5.694	43	~~1453~~	~~0.71~~	~~ug/L~~	~~92~~ MF
33) Benzene	5.967	78	4334	0.43	ug/L	99
34) tert-Amyl methyl ether...	6.120	73	754	0.12	ug/L #	46
35) 1,2-Dichloroethane (EDC)	6.168	62	1362	0.41	ug/L	91
36) iso-Butyl Alcohol	6.278	43	3401	14.60	ug/L	94
38) Trichloroethene (TCE)	6.588	130	1063	0.42	ug/L	86
39) tert-Amyl ethyl ether ...	6.850	59	1722	0.33	ug/L #	73
40) Dibromomethane	7.026	93	419	0.28	ug/L	88
41) 1,2-Dichloropropane	7.135	63	1004	0.39	ug/L	85
42) Bromodichloromethane	7.215	83	1017	0.36	ug/L	93
44) c-1,3-Dichloropropene	7.902	75	1170	0.33	ug/L	99
46) Toluene	8.188	91	4260	0.41	ug/L	94
47) Tetrachloroethene (PCE)	8.644	166	848	0.38	ug/L	92
48) 4-Methyl-2-Pentanone (	8.632	43	2338	0.79	ug/L	83

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041406.D
Acq On : 14 Apr 2020 19:26
Operator : tb
Sample : 0D14058-CAL3
Misc : 1X 0.4ppb 5mL DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 12:39:55 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

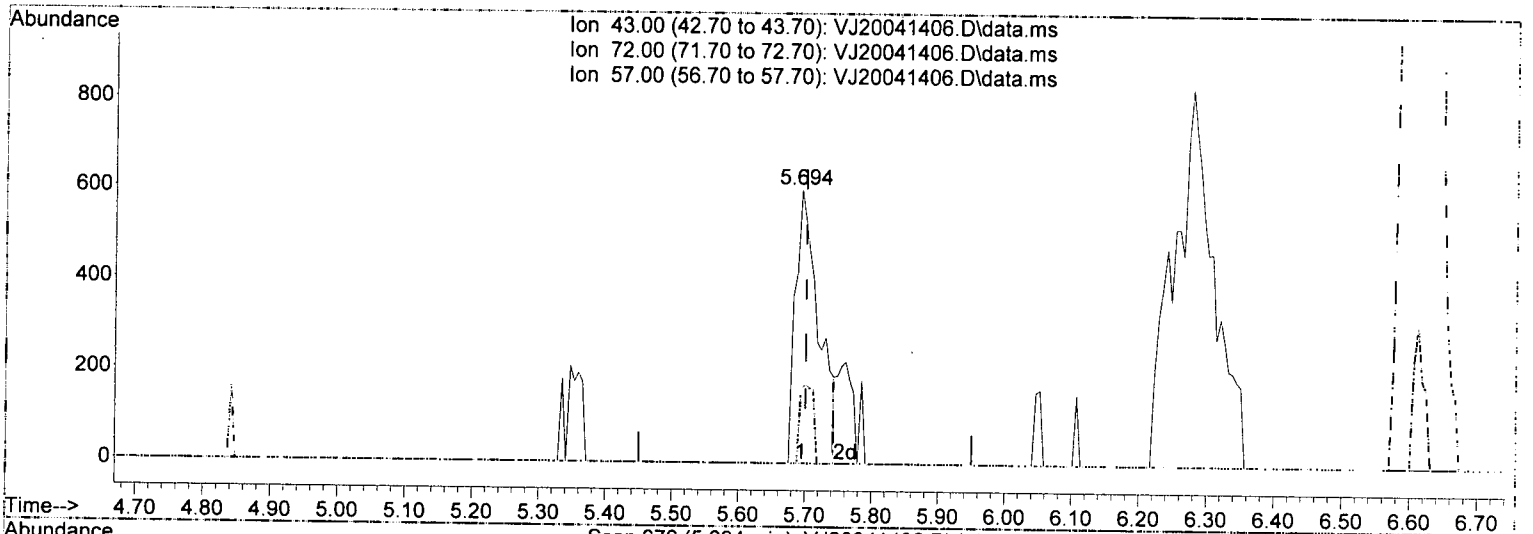
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	8.662	75	1155	0.32 ug/L	68
50) 1,1,2-Trichloroethane	8.845	97	816	0.35 ug/L	96
51) Dibromochloromethane	9.027	129	594	0.31 ug/L	79
52) 1,3-Dichloropropane	9.131	76	1576	0.38 ug/L	94
53) 1,2-Dibromoethane (EDB)	9.265	107	777	0.34 ug/L	84
54) 2-Hexanone	9.508	43	1306	0.57 ug/L	81
55) Chlorobenzene	9.788	112	2671	0.42 ug/L #	44
56) Ethylbenzene	9.831	91	4040	0.38 ug/L	94
57) 1,1,1,2-Tetrachloroethane	9.849	131	680	0.32 ug/L	97
58) m,p-Xylenes (2)	9.964	91	5522	0.70 ug/L	91
59) o-Xylene	10.348	91	2679	0.35 ug/L	88
60) Styrene	10.396	104	1373	0.26 ug/L	91
61) Bromoform	10.408	173	342	0.27 ug/L #	37
62) Isopropylbenzene	10.621	105	2911	0.31 ug/L	91
65) Bromobenzene	10.938	156	946	0.39 ug/L #	74
66) n-Propylbenzene	10.968	91	4011	0.35 ug/L	95
67) 1,1,2,2-Tetrachloroethane	11.023	83	1053	0.36 ug/L	92
68) 2-Chlorotoluene	11.090	126	717	0.31 ug/L #	81
69) 1,3,5-Trimethylbenzene	11.126	105	2401	0.30 ug/L	90
70) 1,2,3-Trichloropropane	11.120	110	379	0.35 ug/L #	77
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.	
72) 4-Chlorotoluene	11.224	91	2337	0.33 ug/L	98
73) tert-Butylbenzene	11.382	91	1461	0.33 ug/L	82
74) 1,2,4-Trimethylbenzene	11.437	105	2372	0.29 ug/L	96
75) sec-Butylbenzene	11.522	105	2931	0.30 ug/L	93
76) 4-Isopropyltoluene	11.631	119	2371	0.30 ug/L	96
77) 1,3-Dichlorobenzene	11.680	146	1596	0.37 ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	1846	0.43 ug/L #	76
79) n-Butylbenzene	11.948	91	2438	0.34 ug/L	93
80) 1,2-Dichlorobenzene	12.069	146	1566	0.40 ug/L	96
81) 1,2-Dibromo-3-Chloropr...	12.665	157	122	0.22 ug/L #	50
82) Hexachlorobutadiene	13.189	223	124	0.21 ug/L #	76
83) 1,2,4-Trichlorobenzene	13.213	180	872	0.35 ug/L	97
84) Naphthalene	13.487	128	2697	0.31 ug/L	88
85) 1,2,3-Trichlorobenzene	13.645	180	851	0.36 ug/L	85

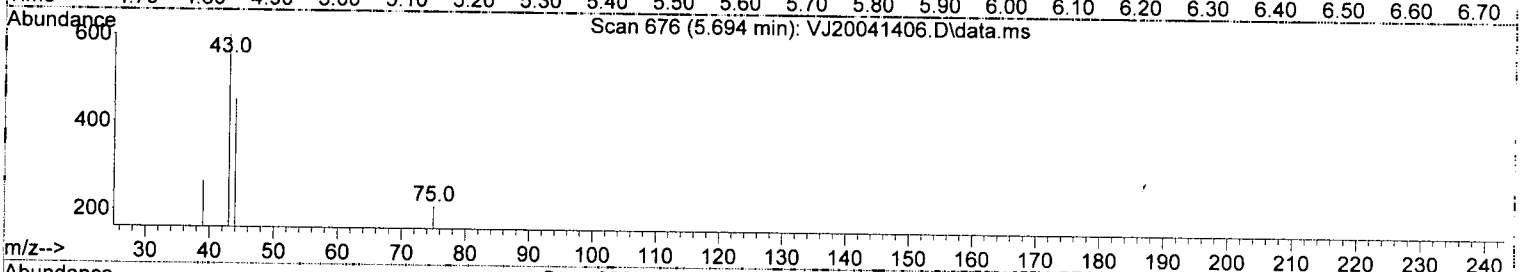
(#) = qualifier out of range (m) = manual integration (+) = signals summed

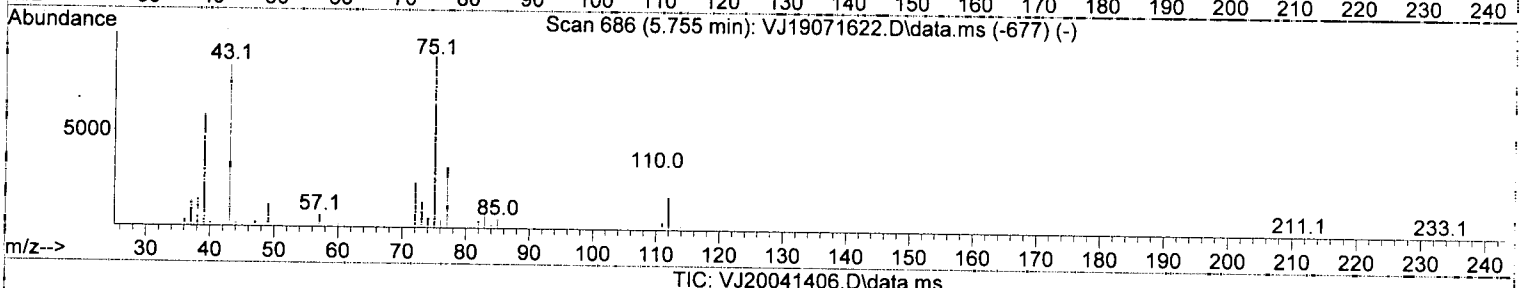
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041406.D
Acq On : 14 Apr 2020 19:26
Operator : tb
Sample : 0D14058-CAL3
Misc : 1X 0.4ppb 5mL DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 13:30:59 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:46:43 2020
Response via : Initial Calibration







TIC: VJ20041406.D\data.ms

(32) 2-Butanone (MEK)

5.694min (-0.006) 0.71 ug/L

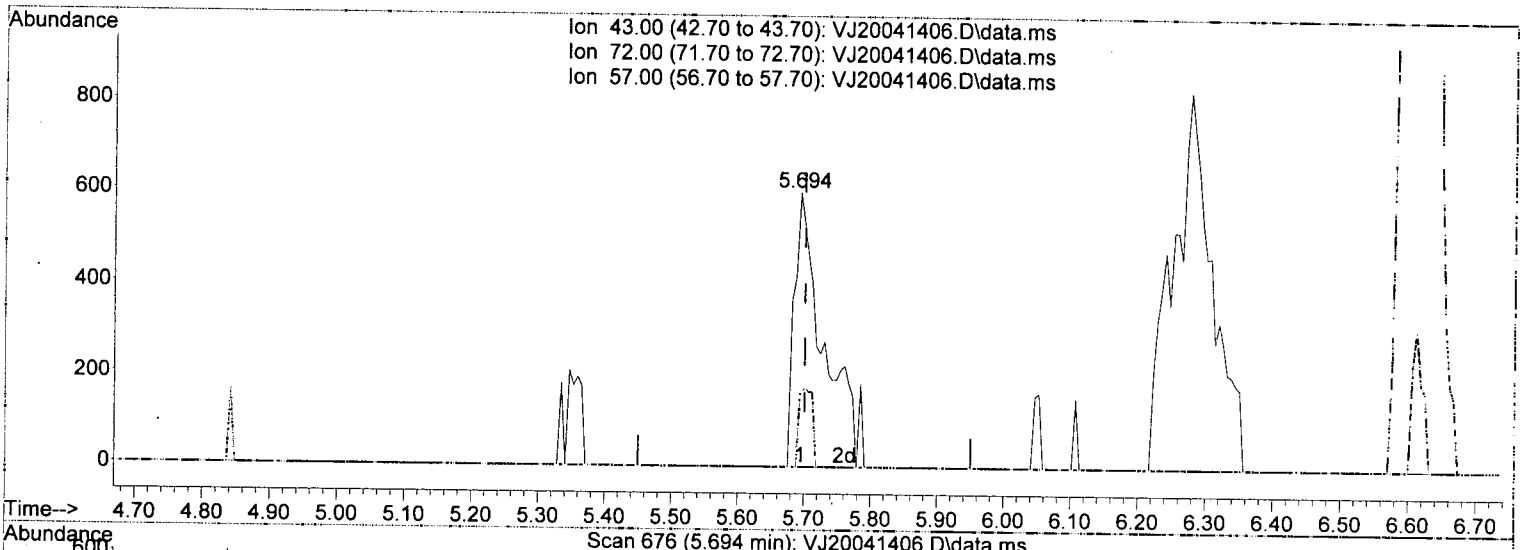
response 1453

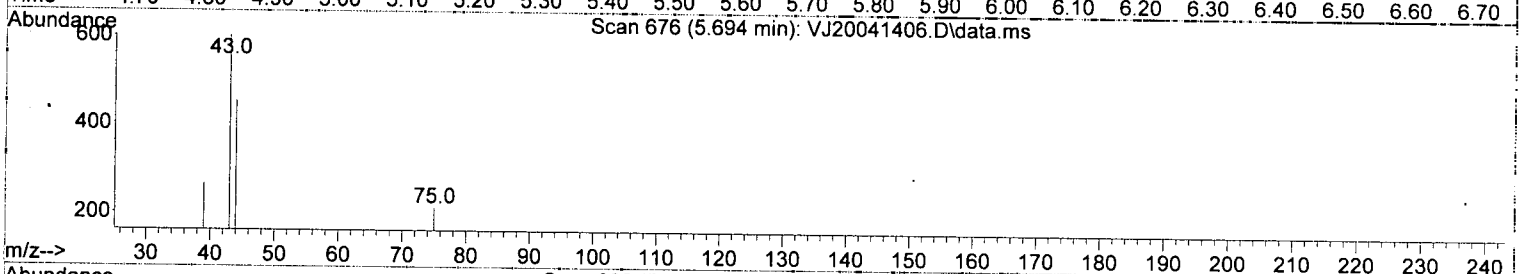
Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	26.74
57.00	7.20	0.00
0.00	0.00	0.00

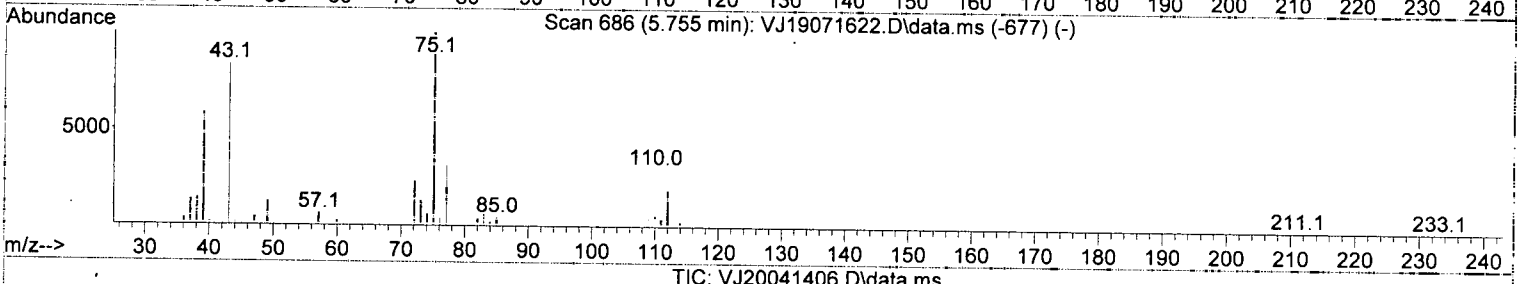
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041406.D
Acq On : 14 Apr 2020 19:26
Operator : tb
Sample : 0D14058-CAL3
Misc : 1X 0.4ppb 5mL DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 13:30:59 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:46:43 2020
Response via : Initial Calibration







TIC: VJ20041406.D\data.ms

(32) 2-Butanone (MEK)

5.694min (-0.006) 0.88 ug/L (m)

response 1806

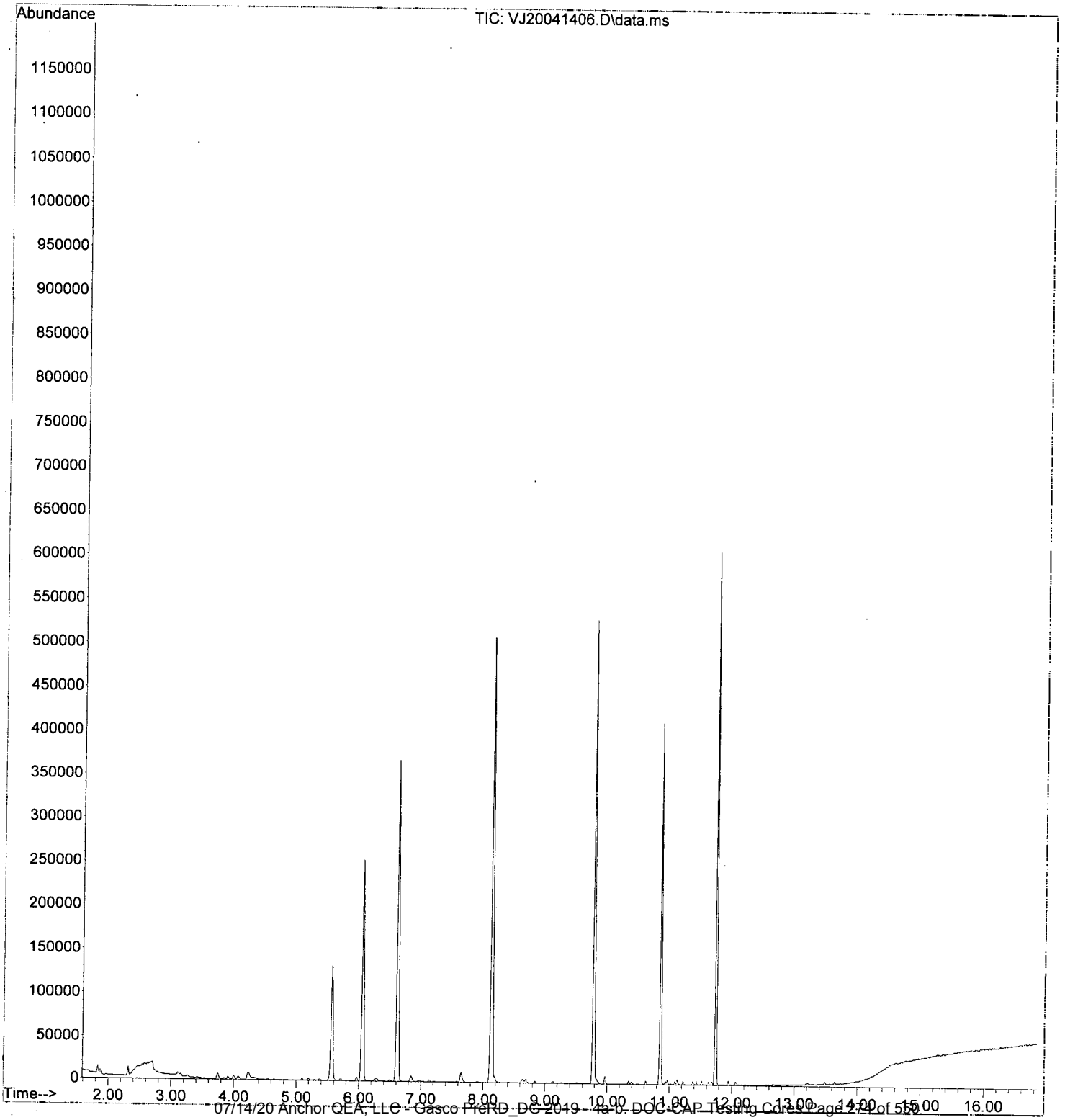
Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	26.74
57.00	7.20	0.00
0.00	0.00	0.00

4/13/20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041406.D
Acq On : 14 Apr 2020 19:26
Operator : tb
Sample : 0D14058-CAL3
Misc : 1X 0.4ppb 5mL DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 13:03:17 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041407.D
Acq On : 14 Apr 2020 19:52
Operator : tb
Sample : 0D14058-CAL4
Misc : 1X 1ppb 5mL DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 13:04:35 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	101650	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	273138	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	116028	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	88484	50.18	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	316835	50.28	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	377021	51.04	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	89056	49.71	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	2198	1.19	ug/L		92
3) Chloromethane	1.880	50	6544	2.23	ug/L		98
4) Vinyl Chloride	1.983	62	2731	1.38	ug/L		95
5) Bromomethane	2.324	96	6310	5.68	ug/L		98
6) Chloroethane	2.439	64	659	1.30	ug/L	#	1
7) Trichlorofluoromethane	2.573	101	583	1.00	ug/L		94
8) Ethanol	3.273	45	6877	117.60	ug/L		88
9) 1,1-Dichloroethene	3.114	61	2892	1.15	ug/L		94
10) Carbon Disulfide	3.127	76	4426	1.01	ug/L		86
11) Freon 113	3.163	101	1870	0.97	ug/L		99
12) Iodomethane	0.000		0	N.D.	d		
13) Methylene Chloride	3.747	84	5044	2.41	ug/L		97
14) Acetone	3.845	43	4577	3.80	ug/L		93
15) t-1,2-Dichloroethene	3.918	61	3570	1.09	ug/L		98
16) n-Hexane	4.003	86	523	1.12	ug/L	#	81
17) Methyl-tert-butyl-ether	4.082	73	7453	1.03	ug/L		95
18) tert-Butanol (TBA)	4.246	59	42254	71.45	ug/L	#	99
19) Diisopropyl ether (DIPE)	4.483	45	1977	0.27	ug/L		99
20) 1,1-Dichloroethane	4.544	63	4472	1.12	ug/L		94
21) Acrylonitrile	4.611	53	1452	1.01	ug/L		95
22) Ethyl-tert-butyl ether...	4.848	59	1635	0.25	ug/L		94
23) c-1,2-Dichloroethene	5.098	61	3238	1.04	ug/L		98
24) 2,2-Dichloropropane	5.207	77	3813	1.20	ug/L		100
25) Bromochloromethane	5.292	49	2205	1.14	ug/L		82
26) Chloroform	5.384	83	4281	1.09	ug/L		97
27) Carbon Tetrachloride	5.524	117	2030	0.76	ug/L		89
28) Tetrahydrofuran	5.566	42	1776	1.26	ug/L		97
29) 1,1,1-Trichloroethane	5.584	97	3615	1.03	ug/L		94
31) 1,1-Dichloropropene	5.712	75	3053	0.97	ug/L		98
32) 2-Butanone (MEK)	5.700	43	4400	2.23	ug/L		95
33) Benzene	5.968	78	10506	1.07	ug/L		97
34) tert-Amyl methyl ether...	6.114	73	1777	0.28	ug/L		97
35) 1,2-Dichloroethane (EDC)	6.175	62	3627	1.13	ug/L		94
36) iso-Butyl Alcohol	6.260	43	6227	27.77	ug/L		89
38) Trichloroethene (TCE)	6.582	130	2706	1.10	ug/L		85
39) tert-Amyl ethyl ether ...	6.844	59	2528	0.51	ug/L	#	73
40) Dibromomethane	7.020	93	1448	1.00	ug/L		83
41) 1,2-Dichloropropane	7.136	63	2577	1.05	ug/L		85
42) Bromodichloromethane	7.215	83	2348	0.86	ug/L		82
44) c-1,3-Dichloropropene	7.908	75	3213	0.97	ug/L		94
46) Toluene	8.188	91	10806	1.10	ug/L		98
47) Tetrachloroethene (PCE)	8.638	166	2164	1.02	ug/L		92
48) 4-Methyl-2-Pentanone (...	8.626	43	5344	1.70	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041407.D
Acq On : 14 Apr 2020 19:52
Operator : tb
Sample : 0D14058-CAL4
Misc : 1X 1ppb 5mL DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 13:04:35 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	2954	0.86	ug/L	90
50) 1,1,2-Trichloroethane	8.845	97	2240	1.01	ug/L	96
51) Dibromochloromethane	9.028	129	1391	0.76	ug/L	88
52) 1,3-Dichloropropane	9.125	76	3957	1.01	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.271	107	2095	0.96	ug/L	96
54) 2-Hexanone	9.508	43	3231	1.49	ug/L	85
55) Chlorobenzene	9.794	112	6540	1.09	ug/L	93
56) Ethylbenzene	9.825	91	10037	0.99	ug/L	95
57) 1,1,1,2-Tetrachloroethane	9.855	131	1887	0.93	ug/L	80
58) m,p-Xylenes (2)	9.965	91	13324	1.78	ug/L	99
59) o-Xylene	10.348	91	6463	0.90	ug/L	93
60) Styrene	10.390	104	3638	0.72	ug/L	99
61) Bromoform	10.409	173	792	0.66	ug/L	87
62) Isopropylbenzene	10.622	105	7312	0.83	ug/L	95
65) Bromobenzene	10.938	156	2278	1.07	ug/L #	65
66) n-Propylbenzene	10.968	91	9842	0.96	ug/L	94
67) 1,1,2,2-Tetrachloroethane	11.023	83	2578	1.01	ug/L	88
68) 2-Chlorotoluene	11.090	126	1836	0.90	ug/L #	70
69) 1,3,5-Trimethylbenzene	11.127	105	6159	0.87	ug/L	91
70) 1,2,3-Trichloropropane	11.120	110	969	1.00	ug/L	97
71) t-1,4-Dichloro-2-butene	11.163	88	317	0.87	ug/L #	59
72) 4-Chlorotoluene	11.224	91	5874	0.95	ug/L	89
73) tert-Butylbenzene	11.382	91	3344	0.85	ug/L	82
74) 1,2,4-Trimethylbenzene	11.437	105	5848	0.82	ug/L	95
75) sec-Butylbenzene	11.522	105	7387	0.86	ug/L	96
76) 4-Isopropyltoluene	11.631	119	5632	0.81	ug/L	99
77) 1,3-Dichlorobenzene	11.686	146	4089	1.08	ug/L	98
78) 1,4-Dichlorobenzene	11.753	146	4453	1.18	ug/L	90
79) n-Butylbenzene	11.948	91	6102	0.97	ug/L	93
80) 1,2-Dichlorobenzene	12.070	146	3674	1.06	ug/L	97
81) 1,2-Dibromo-3-Chloropr...	12.672	157	485	0.99	ug/L #	77
82) Hexachlorobutadiene	13.189	223	575	1.10	ug/L #	75
83) 1,2,4-Trichlorobenzene	13.213	180	2117	0.97	ug/L	96
84) Naphthalene	13.487	128	6636	0.88	ug/L	99
85) 1,2,3-Trichlorobenzene	13.645	180	2040	0.97	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041407.D
Acq On : 14 Apr 2020 19:52
Operator : tb
Sample : 0D14058-CAL4
Misc : 1X 1ppb 5mL DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 12:39:58 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	101650	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	273138	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	116028	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	88484	50.18	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	316835	50.28	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	377021	51.04	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	89056	49.71	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	2198	1.19	ug/L		92
3) Chloromethane	1.880	50	6544	2.23	ug/L		98
4) Vinyl Chloride	1.983	62	2731	1.38	ug/L		95
5) Bromomethane	2.324	96	6310	5.68	ug/L		98
6) Chloroethane	2.439	64	659	1.30	ug/L	#	1
7) Trichlorofluoromethane	2.573	101	583	1.00	ug/L		94
8) Ethanol	3.273	45	6877	117.60	ug/L		88
9) 1,1-Dichloroethene	3.114	61	2892	1.15	ug/L		94
10) Carbon Disulfide	3.127	76	4426	1.01	ug/L		86
11) Freon 113	3.163	101	1870	0.97	ug/L		99
12) Iodomethane	3.260	142	412	1.24	ug/L	#	47
13) Methylene Chloride	3.747	84	5044	2.41	ug/L		97
14) Acetone	3.845	43	4577	3.80	ug/L		93
15) t-1,2-Dichloroethene	3.918	61	3570	1.09	ug/L		98
16) n-Hexane	4.003	86	523	1.12	ug/L	#	81
17) Methyl-tert-butyl-ether	4.082	73	7453	1.03	ug/L		95
18) tert-Butanol (TBA)	4.246	59	42254	71.45	ug/L	#	99
19) Diisopropyl ether (DIPE)	4.483	45	1977	0.27	ug/L		99
20) 1,1-Dichloroethane	4.544	63	4472	1.12	ug/L		94
21) Acrylonitrile	4.611	53	1452	1.01	ug/L		95
22) Ethyl-tert-butyl ether...	4.848	59	1635	0.25	ug/L		94
23) c-1,2-Dichloroethene	5.098	61	3238	1.04	ug/L		98
24) 2,2-Dichloropropane	5.207	77	3813	1.20	ug/L		100
25) Bromochloromethane	5.292	49	2205	1.14	ug/L		82
26) Chloroform	5.384	83	4281	1.09	ug/L		97
27) Carbon Tetrachloride	5.524	117	2030	0.76	ug/L		89
28) Tetrahydrofuran	5.566	42	1776	1.26	ug/L		97
29) 1,1,1-Trichloroethane	5.584	97	3615	1.03	ug/L		94
31) 1,1-Dichloropropene	5.712	75	3053	0.97	ug/L		98
32) 2-Butanone (MEK)	5.700	43	4400	2.23	ug/L		95
33) Benzene	5.968	78	10506	1.07	ug/L		97
34) tert-Amyl methyl ether...	6.114	73	1777	0.28	ug/L		97
35) 1,2-Dichloroethane (EDC)	6.175	62	3627	1.13	ug/L		94
36) iso-Butyl Alcohol	6.260	43	6227	27.77	ug/L		89
38) Trichloroethene (TCE)	6.582	130	2706	1.10	ug/L		85
39) tert-Amyl ethyl ether ...	6.844	59	2528	0.51	ug/L	#	73
40) Dibromomethane	7.020	93	1448	1.00	ug/L		83
41) 1,2-Dichloropropane	7.136	63	2577	1.05	ug/L		85
42) Bromodichloromethane	7.215	83	2348	0.86	ug/L		82
44) c-1,3-Dichloropropene	7.908	75	3213	0.97	ug/L		94
46) Toluene	8.188	91	10806	1.10	ug/L		98
47) Tetrachloroethene (PCE)	8.638	166	2164	1.02	ug/L		92
48) 4-Methyl-2-Pentanone (	8.626	43	5344	1.00	ug/L		94

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041407.D
Acq On : 14 Apr 2020 19:52
Operator : tb
Sample : 0D14058-CAL4
Misc : 1X 1ppb 5mL DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 12:39:58 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

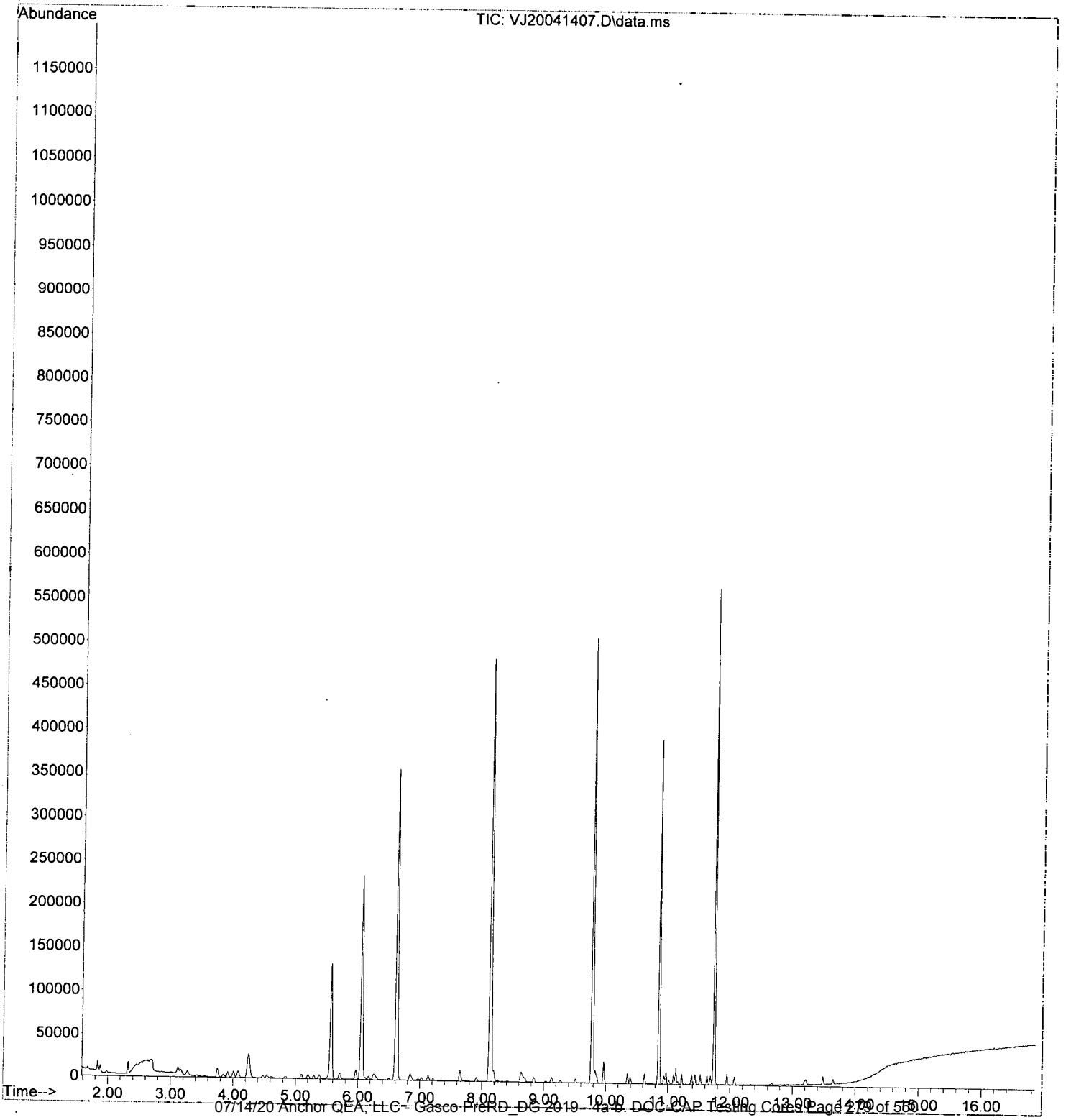
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	2954	0.86	ug/L		90
50) 1,1,2-Trichloroethane	8.845	97	2240	1.01	ug/L		96
51) Dibromochloromethane	9.028	129	1391	0.76	ug/L		88
52) 1,3-Dichloropropane	9.125	76	3957	1.01	ug/L		99
53) 1,2-Dibromoethane (EDB)	9.271	107	2095	0.96	ug/L		96
54) 2-Hexanone	9.508	43	3231	1.49	ug/L		85
55) Chlorobenzene	9.794	112	6540	1.09	ug/L		93
56) Ethylbenzene	9.825	91	10037	0.99	ug/L		95
57) 1,1,1,2-Tetrachloroethane	9.855	131	1887	0.93	ug/L		80
58) m,p-Xylenes (2)	9.965	91	13324	1.78	ug/L		99
59) o-Xylene	10.348	91	6463	0.90	ug/L		93
60) Styrene	10.390	104	3638	0.72	ug/L		99
61) Bromoform	10.409	173	792	0.66	ug/L		87
62) Isopropylbenzene	10.622	105	7312	0.83	ug/L		95
65) Bromobenzene	10.938	156	2278	1.07	ug/L	#	65
66) n-Propylbenzene	10.968	91	9842	0.96	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.023	83	2578	1.01	ug/L		88
68) 2-Chlorotoluene	11.090	126	1836	0.90	ug/L	#	70
69) 1,3,5-Trimethylbenzene	11.127	105	6159	0.87	ug/L		91
70) 1,2,3-Trichloropropane	11.120	110	969	1.00	ug/L		97
71) t-1,4-Dichloro-2-butene	11.163	88	317	0.87	ug/L	#	59
72) 4-Chlorotoluene	11.224	91	5874	0.95	ug/L		89
73) tert-Butylbenzene	11.382	91	3344	0.85	ug/L		82
74) 1,2,4-Trimethylbenzene	11.437	105	5848	0.82	ug/L		95
75) sec-Butylbenzene	11.522	105	7387	0.86	ug/L		96
76) 4-Isopropyltoluene	11.631	119	5632	0.81	ug/L		99
77) 1,3-Dichlorobenzene	11.686	146	4089	1.08	ug/L		98
78) 1,4-Dichlorobenzene	11.753	146	4453	1.18	ug/L		90
79) n-Butylbenzene	11.948	91	6102	0.97	ug/L		93
80) 1,2-Dichlorobenzene	12.070	146	3674	1.06	ug/L		97
81) 1,2-Dibromo-3-Chloropr...	12.672	157	485	0.99	ug/L	#	77
82) Hexachlorobutadiene	13.189	223	575	1.10	ug/L	#	75
83) 1,2,4-Trichlorobenzene	13.213	180	2117	0.97	ug/L		96
84) Naphthalene	13.487	128	6636	0.88	ug/L		99
85) 1,2,3-Trichlorobenzene	13.645	180	2040	0.97	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041407.D
Acq On : 14 Apr 2020 19:52
Operator : tb
Sample : 0D14058-CAL4
Misc : 1X 1ppb 5mL DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 13:04:35 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041408.D
Acq On : 14 Apr 2020 20:19
Operator : tb
Sample : 0D14058-CAL5
Misc : 1X 2ppb 5mL DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 13:07:00 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	108540	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	299437	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	133278	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	99166	52.67	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	341820	50.81	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	408232	50.41	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	100257	48.72	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.673	85	4500	2.28	ug/L		93
3) Chloromethane	1.873	50	8703	2.77	ug/L		97
4) Vinyl Chloride	1.965	62	4573	2.16	ug/L		93
5) Bromomethane	2.317	96	6021	5.07	ug/L		98
6) Chloroethane	2.457	64	1499	2.77	ug/L	#	1
7) Trichlorofluoromethane	2.591	101	1663	2.68	ug/L		73
8) Ethanol	3.327	45	9579	153.41	ug/L		82
9) 1,1-Dichloroethene	3.120	61	7512	2.80	ug/L		92
10) Carbon Disulfide	3.139	76	11415	2.43	ug/L		97
11) Freon 113	3.175	101	4355	2.13	ug/L		88
12) Iodomethane	0.000		0	N.D.	d		
13) Methylene Chloride	3.753	84	7445	3.34	ug/L		99
14) Acetone	3.838	43	7107	5.52	ug/L		89
15) t-1,2-Dichloroethene	3.917	61	7484	2.14	ug/L		97
16) n-Hexane	4.015	86	1019	2.05	ug/L	#	87
17) Methyl-tert-butyl-ether	4.076	73	15596	2.01	ug/L		96
18) tert-Butanol (TBA)	4.295	59	72159m	114.27	ug/L		
19) Diisopropyl ether (DIPE)	4.471	45	4196	0.53	ug/L		93
20) 1,1-Dichloroethane	4.544	63	9552	2.24	ug/L		96
21) Acrylonitrile	4.605	53	2675	1.75	ug/L		91
22) Ethyl-tert-butyl ether...	4.830	59	3507	0.50	ug/L		88
23) c-1,2-Dichloroethene	5.098	61	7005	2.10	ug/L		99
24) 2,2-Dichloropropane	5.207	77	7369	2.16	ug/L		96
25) Bromochloromethane	5.292	49	4475	2.17	ug/L		84
26) Chloroform	5.377	83	9162	2.17	ug/L		96
27) Carbon Tetrachloride	5.517	117	5499	1.93	ug/L		96
28) Tetrahydrofuran	5.554	42	2876	1.92	ug/L		86
29) 1,1,1-Trichloroethane	5.584	97	8123	2.17	ug/L		99
31) 1,1-Dichloropropene	5.712	75	6529	1.95	ug/L		94
32) 2-Butanone (MEK)	5.700	43	7931	3.77	ug/L		96
33) Benzene	5.968	78	21837	2.09	ug/L		99
34) tert-Amyl methyl ether...	6.120	73	3643	0.55	ug/L		95
35) 1,2-Dichloroethane (EDC)	6.168	62	7505	2.19	ug/L		99
36) iso-Butyl Alcohol	6.278	43	10790	45.06	ug/L		87
38) Trichloroethene (TCE)	6.588	130	5544	2.11	ug/L		92
39) tert-Amyl ethyl ether ...	6.850	59	3701	0.69	ug/L		86
40) Dibromomethane	7.026	93	3234	2.10	ug/L		86
41) 1,2-Dichloropropane	7.136	63	5449	2.09	ug/L		93
42) Bromodichloromethane	7.209	83	5632	1.94	ug/L		98
44) c-1,3-Dichloropropene	7.914	75	6680	1.83	ug/L		97
46) Toluene	8.188	91	22184	2.06	ug/L		99
47) Tetrachloroethene (PCE)	8.644	166	4491	1.93	ug/L		92
48) 4-Methyl-2-Pentanone (...	8.632	43	11285	3.28	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041408.D
Acq On : 14 Apr 2020 20:19
Operator : tb
Sample : 0D14058-CAL5
Misc : 1X 2ppb 5mL DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 13:07:00 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	6472	1.71	ug/L	94
50) 1,1,2-Trichloroethane	8.839	97	5046	2.08	ug/L	96
51) Dibromochloromethane	9.034	129	3570	1.77	ug/L	92
52) 1,3-Dichloropropane	9.125	76	8442	1.97	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.265	107	4614	1.93	ug/L	96
54) 2-Hexanone	9.514	43	6736	2.83	ug/L	93
55) Chlorobenzene	9.794	112	13570	2.06	ug/L	92
56) Ethylbenzene	9.831	91	21231	1.91	ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.855	131	3924	1.77	ug/L	93
58) m,p-Xylenes (2)	9.964	91	28830	3.51	ug/L	99
59) o-Xylene	10.348	91	13361	1.70	ug/L	99
60) Styrene	10.396	104	7831	1.41	ug/L	95
61) Bromoform	10.409	173	2124	1.62	ug/L	96
62) Isopropylbenzene	10.621	105	15902	1.65	ug/L	98
65) Bromobenzene	10.938	156	4931	2.01	ug/L	83
66) n-Propylbenzene	10.968	91	21049	1.79	ug/L	94
67) 1,1,2,2-Tetrachloroethane	11.023	83	5694	1.94	ug/L	98
68) 2-Chlorotoluene	11.090	126	4243	1.82	ug/L	94
69) 1,3,5-Trimethylbenzene	11.126	105	13041	1.61	ug/L	91
70) 1,2,3-Trichloropropane	11.126	110	2122	1.91	ug/L	96
71) t-1,4-Dichloro-2-butene	11.163	88	523	1.25	ug/L #	78
72) 4-Chlorotoluene	11.224	91	12657	1.78	ug/L	95
73) tert-Butylbenzene	11.382	91	7552	1.68	ug/L	97
74) 1,2,4-Trimethylbenzene	11.437	105	12963	1.58	ug/L	98
75) sec-Butylbenzene	11.522	105	15825	1.61	ug/L	95
76) 4-Isopropyltoluene	11.631	119	12292	1.54	ug/L	95
77) 1,3-Dichlorobenzene	11.686	146	8299	1.90	ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	9122	2.10	ug/L	92
79) n-Butylbenzene	11.948	91	12152	1.68	ug/L	96
80) 1,2-Dichlorobenzene	12.069	146	7878	1.99	ug/L	98
81) 1,2-Dibromo-3-Chloropr...	12.672	157	1007	1.78	ug/L #	48
82) Hexachlorobutadiene	13.189	223	1205	2.01	ug/L	92
83) 1,2,4-Trichlorobenzene	13.213	180	4502	1.80	ug/L	97
84) Naphthalene	13.487	128	13828	1.59	ug/L	99
85) 1,2,3-Trichlorobenzene	13.645	180	4346	1.81	ug/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041408.D
Acq On : 14 Apr 2020 20:19
Operator : tb
Sample : 0D14058-CAL5
Misc : 1X 2ppb 5mL DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 12:40:01 2020
Quant Method : C:\msdchem\1\methods\~~VJ200414S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	108540	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	299437	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	133278	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	99166	52.67	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	341820	50.81	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	408232	50.41	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	100257	48.72	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.673	85	4500	2.28	ug/L		93
3) Chloromethane	1.873	50	8703	2.77	ug/L		97
4) Vinyl Chloride	1.965	62	4573	2.16	ug/L		93
5) Bromomethane	2.317	96	6021	5.07	ug/L		98
6) Chloroethane	2.457	64	1499	2.77	ug/L	#	1
7) Trichlorofluoromethane	2.591	101	1663	2.68	ug/L		73
8) Ethanol	3.327	45	9579	153.41	ug/L		82
9) 1,1-Dichloroethene	3.120	61	7512	2.80	ug/L		92
10) Carbon Disulfide	3.139	76	11415	2.43	ug/L		97
11) Freon 113	3.175	101	4355	2.13	ug/L		88
12) Iodomethane	3.273	142	411	1.16	ug/L	#	47
13) Methylene Chloride	3.753	84	7445	3.34	ug/L		99
14) Acetone	3.838	43	7107	5.52	ug/L		89
15) t-1,2-Dichloroethene	3.917	61	7484	2.14	ug/L		97
16) n-Hexane	4.015	86	1019	2.05	ug/L	#	87
17) Methyl-tert-butyl-ether	4.076	73	15596	2.01	ug/L		96
18) tert-Butanol (TBA)	4.295	59	~~44055~~	~~69.77~~	~~ug/L~~	~~#~~	~~99~~ MF
19) Diisopropyl ether (DIPE)	4.471	45	4196	0.53	ug/L		93
20) 1,1-Dichloroethane	4.544	63	9552	2.24	ug/L		96
21) Acrylonitrile	4.605	53	2675	1.75	ug/L		91
22) Ethyl-tert-butyl ether...	4.830	59	3507	0.50	ug/L		88
23) c-1,2-Dichloroethene	5.098	61	7005	2.10	ug/L		99
24) 2,2-Dichloropropane	5.207	77	7369	2.16	ug/L		96
25) Bromochloromethane	5.292	49	4475	2.17	ug/L		84
26) Chloroform	5.377	83	9162	2.17	ug/L		96
27) Carbon Tetrachloride	5.517	117	5499	1.93	ug/L		96
28) Tetrahydrofuran	5.554	42	2876	1.92	ug/L		86
29) 1,1,1-Trichloroethane	5.584	97	8123	2.17	ug/L		99
31) 1,1-Dichloropropene	5.712	75	6529	1.95	ug/L		94
32) 2-Butanone (MEK)	5.700	43	7931	3.77	ug/L		96
33) Benzene	5.968	78	21837	2.09	ug/L		99
34) tert-Amyl methyl ether...	6.120	73	3643	0.55	ug/L		95
35) 1,2-Dichloroethane (EDC)	6.168	62	7505	2.19	ug/L		99
36) iso-Butyl Alcohol	6.278	43	10790	45.06	ug/L		87
38) Trichloroethene (TCE)	6.588	130	5544	2.11	ug/L		92
39) tert-Amyl ethyl ether ...	6.850	59	3701	0.69	ug/L		86
40) Dibromomethane	7.026	93	3234	2.10	ug/L		86
41) 1,2-Dichloropropane	7.136	63	5449	2.09	ug/L		93
42) Bromodichloromethane	7.209	83	5632	1.94	ug/L		98
44) c-1,3-Dichloropropene	7.914	75	6680	1.83	ug/L		97
46) Toluene	8.188	91	22184	2.06	ug/L		99
47) Tetrachloroethene (PCE)	8.644	166	4491	1.93	ug/L		92
48) 4-Methyl-2-Pentanone (	8.632	43	11285	3.28	ug/L		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041408.D
Acq On : 14 Apr 2020 20:19
Operator : tb
Sample : 0D14058-CAL5
Misc : 1X 2ppb 5mL DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:40:01 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

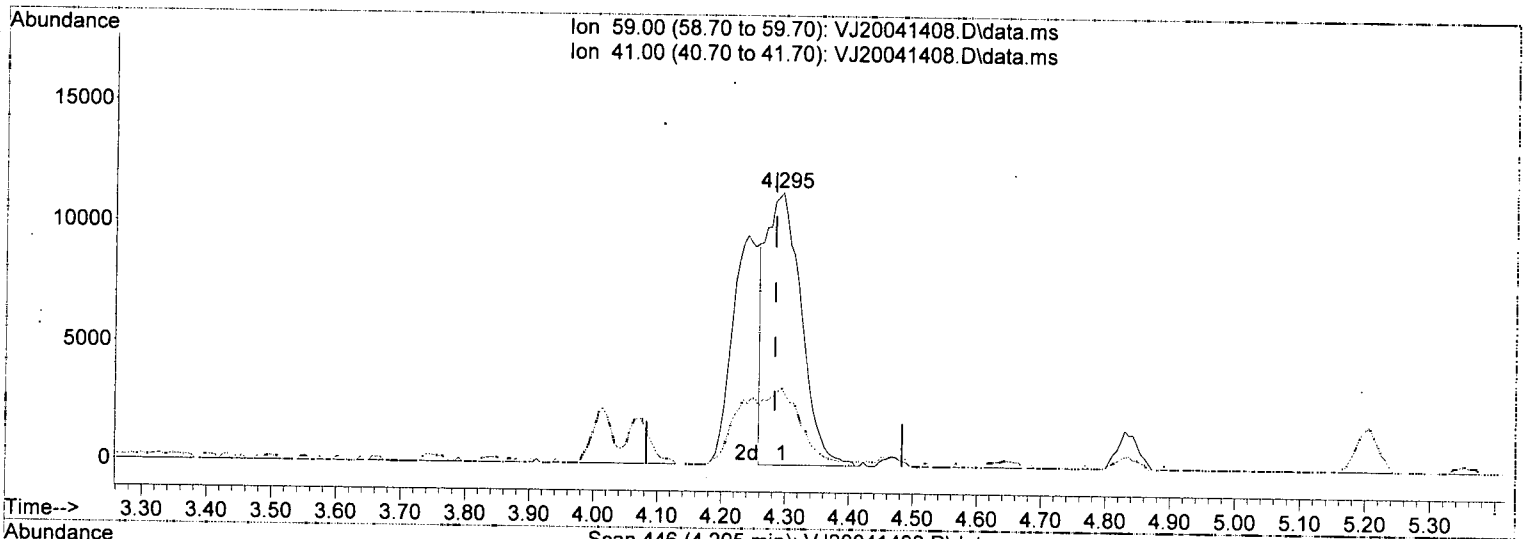
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	6472	1.71 ug/L	94
50) 1,1,2-Trichloroethane	8.839	97	5046	2.08 ug/L	96
51) Dibromochloromethane	9.034	129	3570	1.77 ug/L	92
52) 1,3-Dichloropropane	9.125	76	8442	1.97 ug/L	99
53) 1,2-Dibromoethane (EDB)	9.265	107	4614	1.93 ug/L	96
54) 2-Hexanone	9.514	43	6736	2.83 ug/L	93
55) Chlorobenzene	9.794	112	13570	2.06 ug/L	92
56) Ethylbenzene	9.831	91	21231	1.91 ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.855	131	3924	1.77 ug/L	93
58) m,p-Xylenes (2)	9.964	91	28830	3.51 ug/L	99
59) o-Xylene	10.348	91	13361	1.70 ug/L	99
60) Styrene	10.396	104	7831	1.41 ug/L	95
61) Bromoform	10.409	173	2124	1.62 ug/L	96
62) Isopropylbenzene	10.621	105	15902	1.65 ug/L	98
65) Bromobenzene	10.938	156	4931	2.01 ug/L	83
66) n-Propylbenzene	10.968	91	21049	1.79 ug/L	94
67) 1,1,2,2-Tetrachloroethane	11.023	83	5694	1.94 ug/L	98
68) 2-Chlorotoluene	11.090	126	4243	1.82 ug/L	94
69) 1,3,5-Trimethylbenzene	11.126	105	13041	1.61 ug/L	91
70) 1,2,3-Trichloropropane	11.126	110	2122	1.91 ug/L	96
71) t-1,4-Dichloro-2-butene	11.163	88	523	1.25 ug/L #	78
72) 4-Chlorotoluene	11.224	91	12657	1.78 ug/L	95
73) tert-Butylbenzene	11.382	91	7552	1.68 ug/L	97
74) 1,2,4-Trimethylbenzene	11.437	105	12963	1.58 ug/L	98
75) sec-Butylbenzene	11.522	105	15825	1.61 ug/L	95
76) 4-Isopropyltoluene	11.631	119	12292	1.54 ug/L	95
77) 1,3-Dichlorobenzene	11.686	146	8299	1.90 ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	9122	2.10 ug/L	92
79) n-Butylbenzene	11.948	91	12152	1.68 ug/L	96
80) 1,2-Dichlorobenzene	12.069	146	7878	1.99 ug/L	98
81) 1,2-Dibromo-3-Chloropr...	12.672	157	1007	1.78 ug/L #	48
82) Hexachlorobutadiene	13.189	223	1205	2.01 ug/L	92
83) 1,2,4-Trichlorobenzene	13.213	180	4502	1.80 ug/L	97
84) Naphthalene	13.487	128	13828	1.59 ug/L	99
85) 1,2,3-Trichlorobenzene	13.645	180	4346	1.81 ug/L	91

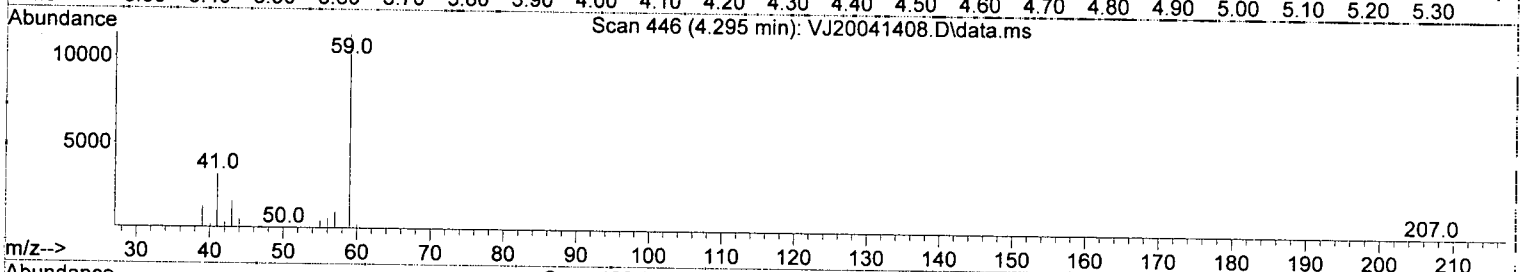
(#) = qualifier out of range (m) = manual integration (+) = signals summed

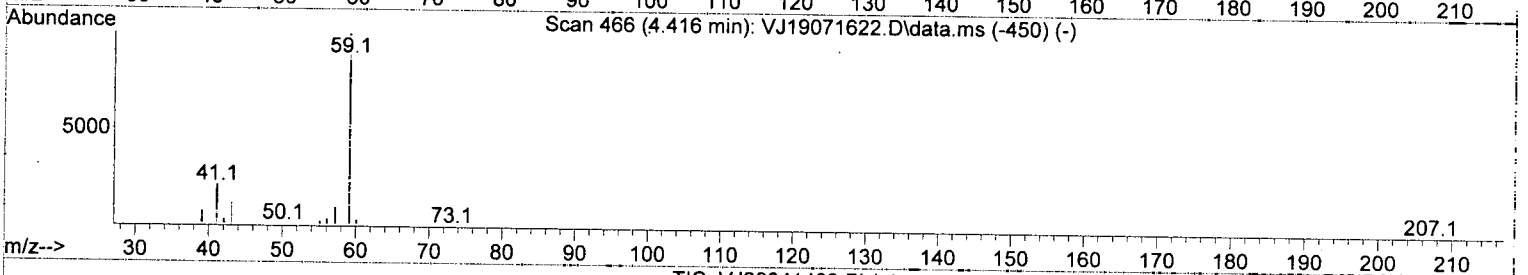
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041408.D
Acq On : 14 Apr 2020 20:19
Operator : tb
Sample : 0D14058-CAL5
Misc : 1X 2ppb 5mL DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:40:01 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration







TIC: VJ20041408.D\data.ms

(18) tert-Butanol (TBA)

4.295min (+ 0.012) 69.77 ug/L

response 44055

Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	28.28#
0.00	0.00	0.00
0.00	0.00	0.00

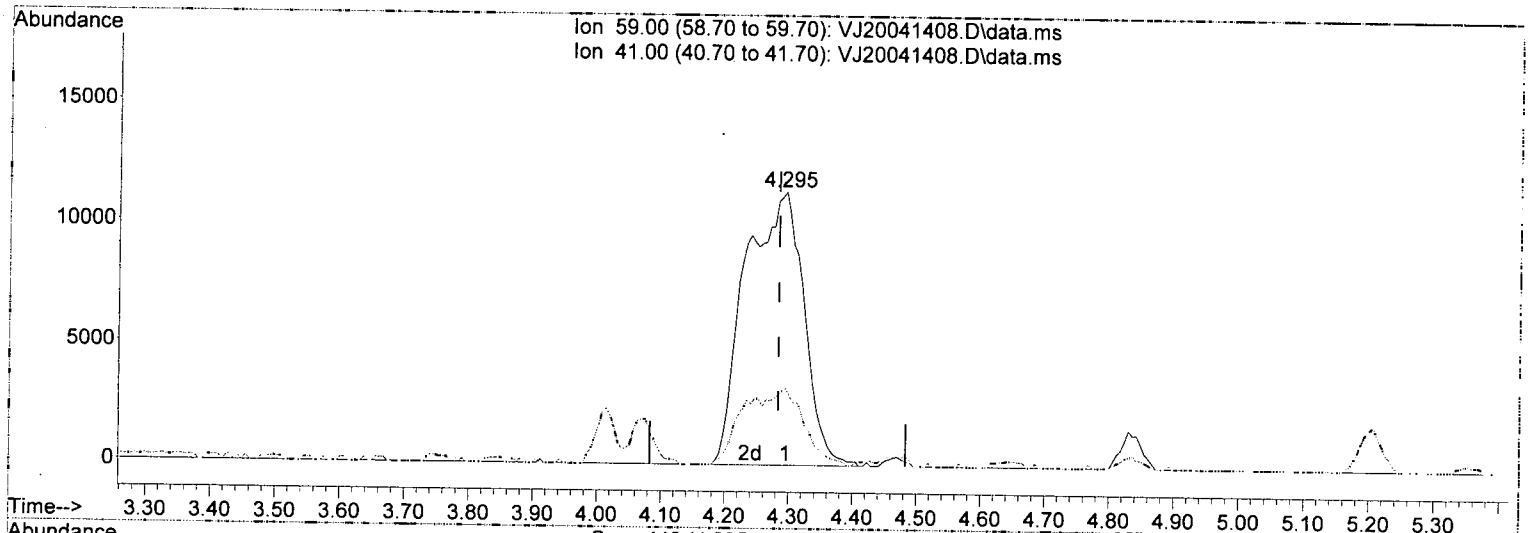
MI

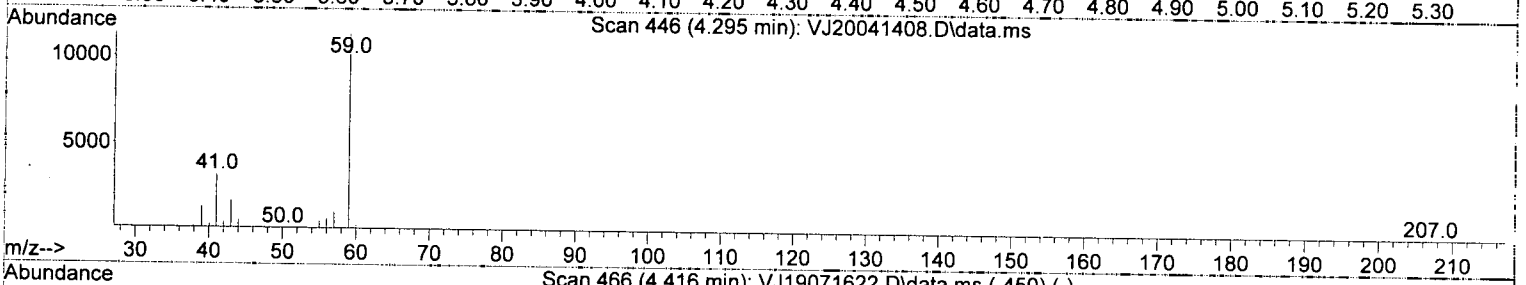
VJ200414S.M Wed Apr 15 13:06:54 2020

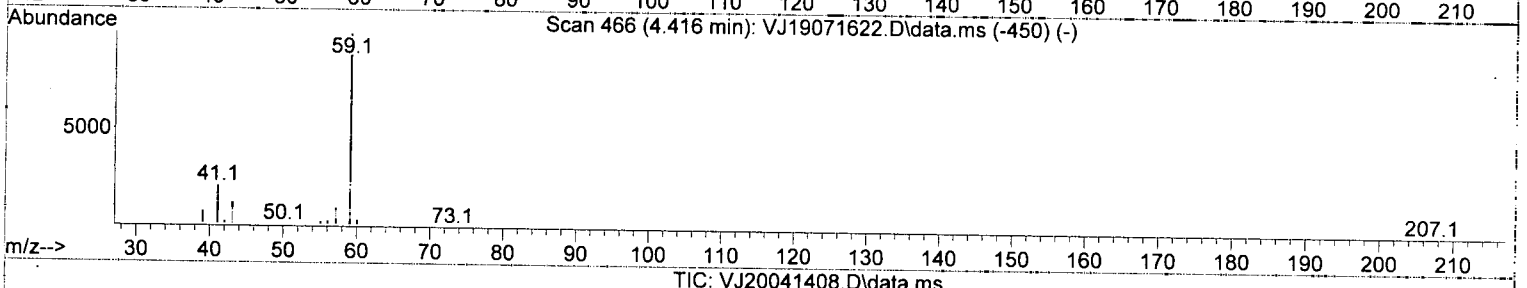
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041408.D
Acq On : 14 Apr 2020 20:19
Operator : tb
Sample : 0D14058-CAL5
Misc : 1X 2ppb 5mL DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:40:01 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration







TIC: VJ20041408.D\data.ms

(18) tert-Butanol (TBA)

4.295min (+ 0.012) 114.27 ug/L m

response 72159

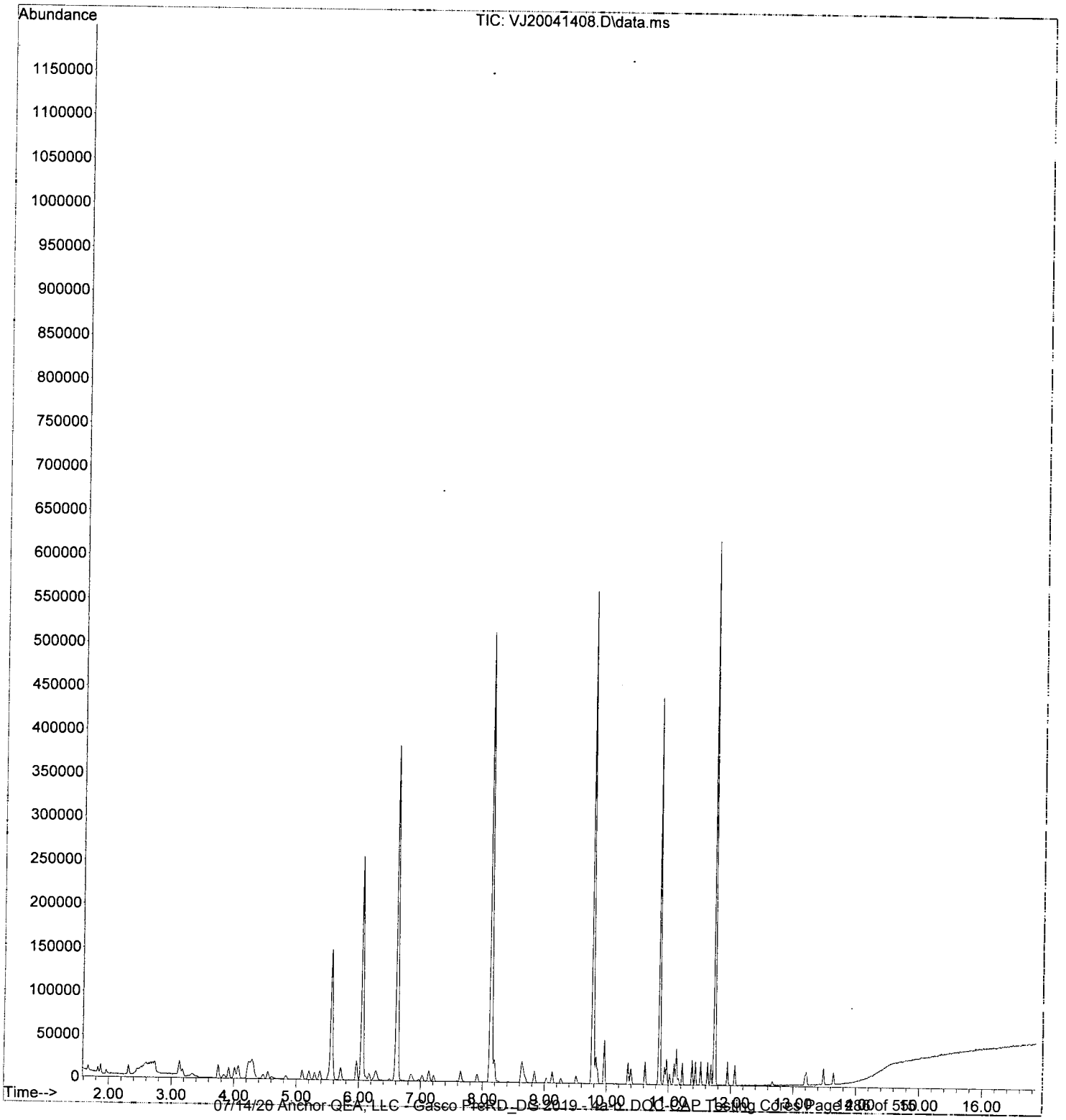
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	28.28#
0.00	0.00	0.00
0.00	0.00	0.00

4/15/20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041408.D
Acq On : 14 Apr 2020 20:19
Operator : tb
Sample : 0D14058-CAL5
Misc : 1X 2ppb 5mL DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 13:07:00 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 13:08:39 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	114526	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	308854	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	133791	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	101899	51.29	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.618	114	356364	50.20	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	421290	50.44	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	102646	49.69	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	10284	4.93	ug/L		99
3) Chloromethane	1.885	50	18921	5.71	ug/L		99
4) Vinyl Chloride	1.977	62	11203	5.01	ug/L		96
5) Bromomethane	2.329	96	9703	7.75	ug/L		99
6) Chloroethane	2.469	64	3845	6.74	ug/L		74
7) Trichlorofluoromethane	2.609	101	4915	7.51	ug/L		96
8) Ethanol	3.406	45	21436m	325.35	ug/L		
9) 1,1-Dichloroethene	3.133	61	18360	6.48	ug/L		93
10) Carbon Disulfide	3.151	76	27914	5.64	ug/L		98
11) Freon 113	3.187	101	10399	4.81	ug/L		89
12) Iodomethane	3.279	142	1216	3.25	ug/L		87
13) Methylene Chloride	3.759	84	14765	6.27	ug/L		96
14) Acetone	3.856	43	12899	9.50	ug/L		99
15) t-1,2-Dichloroethene	3.923	61	18633	5.04	ug/L		92
16) n-Hexane	4.027	86	2389	4.56	ug/L	#	92
17) Methyl-tert-butyl-ether	4.075	73	39384	4.82	ug/L		100
18) tert-Butanol (TBA)	4.319	59	182697	274.20	ug/L	#	94
19) Diisopropyl ether (DIPE)	4.471	45	10462	1.26	ug/L		96
20) 1,1-Dichloroethane	4.550	63	23066	5.14	ug/L		98
21) Acrylonitrile	4.611	53	6864	4.25	ug/L		96
22) Ethyl-tert-butyl ether...	4.836	59	9041	1.22	ug/L		90
23) c-1,2-Dichloroethene	5.104	61	17746	5.05	ug/L		98
24) 2,2-Dichloropropane	5.213	77	18033	5.02	ug/L		98
25) Bromochloromethane	5.298	49	11098	5.09	ug/L		87
26) Chloroform	5.390	83	22905	5.15	ug/L		97
27) Carbon Tetrachloride	5.523	117	14055	4.66	ug/L		95
28) Tetrahydrofuran	5.560	42	6991	4.41	ug/L		95
29) 1,1,1-Trichloroethane	5.590	97	19309	4.89	ug/L		95
31) 1,1-Dichloropropene	5.718	75	16156	4.58	ug/L		97
32) 2-Butanone (MEK)	5.706	43	19682	8.87	ug/L		97
33) Benzene	5.974	78	55437	5.02	ug/L		99
34) tert-Amyl methyl ether...	6.120	73	8949	1.27	ug/L		99
35) 1,2-Dichloroethane (EDC)	6.174	62	18274	5.04	ug/L		99
36) iso-Butyl Alcohol	6.290	43	26792	106.04	ug/L		89
38) Trichloroethene (TCE)	6.588	130	13604	4.90	ug/L		94
39) tert-Amyl ethyl ether ...	6.868	59	7553	1.34	ug/L		94
40) Dibromomethane	7.026	93	8101	4.98	ug/L		84
41) 1,2-Dichloropropane	7.136	63	13699	4.97	ug/L		97
42) Bromodichloromethane	7.215	83	14621	4.76	ug/L		98
44) c-1,3-Dichloropropene	7.914	75	17312	4.61	ug/L		97
46) Toluene	8.194	91	56606	5.09	ug/L		98
47) Tetrachloroethene (PCE)	8.644	166	11972	4.99	ug/L		95
48) 4-Methyl-2-Pentanone (	8.632	43	30656	8.83	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 13:08:39 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.669	75	17464	4.47	ug/L	95
50) 1,1,2-Trichloroethane	8.839	97	12503	4.99	ug/L	96
51) Dibromochloromethane	9.034	129	9512	4.58	ug/L	97
52) 1,3-Dichloropropane	9.125	76	22068	4.99	ug/L	98
53) 1,2-Dibromoethane (EDB)	9.271	107	11584	4.69	ug/L	95
54) 2-Hexanone	9.514	43	19016	7.75	ug/L	99
55) Chlorobenzene	9.794	112	34968	5.14	ug/L	99
56) Ethylbenzene	9.824	91	55402	4.83	ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.855	131	10761	4.71	ug/L	98
58) m,p-Xylenes (2)	9.964	91	78200	9.22	ug/L	99
59) o-Xylene	10.348	91	36670	4.52	ug/L	94
60) Styrene	10.396	104	22772	3.99	ug/L	98
61) Bromoform	10.408	173	5845	4.31	ug/L	96
62) Isopropylbenzene	10.621	105	43513	4.38	ug/L	95
65) Bromobenzene	10.938	156	12437	5.04	ug/L #	83
66) n-Propylbenzene	10.968	91	54469	4.62	ug/L	96
67) 1,1,2,2-Tetrachloroethane	11.023	83	14508	4.93	ug/L	98
68) 2-Chlorotoluene	11.090	126	11078	4.73	ug/L	93
69) 1,3,5-Trimethylbenzene	11.126	105	36416	4.47	ug/L	93
70) 1,2,3-Trichloropropane	11.126	110	5510	4.94	ug/L	98
71) t-1,4-Dichloro-2-butene	11.163	88	1754	4.18	ug/L	94
72) 4-Chlorotoluene	11.224	91	34236	4.79	ug/L	95
73) tert-Butylbenzene	11.382	91	20097	4.44	ug/L	91
74) 1,2,4-Trimethylbenzene	11.437	105	36582	4.44	ug/L	98
75) sec-Butylbenzene	11.522	105	44468	4.50	ug/L	97
76) 4-Isopropyltoluene	11.631	119	34848	4.36	ug/L	98
77) 1,3-Dichlorobenzene	11.686	146	22132	5.05	ug/L	95
78) 1,4-Dichlorobenzene	11.753	146	22637	5.20	ug/L	96
79) n-Butylbenzene	11.948	91	32474	4.46	ug/L	96
80) 1,2-Dichlorobenzene	12.069	146	20006	5.03	ug/L	96
81) 1,2-Dibromo-3-Chloropr...	12.672	157	2595	4.57	ug/L #	63
82) Hexachlorobutadiene	13.195	223	2990	4.96	ug/L	91
83) 1,2,4-Trichlorobenzene	13.213	180	11508	4.58	ug/L	93
84) Naphthalene	13.487	128	36706	4.20	ug/L	100
85) 1,2,3-Trichlorobenzene	13.645	180	11246	4.66	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:40:04 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

4/15/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	114526	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	308854	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	133791	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	101899	51.29	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.618	114	356364	50.20	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	421290	50.44	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	102646	49.69	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	10284	4.93	ug/L		99
3) Chloromethane	1.885	50	18921	5.71	ug/L		99
4) Vinyl Chloride	1.977	62	11203	5.01	ug/L		96
5) Bromomethane	2.329	96	9703	7.75	ug/L		99
6) Chloroethane	2.469	64	3845	6.74	ug/L		74
7) Trichlorofluoromethane	2.609	101	4915	7.51	ug/L		96
8) Ethanol	3.388	45	11020	167.30	ug/L		92 MI
9) 1,1-Dichloroethene	3.133	61	18360	6.48	ug/L		93
10) Carbon Disulfide	3.151	76	27914	5.64	ug/L		98
11) Freon 113	3.187	101	10399	4.81	ug/L		89
12) Iodomethane	3.279	142	1216	3.25	ug/L		87
13) Methylene Chloride	3.759	84	14765	6.27	ug/L		96
14) Acetone	3.856	43	12899	9.50	ug/L		99
15) t-1,2-Dichloroethene	3.923	61	18633	5.04	ug/L		92
16) n-Hexane	4.027	86	2389	4.56	ug/L	#	92
17) Methyl-tert-butyl-ether	4.075	73	39384	4.82	ug/L		100
18) tert-Butanol (TBA)	4.319	59	182697	274.20	ug/L	#	94
19) Diisopropyl ether (DIPE)	4.471	45	10462	1.26	ug/L		96
20) 1,1-Dichloroethane	4.550	63	23066	5.14	ug/L		98
21) Acrylonitrile	4.611	53	6864	4.25	ug/L		96
22) Ethyl-tert-butyl ether...	4.836	59	9041	1.22	ug/L		90
23) c-1,2-Dichloroethene	5.104	61	17746	5.05	ug/L		98
24) 2,2-Dichloropropane	5.213	77	18033	5.02	ug/L		98
25) Bromochloromethane	5.298	49	11098	5.09	ug/L		87
26) Chloroform	5.390	83	22905	5.15	ug/L		97
27) Carbon Tetrachloride	5.523	117	14055	4.66	ug/L		95
28) Tetrahydrofuran	5.560	42	6991	4.41	ug/L		95
29) 1,1,1-Trichloroethane	5.590	97	19309	4.89	ug/L		95
31) 1,1-Dichloropropene	5.718	75	16156	4.58	ug/L		97
32) 2-Butanone (MEK)	5.706	43	19682	8.87	ug/L		97
33) Benzene	5.974	78	55437	5.02	ug/L		99
34) tert-Amyl methyl ether...	6.120	73	8949	1.27	ug/L		99
35) 1,2-Dichloroethane (EDC)	6.174	62	18274	5.04	ug/L		99
36) iso-Butyl Alcohol	6.290	43	26792	106.04	ug/L		89
38) Trichloroethene (TCE)	6.588	130	13604	4.90	ug/L		94
39) tert-Amyl ethyl ether ...	6.868	59	7553	1.34	ug/L		94
40) Dibromomethane	7.026	93	8101	4.98	ug/L		84
41) 1,2-Dichloropropane	7.136	63	13699	4.97	ug/L		97
42) Bromodichloromethane	7.215	83	14621	4.76	ug/L		98
44) c-1,3-Dichloropropene	7.914	75	17312	4.61	ug/L		97
46) Toluene	8.194	91	56606	5.09	ug/L		98
47) Tetrachloroethene (PCE)	8.644	166	11972	4.99	ug/L		95
48) 4-Methyl-2-Pentanone (	8.632	43	30656	8.63	ug/L		99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:40:04 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

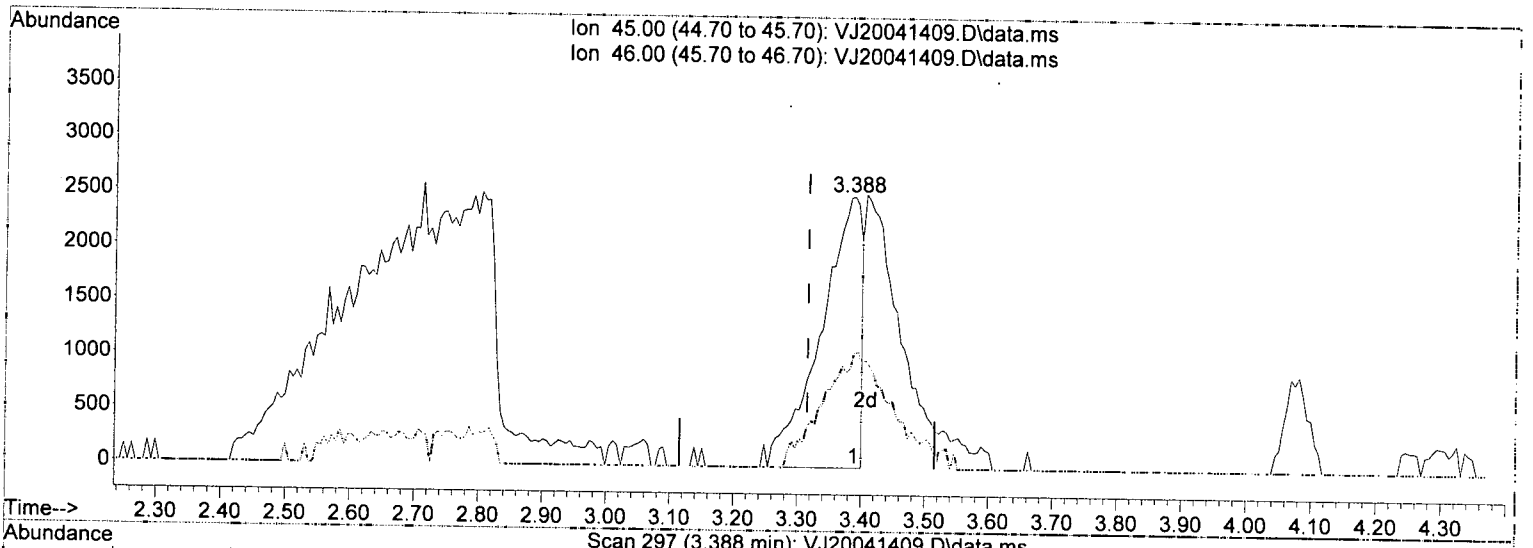
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.669	75	17464	4.47	ug/L	95
50) 1,1,2-Trichloroethane	8.839	97	12503	4.99	ug/L	96
51) Dibromochloromethane	9.034	129	9512	4.58	ug/L	97
52) 1,3-Dichloropropane	9.125	76	22068	4.99	ug/L	98
53) 1,2-Dibromoethane (EDB)	9.271	107	11584	4.69	ug/L	95
54) 2-Hexanone	9.514	43	19016	7.75	ug/L	99
55) Chlorobenzene	9.794	112	34968	5.14	ug/L	99
56) Ethylbenzene	9.824	91	55402	4.83	ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.855	131	10761	4.71	ug/L	98
58) m,p-Xylenes (2)	9.964	91	78200	9.22	ug/L	99
59) o-Xylene	10.348	91	36670	4.52	ug/L	94
60) Styrene	10.396	104	22772	3.99	ug/L	98
61) Bromoform	10.408	173	5845	4.31	ug/L	96
62) Isopropylbenzene	10.621	105	43513	4.38	ug/L	95
65) Bromobenzene	10.938	156	12437	5.04	ug/L #	83
66) n-Propylbenzene	10.968	91	54469	4.62	ug/L	96
67) 1,1,2,2-Tetrachloroethane	11.023	83	14508	4.93	ug/L	98
68) 2-Chlorotoluene	11.090	126	11078	4.73	ug/L	93
69) 1,3,5-Trimethylbenzene	11.126	105	36416	4.47	ug/L	93
70) 1,2,3-Trichloropropane	11.126	110	5510	4.94	ug/L	98
71) t-1,4-Dichloro-2-butene	11.163	88	1754	4.18	ug/L	94
72) 4-Chlorotoluene	11.224	91	34236	4.79	ug/L	95
73) tert-Butylbenzene	11.382	91	20097	4.44	ug/L	91
74) 1,2,4-Trimethylbenzene	11.437	105	36582	4.44	ug/L	98
75) sec-Butylbenzene	11.522	105	44468	4.50	ug/L	97
76) 4-Isopropyltoluene	11.631	119	34848	4.36	ug/L	98
77) 1,3-Dichlorobenzene	11.686	146	22132	5.05	ug/L	95
78) 1,4-Dichlorobenzene	11.753	146	22637	5.20	ug/L	96
79) n-Butylbenzene	11.948	91	32474	4.46	ug/L	96
80) 1,2-Dichlorobenzene	12.069	146	20006	5.03	ug/L	96
81) 1,2-Dibromo-3-Chloropr...	12.672	157	2595	4.57	ug/L #	63
82) Hexachlorobutadiene	13.195	223	2990	4.96	ug/L	91
83) 1,2,4-Trichlorobenzene	13.213	180	11508	4.58	ug/L	93
84) Naphthalene	13.487	128	36706	4.20	ug/L	100
85) 1,2,3-Trichlorobenzene	13.645	180	11246	4.66	ug/L	98

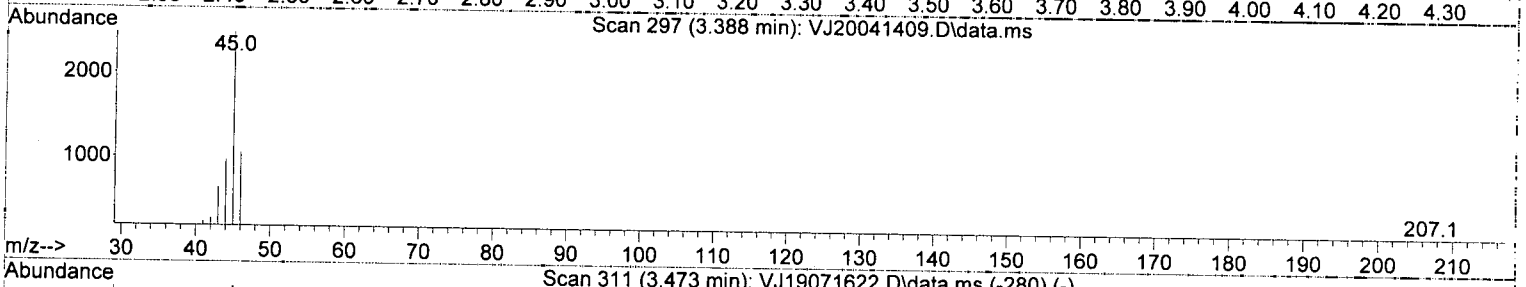
(#) = qualifier out of range (m) = manual integration (+) = signals summed

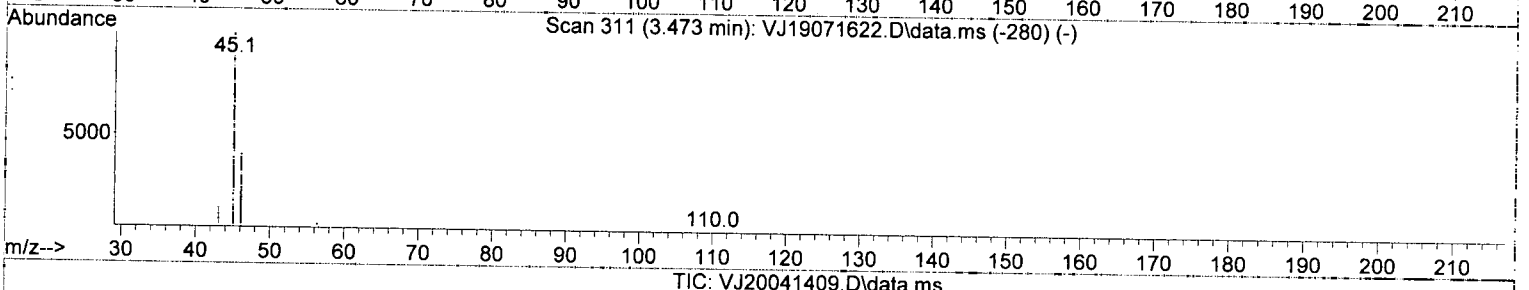
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:40:04 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration







TIC: VJ20041409.D\data.ms

(8) Ethanol

3.388min (+ 0.073) 167.38 ug/L

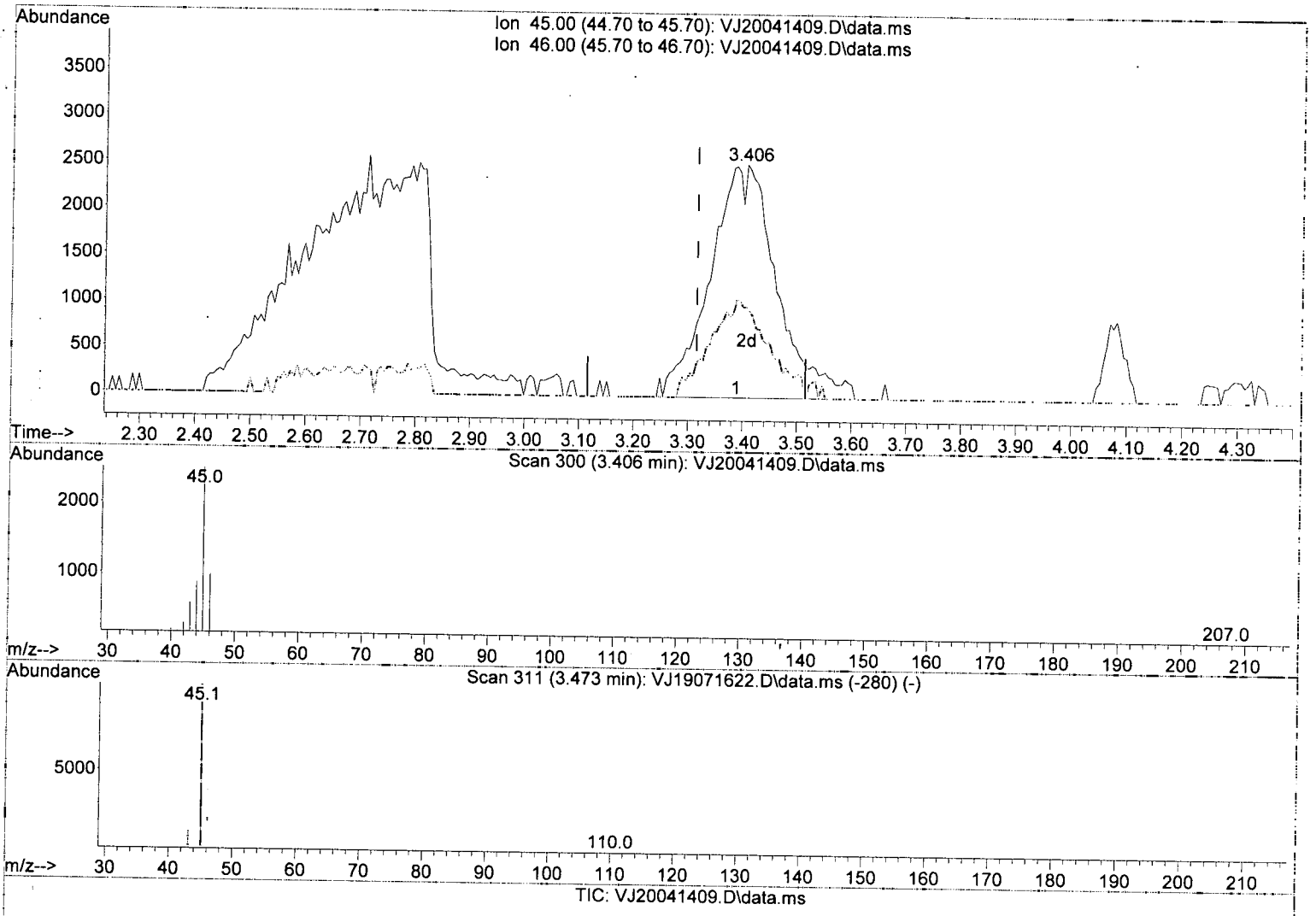
response 11028

Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	42.23
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:40:04 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



TIC: VJ20041409.D\data.ms

(8) Ethanol

3.406min (+ 0.091) 325.35 ug/L m

response 21436

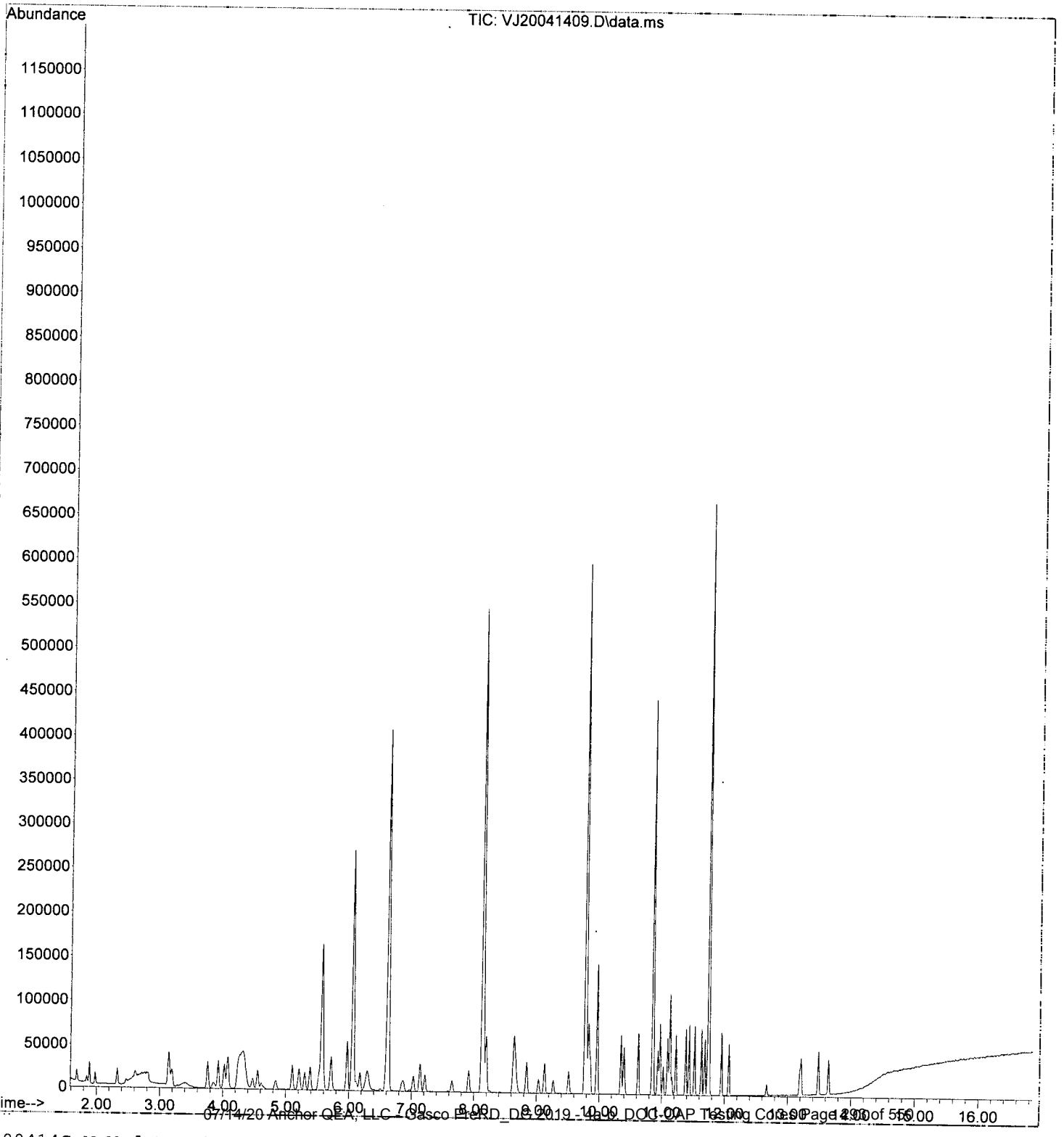
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.27
0.00	0.00	0.00
0.00	0.00	0.00

4/15/20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041409.D
Acq On : 14 Apr 2020 20:46
Operator : tb
Sample : 0D14058-CAL6
Misc : 1X 5ppb 5mL DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 13:08:39 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041410.D
Acq On : 14 Apr 2020 21:13
Operator : tb
Sample : 0D14058-CAL7
Misc : 1X 10ppb 5mL DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 15 12:40:07 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

4/15/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	112952	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	309528	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	136622	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	103004	52.57	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	352107	50.29	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	416754	49.78	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	104997	49.77	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	22545	10.97	ug/L		98
3) Chloromethane	1.886	50	36365	11.13	ug/L		99
4) Vinyl Chloride	1.971	62	24245	10.99	ug/L		98
5) Bromomethane	2.330	96	16117	13.05	ug/L		98
6) Chloroethane	2.457	64	6815	12.11	ug/L		72
7) Trichlorofluoromethane	2.591	101	7818	12.12	ug/L		98
8) Ethanol	3.309	45	36961	568.80	ug/L		92
9) 1,1-Dichloroethene	3.127	61	37467	13.41	ug/L		96
10) Carbon Disulfide	3.145	76	60295	12.35	ug/L		99
11) Freon 113	3.187	101	22663	10.63	ug/L		94
12) Iodomethane	3.279	142	3379	9.14	ug/L		94
13) Methylene Chloride	3.759	84	27081	11.66	ug/L		98
14) Acetone	3.838	43	26480	19.77	ug/L		95
15) t-1,2-Dichloroethene	3.924	61	37791	10.37	ug/L		98
16) n-Hexane	4.021	86	5313	10.27	ug/L	#	84
17) Methyl-tert-butyl-ether	4.076	73	82126	10.19	ug/L		97
18) tert-Butanol (TBA)	4.276	59	356524	542.55	ug/L	#	92
19) Diisopropyl ether (DIPE)	4.471	45	21062	2.57	ug/L		99
20) 1,1-Dichloroethane	4.550	63	48104	10.86	ug/L		98
21) Acrylonitrile	4.605	53	15376	9.66	ug/L		97
22) Ethyl-tert-butyl ether...	4.836	59	18690	2.56	ug/L		93
23) c-1,2-Dichloroethene	5.098	61	36887	10.64	ug/L		98
24) 2,2-Dichloropropane	5.207	77	37898	10.69	ug/L		98
25) Bromochloromethane	5.292	49	23591	10.97	ug/L		81
26) Chloroform	5.384	83	46665	10.64	ug/L		96
27) Carbon Tetrachloride	5.524	117	30811	10.37	ug/L		92
28) Tetrahydrofuran	5.554	42	14484	9.27	ug/L		94
29) 1,1,1-Trichloroethane	5.590	97	41392	10.63	ug/L		99
31) 1,1-Dichloropropene	5.718	75	35653	10.24	ug/L		94
32) 2-Butanone (MEK)	5.700	43	41328	18.89	ug/L		97
33) Benzene	5.968	78	115101	10.57	ug/L		99
34) tert-Amyl methyl ether...	6.114	73	18016	2.59	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.174	62	37263	10.43	ug/L		99
36) iso-Butyl Alcohol	6.266	43	51399	206.27	ug/L		95
38) Trichloroethene (TCE)	6.588	130	29421	10.75	ug/L		93
39) tert-Amyl ethyl ether ...	6.868	59	14484	2.61	ug/L		91
40) Dibromomethane	7.026	93	16647	10.38	ug/L		90
41) 1,2-Dichloropropane	7.136	63	28456	10.46	ug/L		95
42) Bromodichloromethane	7.215	83	30951	10.23	ug/L		96
44) c-1,3-Dichloropropene	7.914	75	37857	10.05	ug/L		97
46) Toluene	8.188	91	116230	10.43	ug/L		99
47) Tetrachloroethene (PCE)	8.638	166	25347	10.54	ug/L		90
48) 4-Methyl-2-Pentanone (	8.626	43	66313	18.64	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041410.D
Acq On : 14 Apr 2020 21:13
Operator : tb
Sample : 0D14058-CAL7
Misc : 1X 10ppb 5mL DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 15 12:40:07 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	38055	9.73	ug/L	96
50) 1,1,2-Trichloroethane	8.839	97	25999	10.36	ug/L	99
51) Dibromochloromethane	9.034	129	20897	10.05	ug/L	99
52) 1,3-Dichloropropane	9.125	76	45518	10.27	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.271	107	24716	9.98	ug/L	99
54) 2-Hexanone	9.514	43	41308	16.79	ug/L	98
55) Chlorobenzene	9.794	112	71361	10.46	ug/L	98
56) Ethylbenzene	9.831	91	116198	10.10	ug/L	100
57) 1,1,1,2-Tetrachloroethane	9.855	131	22848	9.97	ug/L	97
58) m,p-Xylenes (2)	9.965	91	170994	20.12	ug/L	98
59) o-Xylene	10.348	91	79811	9.81	ug/L	96
60) Styrene	10.396	104	53627	9.37	ug/L	98
61) Bromoform	10.409	173	13314	9.80	ug/L	96
62) Isopropylbenzene	10.622	105	97974	9.84	ug/L	97
65) Bromobenzene	10.938	156	25398	10.08	ug/L	87
66) n-Propylbenzene	10.968	91	118337	9.84	ug/L	98
67) 1,1,2,2-Tetrachloroethane	11.017	83	29530	9.82	ug/L	95
68) 2-Chlorotoluene	11.090	126	23581	9.86	ug/L	96
69) 1,3,5-Trimethylbenzene	11.126	105	81461	9.80	ug/L	92
70) 1,2,3-Trichloropropane	11.126	110	11302	9.92	ug/L	99
71) t-1,4-Dichloro-2-butene	11.163	88	3910	9.13	ug/L	97
72) 4-Chlorotoluene	11.224	91	73145	10.03	ug/L	95
73) tert-Butylbenzene	11.382	91	45200	9.78	ug/L	94
74) 1,2,4-Trimethylbenzene	11.437	105	81918	9.73	ug/L	97
75) sec-Butylbenzene	11.522	105	99807	9.89	ug/L	98
76) 4-Isopropyltoluene	11.631	119	79005	9.68	ug/L	98
77) 1,3-Dichlorobenzene	11.686	146	45095	10.07	ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	45055	10.13	ug/L	97
79) n-Butylbenzene	11.948	91	72973	9.82	ug/L	95
80) 1,2-Dichlorobenzene	12.069	146	41793	10.29	ug/L	97
81) 1,2-Dibromo-3-Chloropr...	12.672	157	5297	9.14	ug/L	75
82) Hexachlorobutadiene	13.189	223	6186	10.05	ug/L	93
83) 1,2,4-Trichlorobenzene	13.213	180	24993	9.74	ug/L	95
84) Naphthalene	13.487	128	79754	8.94	ug/L	98
85) 1,2,3-Trichlorobenzene	13.645	180	24088	9.78	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041410.D
Acq On : 14 Apr 2020 21:13
Operator : tb
Sample : 0D14058-CAL7
Misc : 1X 10ppb 5mL DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 12:40:07 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	112952	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	309528	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	136622	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	103004	52.57	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	352107	50.29	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	416754	49.78	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	104997	49.77	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	22545	10.97	ug/L		98
3) Chloromethane	1.886	50	36365	11.13	ug/L		99
4) Vinyl Chloride	1.971	62	24245	10.99	ug/L		98
5) Bromomethane	2.330	96	16117	13.05	ug/L		98
6) Chloroethane	2.457	64	6815	12.11	ug/L		72
7) Trichlorofluoromethane	2.591	101	7818	12.12	ug/L		98
8) Ethanol	3.309	45	36961	568.80	ug/L		92
9) 1,1-Dichloroethene	3.127	61	37467	13.41	ug/L		96
10) Carbon Disulfide	3.145	76	60295	12.35	ug/L		99
11) Freon 113	3.187	101	22663	10.63	ug/L		94
12) Iodomethane	3.279	142	3379	9.14	ug/L		94
13) Methylene Chloride	3.759	84	27081	11.66	ug/L		98
14) Acetone	3.838	43	26480	19.77	ug/L		95
15) t-1,2-Dichloroethene	3.924	61	37791	10.37	ug/L		98
16) n-Hexane	4.021	86	5313	10.27	ug/L	#	84
17) Methyl-tert-butyl-ether	4.076	73	82126	10.19	ug/L		97
18) tert-Butanol (TBA)	4.276	59	356524	542.55	ug/L	#	92
19) Diisopropyl ether (DIPE)	4.471	45	21062	2.57	ug/L		99
20) 1,1-Dichloroethane	4.550	63	48104	10.86	ug/L		98
21) Acrylonitrile	4.605	53	15376	9.66	ug/L		97
22) Ethyl-tert-butyl ether...	4.836	59	18690	2.56	ug/L		93
23) c-1,2-Dichloroethene	5.098	61	36887	10.64	ug/L		98
24) 2,2-Dichloropropane	5.207	77	37898	10.69	ug/L		98
25) Bromochloromethane	5.292	49	23591	10.97	ug/L		81
26) Chloroform	5.384	83	46665	10.64	ug/L		96
27) Carbon Tetrachloride	5.524	117	30811	10.37	ug/L		92
28) Tetrahydrofuran	5.554	42	14484	9.27	ug/L		94
29) 1,1,1-Trichloroethane	5.590	97	41392	10.63	ug/L		99
31) 1,1-Dichloropropene	5.718	75	35653	10.24	ug/L		94
32) 2-Butanone (MEK)	5.700	43	41328	18.89	ug/L		97
33) Benzene	5.968	78	115101	10.57	ug/L		99
34) tert-Amyl methyl ether...	6.114	73	18016	2.59	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.174	62	37263	10.43	ug/L		99
36) iso-Butyl Alcohol	6.266	43	51399	206.27	ug/L		95
38) Trichloroethene (TCE)	6.588	130	29421	10.75	ug/L		93
39) tert-Amyl ethyl ether ...	6.868	59	14484	2.61	ug/L		91
40) Dibromomethane	7.026	93	16647	10.38	ug/L		90
41) 1,2-Dichloropropane	7.136	63	28456	10.46	ug/L		95
42) Bromodichloromethane	7.215	83	30951	10.23	ug/L		96
44) c-1,3-Dichloropropene	7.914	75	37857	10.05	ug/L		97
46) Toluene	8.188	91	116230	10.43	ug/L		99
47) Tetrachloroethene (PCE)	8.638	166	25347	10.54	ug/L		90
48) 4-Methyl-2-Pentanone (	8.626	43	66313	18.54	ug/L		99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041410.D
Acq On : 14 Apr 2020 21:13
Operator : tb
Sample : 0D14058-CAL7
Misc : 1X 10ppb 5mL DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 15 12:40:07 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

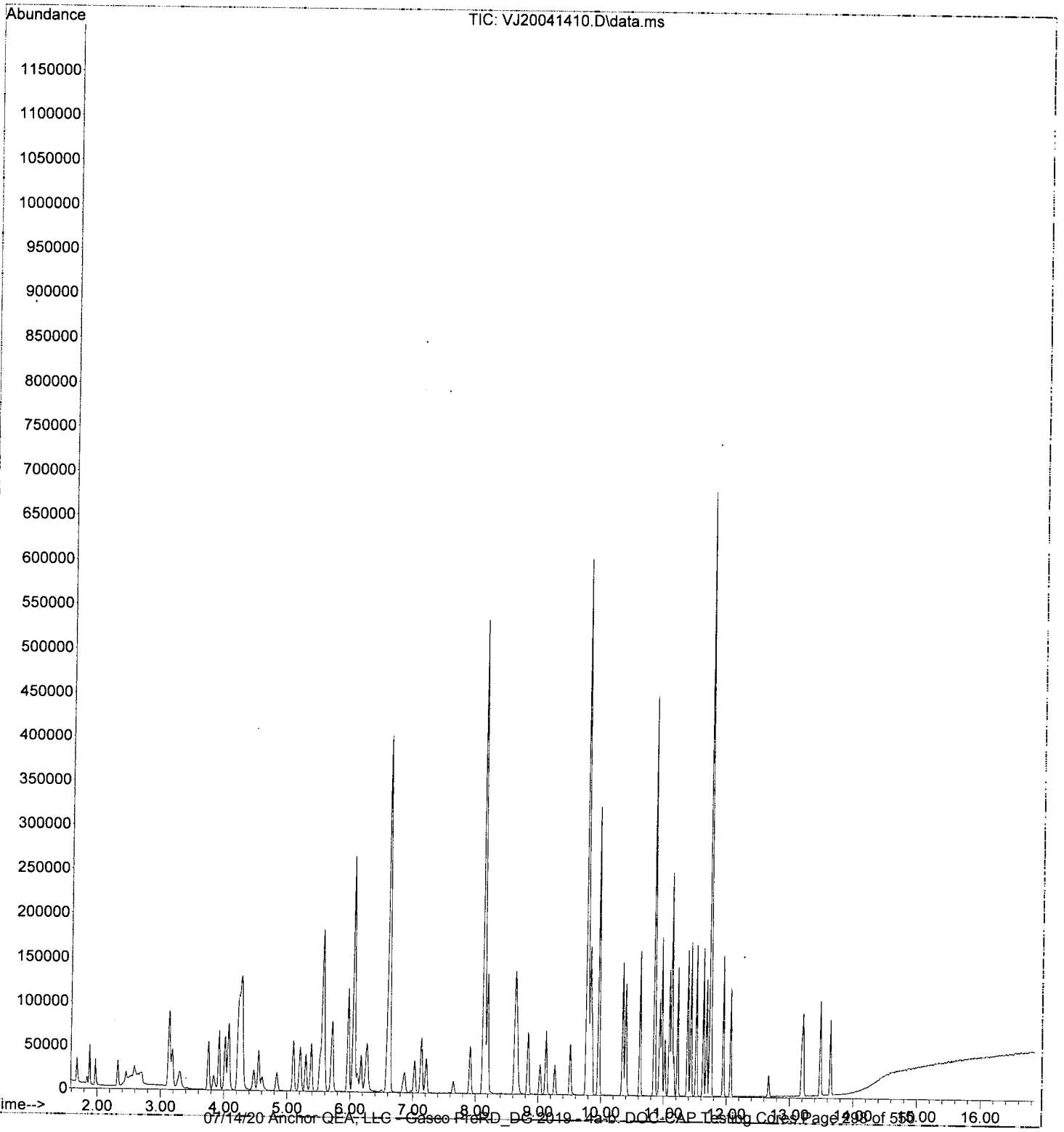
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	38055	9.73	ug/L	96
50) 1,1,2-Trichloroethane	8.839	97	25999	10.36	ug/L	99
51) Dibromochloromethane	9.034	129	20897	10.05	ug/L	99
52) 1,3-Dichloropropane	9.125	76	45518	10.27	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.271	107	24716	9.98	ug/L	99
54) 2-Hexanone	9.514	43	41308	16.79	ug/L	98
55) Chlorobenzene	9.794	112	71361	10.46	ug/L	98
56) Ethylbenzene	9.831	91	116198	10.10	ug/L	100
57) 1,1,1,2-Tetrachloroethane	9.855	131	22848	9.97	ug/L	97
58) m,p-Xylenes (2)	9.965	91	170994	20.12	ug/L	98
59) o-Xylene	10.348	91	79811	9.81	ug/L	96
60) Styrene	10.396	104	53627	9.37	ug/L	98
61) Bromoform	10.409	173	13314	9.80	ug/L	96
62) Isopropylbenzene	10.622	105	97974	9.84	ug/L	97
65) Bromobenzene	10.938	156	25398	10.08	ug/L	87
66) n-Propylbenzene	10.968	91	118337	9.84	ug/L	98
67) 1,1,2,2-Tetrachloroethane	11.017	83	29530	9.82	ug/L	95
68) 2-Chlorotoluene	11.090	126	23581	9.86	ug/L	96
69) 1,3,5-Trimethylbenzene	11.126	105	81461	9.80	ug/L	92
70) 1,2,3-Trichloropropane	11.126	110	11302	9.92	ug/L	99
71) t-1,4-Dichloro-2-butene	11.163	88	3910	9.13	ug/L	97
72) 4-Chlorotoluene	11.224	91	73145	10.03	ug/L	95
73) tert-Butylbenzene	11.382	91	45200	9.78	ug/L	94
74) 1,2,4-Trimethylbenzene	11.437	105	81918	9.73	ug/L	97
75) sec-Butylbenzene	11.522	105	99807	9.89	ug/L	98
76) 4-Isopropyltoluene	11.631	119	79005	9.68	ug/L	98
77) 1,3-Dichlorobenzene	11.686	146	45095	10.07	ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	45055	10.13	ug/L	97
79) n-Butylbenzene	11.948	91	72973	9.82	ug/L	95
80) 1,2-Dichlorobenzene	12.069	146	41793	10.29	ug/L	97
81) 1,2-Dibromo-3-Chloropr...	12.672	157	5297	9.14	ug/L	75
82) Hexachlorobutadiene	13.189	223	6186	10.05	ug/L	93
83) 1,2,4-Trichlorobenzene	13.213	180	24993	9.74	ug/L	95
84) Naphthalene	13.487	128	79754	8.94	ug/L	98
85) 1,2,3-Trichlorobenzene	13.645	180	24088	9.78	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041410.D
Acq On : 14 Apr 2020 21:13
Operator : tb
Sample : 0D14058-CAL7
Misc : 1X 10ppb 5mL DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 15 12:40:07 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041411.D
Acq On : 14 Apr 2020 21:40
Operator : tb
Sample : 0D14058-CAL8
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 12:40:10 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	120657	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	327947	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	140705	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	104655	50.00	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	373957	50.00	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	443469	50.00	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	108624	50.00	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	43914	20.00	ug/L		100
3) Chloromethane	1.886	50	69801	20.00	ug/L		99
4) Vinyl Chloride	1.977	62	47143	20.00	ug/L		95
5) Bromomethane	2.330	96	26385	20.00	ug/L		95
6) Chloroethane	2.457	64	12027	20.00	ug/L		86
7) Trichlorofluoromethane	2.591	101	13781	20.00	ug/L		98
8) Ethanol	3.315	45	86767	1250.01	ug/L		90
9) 1,1-Dichloroethene	3.127	61	59672	20.00	ug/L		97
10) Carbon Disulfide	3.139	76	104264	20.00	ug/L		99
11) Freon 113	3.181	101	45551	20.00	ug/L		90
12) Iodomethane	3.279	142	7894	20.00	ug/L		92
13) Methylene Chloride	3.759	84	49630	20.00	ug/L		96
14) Acetone	3.844	43	57230	40.00	ug/L		99
15) t-1,2-Dichloroethene	3.924	61	77860	20.00	ug/L		98
16) n-Hexane	4.015	86	11051	20.00	ug/L		95
17) Methyl-tert-butyl-ether	4.082	73	172134	20.00	ug/L		97
18) tert-Butanol (TBA)	4.282	59	877843	1250.56	ug/L	#	88
19) Diisopropyl ether (DIPE)	4.477	45	43695	5.00	ug/L		94
20) 1,1-Dichloroethane	4.550	63	94607	20.00	ug/L		99
21) Acrylonitrile	4.605	53	34002	20.00	ug/L		97
22) Ethyl-tert-butyl ether...	4.842	59	39056	5.00	ug/L		95
23) c-1,2-Dichloroethene	5.098	61	74058	20.00	ug/L		99
24) 2,2-Dichloropropane	5.207	77	75705	20.00	ug/L		99
25) Bromochloromethane	5.298	49	45939	20.00	ug/L		88
26) Chloroform	5.384	83	93659	20.00	ug/L		97
27) Carbon Tetrachloride	5.524	117	63492	20.00	ug/L		98
28) Tetrahydrofuran	5.560	42	33365	20.00	ug/L		95
29) 1,1,1-Trichloroethane	5.590	97	83161	20.00	ug/L		99
31) 1,1-Dichloropropene	5.718	75	74404	20.00	ug/L		96
32) 2-Butanone (MEK)	5.700	43	93489	40.00	ug/L		97
33) Benzene	5.968	78	232693	20.00	ug/L		99
34) tert-Amyl methyl ether...	6.120	73	37084	5.00	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.174	62	76329	20.00	ug/L		99
36) iso-Butyl Alcohol	6.266	43	133666	502.15	ug/L		100
38) Trichloroethene (TCE)	6.588	130	58485	20.00	ug/L		96
39) tert-Amyl ethyl ether ...	6.868	59	29606	5.00	ug/L		89
40) Dibromomethane	7.026	93	34268	20.00	ug/L		86
41) 1,2-Dichloropropane	7.136	63	58101	20.00	ug/L		96
42) Bromodichloromethane	7.215	83	64659	20.00	ug/L		98
44) c-1,3-Dichloropropene	7.914	75	79825	20.00	ug/L		98
46) Toluene	8.188	91	236180	20.00	ug/L		99
47) Tetrachloroethene (PCE)	8.644	166	50951	20.00	ug/L		90
48) 4-Methyl-2-Pentanone (	8.626	43	150802	40.00	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041411.D
Acq On : 14 Apr 2020 21:40
Operator : tb
Sample : 0D14058-CAL8
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 15 12:40:10 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	82901	20.00 ug/L	96
50) 1,1,2-Trichloroethane	8.839	97	53196	20.00 ug/L	98
51) Dibromochloromethane	9.034	129	44058	20.00 ug/L	98
52) 1,3-Dichloropropane	9.125	76	93896	20.00 ug/L	99
53) 1,2-Dibromoethane (EDB)	9.265	107	52465	20.00 ug/L	96
54) 2-Hexanone	9.514	43	104239	40.00 ug/L	99
55) Chlorobenzene	9.794	112	144562	20.00 ug/L	99
56) Ethylbenzene	9.831	91	243740	20.00 ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.855	131	48569	20.00 ug/L	99
58) m,p-Xylenes (2)	9.965	91	360254	40.00 ug/L	97
59) o-Xylene	10.348	91	172449	20.00 ug/L	95
60) Styrene	10.396	104	121284	20.00 ug/L	98
61) Bromoform	10.409	173	28786	20.00 ug/L	97
62) Isopropylbenzene	10.628	105	210984	20.00 ug/L	99
65) Bromobenzene	10.938	156	51875	20.00 ug/L #	83
66) n-Propylbenzene	10.968	91	247782	20.00 ug/L	96
67) 1,1,2,2-Tetrachloroethane	11.023	83	61924	20.00 ug/L	98
68) 2-Chlorotoluene	11.090	126	49251	20.00 ug/L	90
69) 1,3,5-Trimethylbenzene	11.126	105	171225	20.00 ug/L	94
70) 1,2,3-Trichloropropane	11.126	110	23472	20.00 ug/L	98
71) t-1,4-Dichloro-2-butene	11.163	88	8823	20.00 ug/L	96
72) 4-Chlorotoluene	11.224	91	150224	20.00 ug/L	94
73) tert-Butylbenzene	11.382	91	95193	20.00 ug/L	94
74) 1,2,4-Trimethylbenzene	11.437	105	173394	20.00 ug/L	97
75) sec-Butylbenzene	11.522	105	207846	20.00 ug/L	97
76) 4-Isopropyltoluene	11.631	119	168190	20.00 ug/L	99
77) 1,3-Dichlorobenzene	11.686	146	92245	20.00 ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	91616	20.00 ug/L	96
79) n-Butylbenzene	11.948	91	153060	20.00 ug/L	96
80) 1,2-Dichlorobenzene	12.069	146	83686	20.00 ug/L	96
81) 1,2-Dibromo-3-Chloropr...	12.672	157	11933	20.00 ug/L	76
82) Hexachlorobutadiene	13.189	223	12680	20.00 ug/L	93
83) 1,2,4-Trichlorobenzene	13.213	180	52853	20.00 ug/L	95
84) Naphthalene	13.487	128	183811	20.00 ug/L	99
85) 1,2,3-Trichlorobenzene	13.645	180	50757	20.00 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041411.D
Acq On : 14 Apr 2020 21:40
Operator : tb
Sample : 0D14058-CAL8
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 12:40:10 2020
Quant Method : C:\msdchem\1\methods\V~~J200414S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	120657	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	327947	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	140705	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	104655	50.00	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	373957	50.00	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	443469	50.00	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	108624	50.00	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	43914	20.00	ug/L		100
3) Chloromethane	1.886	50	69801	20.00	ug/L		99
4) Vinyl Chloride	1.977	62	47143	20.00	ug/L		95
5) Bromomethane	2.330	96	26385	20.00	ug/L		95
6) Chloroethane	2.457	64	12027	20.00	ug/L		86
7) Trichlorofluoromethane	2.591	101	13781	20.00	ug/L		98
8) Ethanol	3.315	45	86767	1250.01	ug/L		90
9) 1,1-Dichloroethene	3.127	61	59672	20.00	ug/L		97
10) Carbon Disulfide	3.139	76	104264	20.00	ug/L		99
11) Freon 113	3.181	101	45551	20.00	ug/L		90
12) Iodomethane	3.279	142	7894	20.00	ug/L		92
13) Methylene Chloride	3.759	84	49630	20.00	ug/L		96
14) Acetone	3.844	43	57230	40.00	ug/L		99
15) t-1,2-Dichloroethene	3.924	61	77860	20.00	ug/L		98
16) n-Hexane	4.015	86	11051	20.00	ug/L		95
17) Methyl-tert-butyl-ether	4.082	73	172134	20.00	ug/L		97
18) tert-Butanol (TBA)	4.282	59	877843	1250.56	ug/L	#	88
19) Diisopropyl ether (DIPE)	4.477	45	43695	5.00	ug/L		94
20) 1,1-Dichloroethane	4.550	63	94607	20.00	ug/L		99
21) Acrylonitrile	4.605	53	34002	20.00	ug/L		97
22) Ethyl-tert-butyl ether...	4.842	59	39056	5.00	ug/L		95
23) c-1,2-Dichloroethene	5.098	61	74058	20.00	ug/L		99
24) 2,2-Dichloropropane	5.207	77	75705	20.00	ug/L		99
25) Bromochloromethane	5.298	49	45939	20.00	ug/L		88
26) Chloroform	5.384	83	93659	20.00	ug/L		97
27) Carbon Tetrachloride	5.524	117	63492	20.00	ug/L		98
28) Tetrahydrofuran	5.560	42	33365	20.00	ug/L		95
29) 1,1,1-Trichloroethane	5.590	97	83161	20.00	ug/L		99
31) 1,1-Dichloropropene	5.718	75	74404	20.00	ug/L		96
32) 2-Butanone (MEK)	5.700	43	93489	40.00	ug/L		97
33) Benzene	5.968	78	232693	20.00	ug/L		99
34) tert-Amyl methyl ether...	6.120	73	37084	5.00	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.174	62	76329	20.00	ug/L		99
36) iso-Butyl Alcohol	6.266	43	133666	502.15	ug/L		100
38) Trichloroethene (TCE)	6.588	130	58485	20.00	ug/L		96
39) tert-Amyl ethyl ether ...	6.868	59	29606	5.00	ug/L		89
40) Dibromomethane	7.026	93	34268	20.00	ug/L		86
41) 1,2-Dichloropropane	7.136	63	58101	20.00	ug/L		96
42) Bromodichloromethane	7.215	83	64659	20.00	ug/L		98
44) c-1,3-Dichloropropene	7.914	75	79825	20.00	ug/L		98
46) Toluene	8.188	91	236180	20.00	ug/L		99
47) Tetrachloroethene (PCE)	8.644	166	50951	20.00	ug/L		90
48) 4-Methyl-2-Pentanone (	8.626	43	150802	40.00	ug/L		98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041411.D
Acq On : 14 Apr 2020 21:40
Operator : tb
Sample : 0D14058-CAL8
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 15 12:40:10 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

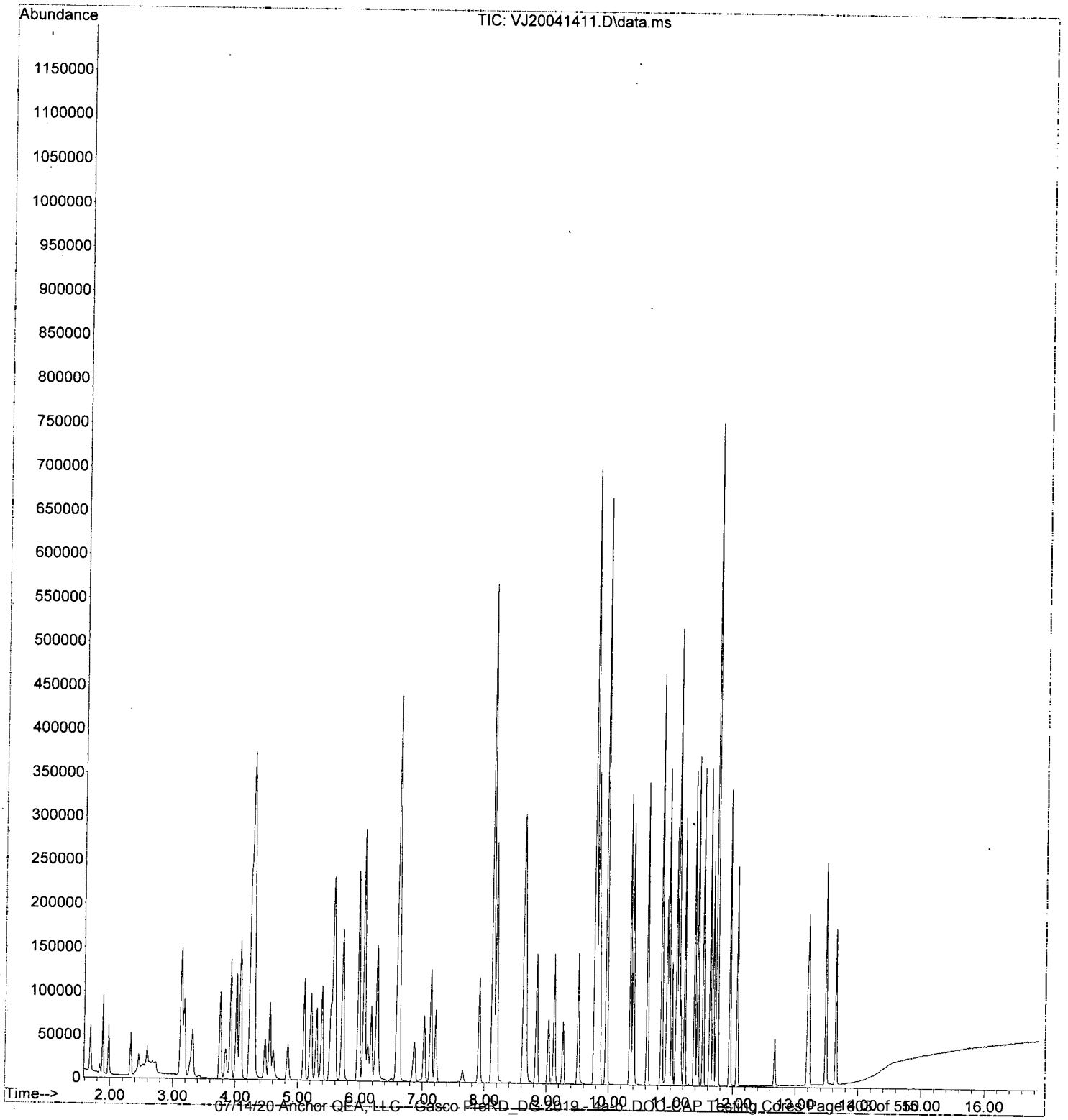
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	82901	20.00	ug/L		96
50) 1,1,2-Trichloroethane	8.839	97	53196	20.00	ug/L		98
51) Dibromochloromethane	9.034	129	44058	20.00	ug/L		98
52) 1,3-Dichloropropane	9.125	76	93896	20.00	ug/L		99
53) 1,2-Dibromoethane (EDB)	9.265	107	52465	20.00	ug/L		96
54) 2-Hexanone	9.514	43	104239	40.00	ug/L		99
55) Chlorobenzene	9.794	112	144562	20.00	ug/L		99
56) Ethylbenzene	9.831	91	243740	20.00	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.855	131	48569	20.00	ug/L		99
58) m,p-Xylenes (2)	9.965	91	360254	40.00	ug/L		97
59) o-Xylene	10.348	91	172449	20.00	ug/L		95
60) Styrene	10.396	104	121284	20.00	ug/L		98
61) Bromoform	10.409	173	28786	20.00	ug/L		97
62) Isopropylbenzene	10.628	105	210984	20.00	ug/L		99
65) Bromobenzene	10.938	156	51875	20.00	ug/L	#	83
66) n-Propylbenzene	10.968	91	247782	20.00	ug/L		96
67) 1,1,2,2-Tetrachloroethane	11.023	83	61924	20.00	ug/L		98
68) 2-Chlorotoluene	11.090	126	49251	20.00	ug/L		90
69) 1,3,5-Trimethylbenzene	11.126	105	171225	20.00	ug/L		94
70) 1,2,3-Trichloropropane	11.126	110	23472	20.00	ug/L		98
71) t-1,4-Dichloro-2-butene	11.163	88	8823	20.00	ug/L		96
72) 4-Chlorotoluene	11.224	91	150224	20.00	ug/L		94
73) tert-Butylbenzene	11.382	91	95193	20.00	ug/L		94
74) 1,2,4-Trimethylbenzene	11.437	105	173394	20.00	ug/L		97
75) sec-Butylbenzene	11.522	105	207846	20.00	ug/L		97
76) 4-Isopropyltoluene	11.631	119	168190	20.00	ug/L		99
77) 1,3-Dichlorobenzene	11.686	146	92245	20.00	ug/L		97
78) 1,4-Dichlorobenzene	11.753	146	91616	20.00	ug/L		96
79) n-Butylbenzene	11.948	91	153060	20.00	ug/L		96
80) 1,2-Dichlorobenzene	12.069	146	83686	20.00	ug/L		96
81) 1,2-Dibromo-3-Chloropr...	12.672	157	11933	20.00	ug/L		76
82) Hexachlorobutadiene	13.189	223	12680	20.00	ug/L		93
83) 1,2,4-Trichlorobenzene	13.213	180	52853	20.00	ug/L		95
84) Naphthalene	13.487	128	183811	20.00	ug/L		99
85) 1,2,3-Trichlorobenzene	13.645	180	50757	20.00	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041411.D
Acq On : 14 Apr 2020 21:40
Operator : tb
Sample : 0D14058-CAL8
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 15 12:40:10 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041412.D
Acq On : 14 Apr 2020 22:07
Operator : tb
Sample : 0D14058-CAL9
Misc : 1X 50ppb 5mL DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 15 12:40:13 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

4/15/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	110264	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	300882	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	136262	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	95344	49.85	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	344845	50.45	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	407069	50.02	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	102598	48.77	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	126884	63.23	ug/L		98
3) Chloromethane	1.892	50	181011	56.75	ug/L		100
4) Vinyl Chloride	1.989	62	143149	66.45	ug/L		95
5) Bromomethane	2.330	96	51570	42.77	ug/L		97
6) Chloroethane	2.451	64	26476	48.18	ug/L		93
7) Trichlorofluoromethane	2.585	101	30102	47.80	ug/L		97
8) Ethanol	3.273	45	192713	3038.02	ug/L		90
9) 1,1-Dichloroethene	3.120	61	137588	50.46	ug/L		97
10) Carbon Disulfide	3.133	76	236878	49.72	ug/L		97
11) Freon 113	3.175	101	105550	50.71	ug/L		92
12) Iodomethane	3.273	142	26086	72.32	ug/L		92
13) Methylene Chloride	3.759	84	116970	51.58	ug/L		98
14) Acetone	3.844	43	143371	109.65	ug/L		98
15) t-1,2-Dichloroethene	3.923	61	183985	51.72	ug/L		99
16) n-Hexane	4.015	86	26290	52.06	ug/L		95
17) Methyl-tert-butyl-ether	4.082	73	421496	53.59	ug/L		98
18) tert-Butanol (TBA)	4.240	59	1987882	3098.84	ug/L	#	85
19) Diisopropyl ether (DIPE)	4.477	45	84930	10.63	ug/L		93
20) 1,1-Dichloroethane	4.550	63	226281	52.34	ug/L		99
21) Acrylonitrile	4.605	53	86281	55.53	ug/L		99
22) Ethyl-tert-butyl ether...	4.842	59	75774	10.62	ug/L		96
23) c-1,2-Dichloroethene	5.098	61	179197	52.96	ug/L		100
24) 2,2-Dichloropropane	5.207	77	181444	52.46	ug/L		97
25) Bromochloromethane	5.298	49	108634	51.76	ug/L		88
26) Chloroform	5.384	83	221317	51.71	ug/L		96
27) Carbon Tetrachloride	5.523	117	152337	52.51	ug/L		95
28) Tetrahydrofuran	5.560	42	86108	56.48	ug/L		98
29) 1,1,1-Trichloroethane	5.590	97	196290	51.66	ug/L		97
31) 1,1-Dichloropropene	5.718	75	178612	52.54	ug/L		97
32) 2-Butanone (MEK)	5.700	43	245104	114.75	ug/L		97
33) Benzene	5.968	78	553408	52.05	ug/L		99
34) tert-Amyl methyl ether...	6.120	73	73216	10.80	ug/L		99
35) 1,2-Dichloroethane (EDC)	6.174	62	184518	52.91	ug/L		99
36) iso-Butyl Alcohol	6.247	43	383753	1577.56	ug/L		100
38) Trichloroethene (TCE)	6.588	130	140559	52.60	ug/L		97
39) tert-Amyl ethyl ether ...	6.868	59	56312	10.41	ug/L		92
40) Dibromomethane	7.026	93	83366	53.24	ug/L		87
41) 1,2-Dichloropropane	7.136	63	142249	53.58	ug/L		99
42) Bromodichloromethane	7.215	83	159378	53.94	ug/L		99
44) c-1,3-Dichloropropene	7.914	75	204703	55.90	ug/L		96
46) Toluene	8.194	91	564082	52.06	ug/L		99
47) Tetrachloroethene (PCE)	8.644	166	121169	51.84	ug/L		90
48) 4-Methyl-2-Pentanone (...	8.632	43	405804	117.32	ug/L		97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041412.D
Acq On : 14 Apr 2020 22:07
Operator : tb
Sample : 0D14058-CAL9
Misc : 1X 50ppb 5mL DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 15 12:40:13 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

4/15/20

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.059	99	110264	50.00	ug/L	0.00
43) Chlorobenzene-d5 (I)	9.776	117	300882	50.00	ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	136262	50.00	ug/L	0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.566	111	95344	49.85	ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.619	114	344845	50.45	ug/L	0.00
45) Toluene-d8 (S)	8.133	98	407069	50.02	ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.853	174	102598	48.77	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.691	85	126884	63.23	ug/L	98
3) Chloromethane	1.892	50	181011	56.75	ug/L	100
4) Vinyl Chloride	1.989	62	143149	66.45	ug/L	95
5) Bromomethane	2.330	96	51570	42.77	ug/L	97
6) Chloroethane	2.451	64	26476	48.18	ug/L	93
7) Trichlorofluoromethane	2.585	101	30102	47.80	ug/L	97
8) Ethanol	3.273	45	192713	3038.02	ug/L	90
9) 1,1-Dichloroethene	3.120	61	137588	50.46	ug/L	97
10) Carbon Disulfide	3.133	76	236878	49.72	ug/L	97
11) Freon 113	3.175	101	105550	50.71	ug/L	92
12) Iodomethane	3.273	142	26086	72.32	ug/L	92
13) Methylene Chloride	3.759	84	116970	51.58	ug/L	98
14) Acetone	3.844	43	143371	109.65	ug/L	98
15) t-1,2-Dichloroethene	3.923	61	183985	51.72	ug/L	99
16) n-Hexane	4.015	86	26290	52.06	ug/L	95
17) Methyl-tert-butyl-ether	4.082	73	421496	53.59	ug/L	98
18) tert-Butanol (TBA)	4.240	59	1987882	3098.84	ug/L #	85
19) Diisopropyl ether (DIPE)	4.477	45	84930	10.63	ug/L	93
20) 1,1-Dichloroethane	4.550	63	226281	52.34	ug/L	99
21) Acrylonitrile	4.605	53	86281	55.53	ug/L	99
22) Ethyl-tert-butyl ether...	4.842	59	75774	10.62	ug/L	96
23) c-1,2-Dichloroethene	5.098	61	179197	52.96	ug/L	100
24) 2,2-Dichloropropane	5.207	77	181444	52.45	ug/L	97
25) Bromochloromethane	5.298	49	108634	51.75	ug/L	88
26) Chloroform	5.384	83	221317	51.71	ug/L	96
27) Carbon Tetrachloride	5.523	117	152337	52.51	ug/L	95
28) Tetrahydrofuran	5.560	42	86108	56.48	ug/L	98
29) 1,1,1-Trichloroethane	5.590	97	196290	51.66	ug/L	97
31) 1,1-Dichloropropene	5.718	75	178612	52.54	ug/L	97
32) 2-Butanone (MEK)	5.700	43	245104	114.75	ug/L	97
33) Benzene	5.968	78	553408	52.05	ug/L	99
34) tert-Amyl methyl ether...	6.120	73	73216	10.80	ug/L	99
35) 1,2-Dichloroethane (EDC)	6.174	62	184518	52.91	ug/L	99
36) iso-Butyl Alcohol	6.247	43	383753	1577.56	ug/L	100
38) Trichloroethene (TCE)	6.588	130	140559	52.60	ug/L	97
39) tert-Amyl ethyl ether ...	6.868	59	56312	10.41	ug/L	92
40) Dibromomethane	7.026	93	83366	53.24	ug/L	87
41) 1,2-Dichloropropane	7.136	63	142249	53.58	ug/L	99
42) Bromodichloromethane	7.215	83	159378	53.94	ug/L	99
44) c-1,3-Dichloropropene	7.914	75	204703	55.90	ug/L	96
46) Toluene	8.194	91	564082	52.06	ug/L	99
47) Tetrachloroethene (PCE)	8.644	166	121169	51.84	ug/L	90
48) 4-Methyl-2-Pentanone (	8.632	43	405804	107.82	ug/L	97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041412.D
Acq On : 14 Apr 2020 22:07
Operator : tb
Sample : 0D14058-CAL9
Misc : 1X 50ppb 5mL DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 15 12:40:13 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.669	75	205734	54.10	ug/L		98
50) 1,1,2-Trichloroethane	8.839	97	126170	51.70	ug/L		99
51) Dibromochloromethane	9.034	129	110967	54.90	ug/L		98
52) 1,3-Dichloropropane	9.125	76	227885	52.91	ug/L		99
53) 1,2-Dibromoethane (EDB)	9.271	107	131063	54.46	ug/L		99
54) 2-Hexanone	9.508	43	306522	128.20	ug/L		99
55) Chlorobenzene	9.794	112	345012	52.03	ug/L		99
56) Ethylbenzene	9.831	91	595001	53.21	ug/L		100
57) 1,1,1,2-Tetrachloroethane	9.855	131	118710	53.28	ug/L		96
58) m,p-Xylenes (2)	9.964	91	891467	107.89	ug/L		97
59) o-Xylene	10.348	91	445022	56.25	ug/L		96
60) Styrene	10.396	104	327561	58.87	ug/L		98
61) Bromoform	10.409	173	76074	57.61	ug/L		96
62) Isopropylbenzene	10.628	105	533724	55.14	ug/L		99
65) Bromobenzene	10.938	156	127674	50.83	ug/L	#	83
66) n-Propylbenzene	10.968	91	620445	51.71	ug/L		96
67) 1,1,2,2-Tetrachloroethane	11.023	83	151908	50.66	ug/L		99
68) 2-Chlorotoluene	11.090	126	123120	51.63	ug/L		92
69) 1,3,5-Trimethylbenzene	11.133	105	431158	52.00	ug/L		97
70) 1,2,3-Trichloropropane	11.126	110	58450	51.43	ug/L		99
71) t-1,4-Dichloro-2-butene	11.163	88	25559	59.83	ug/L		94
72) 4-Chlorotoluene	11.224	91	377949	51.96	ug/L		96
73) tert-Butylbenzene	11.382	91	240963	52.28	ug/L		94
74) 1,2,4-Trimethylbenzene	11.437	105	434766	51.78	ug/L		97
75) sec-Butylbenzene	11.522	105	526357	52.30	ug/L		97
76) 4-Isopropyltoluene	11.631	119	437429	53.71	ug/L		99
77) 1,3-Dichlorobenzene	11.686	146	227353	50.90	ug/L		97
78) 1,4-Dichlorobenzene	11.753	146	227231	51.22	ug/L		95
79) n-Butylbenzene	11.948	91	387510	52.29	ug/L		97
80) 1,2-Dichlorobenzene	12.069	146	210540	51.96	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.672	157	35196	60.91	ug/L		78
82) Hexachlorobutadiene	13.189	223	31099	50.65	ug/L		95
83) 1,2,4-Trichlorobenzene	13.213	180	133828	52.29	ug/L		96
84) Naphthalene	13.487	128	497953	55.95	ug/L		99
85) 1,2,3-Trichlorobenzene	13.645	180	131349	53.44	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041412.D
Acq On : 14 Apr 2020 22:07
Operator : tb
Sample : 0D14058-CAL9
Misc : 1X 50ppb 5mL DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 15 12:40:13 2020
Quant Method : C:\msdchem\1\methods\VJ~~200414S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

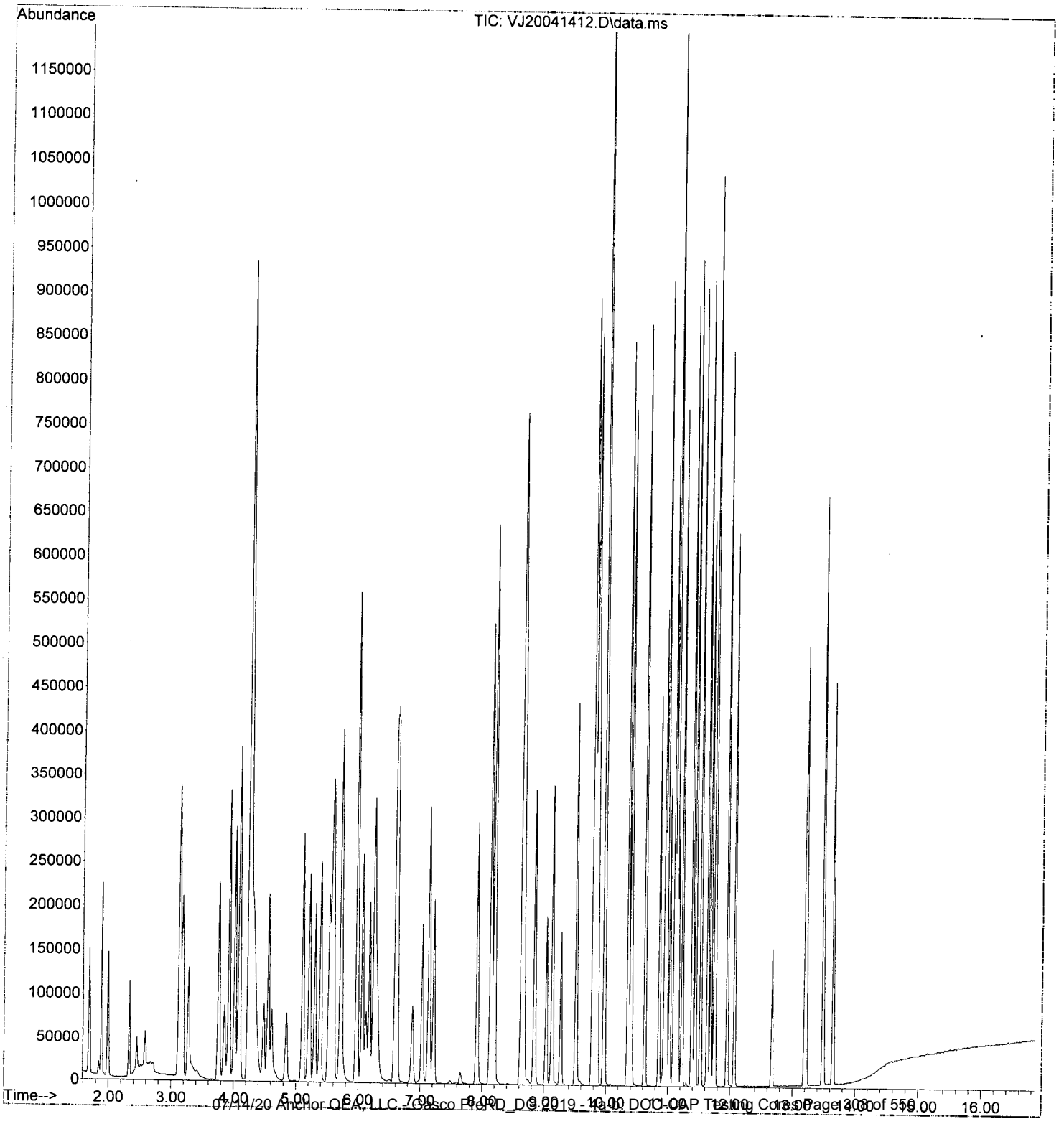
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.669	75	205734	54.10	ug/L		98
50) 1,1,2-Trichloroethane	8.839	97	126170	51.70	ug/L		99
51) Dibromochloromethane	9.034	129	110967	54.90	ug/L		98
52) 1,3-Dichloropropane	9.125	76	227885	52.91	ug/L		99
53) 1,2-Dibromoethane (EDB)	9.271	107	131063	54.46	ug/L		99
54) 2-Hexanone	9.508	43	306522	128.20	ug/L		99
55) Chlorobenzene	9.794	112	345012	52.03	ug/L		99
56) Ethylbenzene	9.831	91	595001	53.21	ug/L		100
57) 1,1,1,2-Tetrachloroethane	9.855	131	118710	53.28	ug/L		96
58) m,p-Xylenes (2)	9.964	91	891467	107.89	ug/L		97
59) o-Xylene	10.348	91	445022	56.25	ug/L		96
60) Styrene	10.396	104	327561	58.87	ug/L		98
61) Bromoform	10.409	173	76074	57.61	ug/L		96
62) Isopropylbenzene	10.628	105	533724	55.14	ug/L		99
65) Bromobenzene	10.938	156	127674	50.83	ug/L	#	83
66) n-Propylbenzene	10.968	91	620445	51.71	ug/L		96
67) 1,1,2,2-Tetrachloroethane	11.023	83	151908	50.66	ug/L		99
68) 2-Chlorotoluene	11.090	126	123120	51.63	ug/L		92
69) 1,3,5-Trimethylbenzene	11.133	105	431158	52.00	ug/L		97
70) 1,2,3-Trichloropropane	11.126	110	58450	51.43	ug/L		99
71) t-1,4-Dichloro-2-butene	11.163	88	25559	59.83	ug/L		94
72) 4-Chlorotoluene	11.224	91	377949	51.96	ug/L		96
73) tert-Butylbenzene	11.382	91	240963	52.28	ug/L		94
74) 1,2,4-Trimethylbenzene	11.437	105	434766	51.78	ug/L		97
75) sec-Butylbenzene	11.522	105	526357	52.30	ug/L		97
76) 4-Isopropyltoluene	11.631	119	437429	53.71	ug/L		99
77) 1,3-Dichlorobenzene	11.686	146	227353	50.90	ug/L		97
78) 1,4-Dichlorobenzene	11.753	146	227231	51.22	ug/L		95
79) n-Butylbenzene	11.948	91	387510	52.29	ug/L		97
80) 1,2-Dichlorobenzene	12.069	146	210540	51.96	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.672	157	35196	60.91	ug/L		78
82) Hexachlorobutadiene	13.189	223	31099	50.65	ug/L		95
83) 1,2,4-Trichlorobenzene	13.213	180	133828	52.29	ug/L		96
84) Naphthalene	13.487	128	497953	55.95	ug/L		99
85) 1,2,3-Trichlorobenzene	13.645	180	131349	53.44	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041412.D
Acq On : 14 Apr 2020 22:07
Operator : tb
Sample : 0D14058-CAL9
Misc : 1X 50ppb 5mL DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 15 12:40:13 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



VJ200414S.M Wed Apr 15 13:13:44 2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041413.D
Acq On : 14 Apr 2020 22:34
Operator : tb
Sample : 0D14058-IBL2
Misc : 1X 5mL DI+MeOH
ALS Vial : 13 Sample Multiplier: 1

NR

Quant Time: Apr 15 14:25:33 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	108137	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	295585	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	132098	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	93539	49.27	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	341111	50.35	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	406275	50.55	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	98873	49.28	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	346	0.16	ug/L	#	51
3) Chloromethane	1.880	50	7686	2.20	ug/L		99
5) Bromomethane	2.330	96	8994	4.85	ug/L		98
6) Chloroethane	2.518	64	55	0.09	ug/L	#	1
8) Ethanol	3.340	45	385	5.73	ug/L	#	29
9) 1,1-Dichloroethene	3.115	61	412	0.13	ug/L	#	66
10) Carbon Disulfide	3.133	76	1732	0.33	ug/L		72
11) Freon 113	3.181	101	224	0.11	ug/L	#	58
12) Iodomethane	3.267	142	3522	10.55	ug/L		86
13) Methylene Chloride	3.753	84	4314	1.82	ug/L		96
14) Acetone	3.851	43	1652	1.23	ug/L		84
15) t-1,2-Dichloroethene	3.924	61	477	0.13	ug/L	#	22
16) n-Hexane	4.009	86	288	0.57	ug/L	#	61
18) tert-Butanol (TBA)	4.301	59	56	0.09	ug/L	#	1
31) 1,1-Dichloropropene	5.712	75	434	0.13	ug/L	#	39
32) 2-Butanone (MEK)	5.706	43	199	0.09	ug/L		52
36) iso-Butyl Alcohol	6.284	43	1325	13.61	ug/L		84
39) tert-Amyl ethyl ether ...	6.844	59	1455	0.25	ug/L	#	68
46) Toluene	8.188	91	958	0.08	ug/L		89
47) Tetrachloroethene (PCE)	8.644	166	351	0.16	ug/L	#	68
55) Chlorobenzene	9.788	112	621	0.09	ug/L	#	1
56) Ethylbenzene	9.825	91	1256	0.11	ug/L		82
58) m,p-Xylenes (2)	9.965	91	1887	0.31	ug/L		88
59) o-Xylene	10.348	91	937	0.16	ug/L		79
60) Styrene	10.390	104	302	0.25	ug/L	#	40
62) Isopropylbenzene	10.622	105	1118	0.12	ug/L		89
66) n-Propylbenzene	10.968	91	2235	0.20	ug/L		92
69) 1,3,5-Trimethylbenzene	11.127	105	1178	0.16	ug/L		91
72) 4-Chlorotoluene	11.224	91	1164	0.17	ug/L		88
73) tert-Butylbenzene	11.382	91	621	0.15	ug/L		85
74) 1,2,4-Trimethylbenzene	11.437	105	1014	0.14	ug/L		95
75) sec-Butylbenzene	11.522	105	1829	0.21	ug/L		91
76) 4-Isopropyltoluene	11.632	119	1482	0.20	ug/L		98
77) 1,3-Dichlorobenzene	11.686	146	888	0.21	ug/L		92
78) 1,4-Dichlorobenzene	11.753	146	1110	0.25	ug/L	#	71
79) n-Butylbenzene	11.948	91	2370	0.34	ug/L		91
80) 1,2-Dichlorobenzene	12.070	146	631	0.16	ug/L		93
82) Hexachlorobutadiene	13.189	223	281	0.47	ug/L	#	74
83) 1,2,4-Trichlorobenzene	13.213	180	1084	0.46	ug/L		93
84) Naphthalene	13.481	128	1685	0.23	ug/L		77
85) 1,2,3-Trichlorobenzene	13.645	180	780	0.33	ug/L		86

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041413.D
Acq On : 14 Apr 2020 22:34
Operator : tb
Sample : 0D14058-IBL2
Misc : 1X 5mL DI+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 15 14:25:33 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

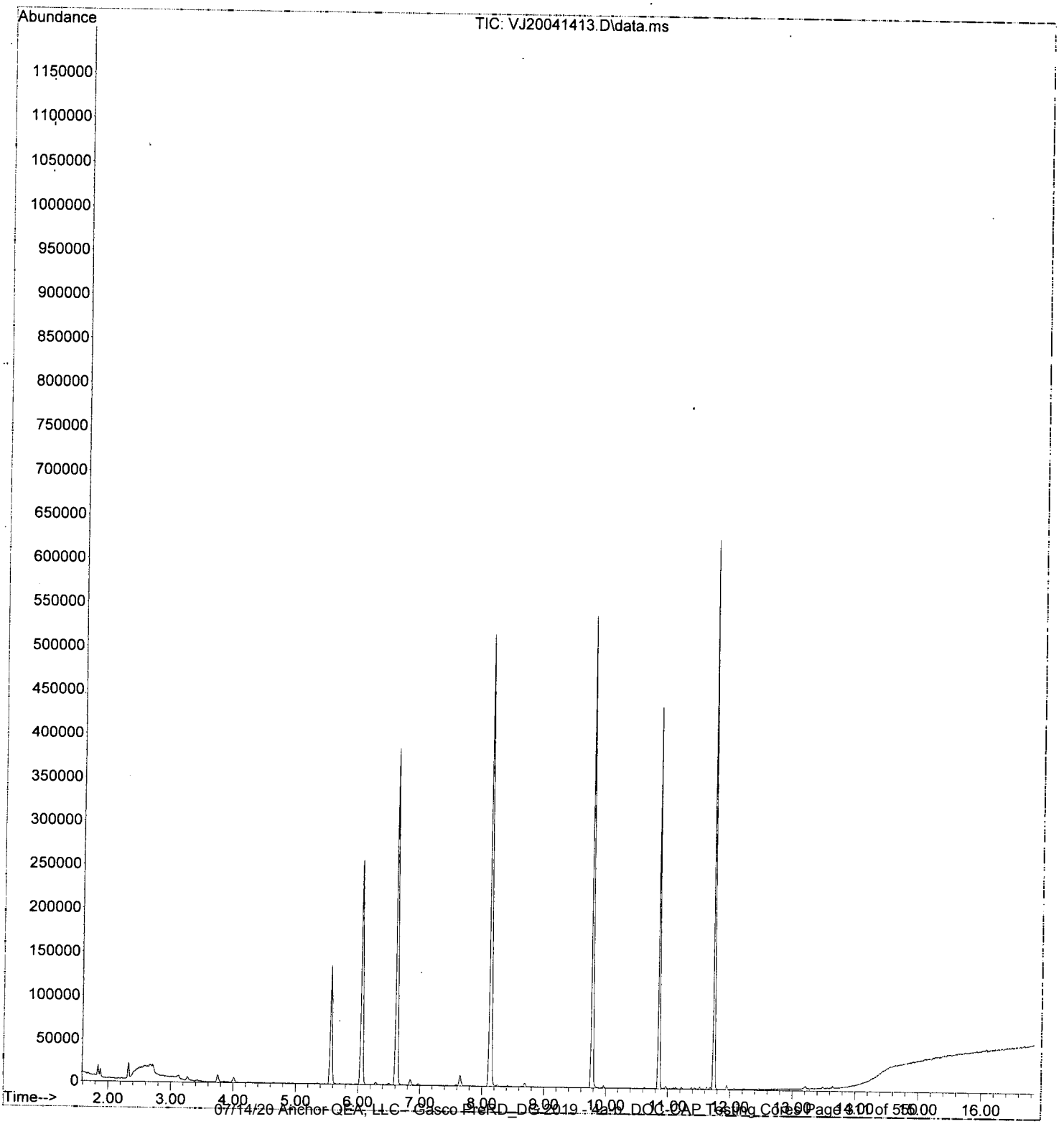
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041413.D
Acq On : 14 Apr 2020 22:34
Operator : tb
Sample : 0D14058-IBL2
Misc : 1X 5mL DI+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 15 14:25:33 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 13:15:12 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

4/15/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	122138	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	334260	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	142815	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	103774	48.98	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	383034	50.59	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	449815	49.76	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	111188	50.42	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	264089	118.82	ug/L		99
3) Chloromethane	1.886	50	354765	100.42	ug/L		100
4) Vinyl Chloride	1.977	62	253013	106.04	ug/L		95
5) Bromomethane	2.336	96	102534	76.78	ug/L		97
6) Chloroethane	2.457	64	61488	101.01	ug/L		95
7) Trichlorofluoromethane	2.591	101	69935	100.26	ug/L		99
8) Ethanol	3.315	45	380721	5418.37	ug/L		90
9) 1,1-Dichloroethene	3.127	61	385423	127.61	ug/L		98
10) Carbon Disulfide	3.139	76	638048	120.91	ug/L		99
11) Freon 113	3.181	101	236088	102.40	ug/L		93
12) Iodomethane	3.279	142	74202	185.72	ug/L		93
13) Methylene Chloride	3.759	84	243020	96.75	ug/L		98
14) Acetone	3.845	43	289316m	199.76	ug/L		
15) t-1,2-Dichloroethene	3.924	61	397172	100.79	ug/L		98
16) n-Hexane	4.021	86	58843	105.20	ug/L	#	89
17) Methyl-tert-butyl-ether	4.082	73	931269	106.89	ug/L		97
18) tert-Butanol (TBA)	4.289	59	3910191m	5502.86	ug/L		
19) Diisopropyl ether (DIPE)	4.477	45	188761	21.34	ug/L		93
20) 1,1-Dichloroethane	4.550	63	484451	101.17	ug/L		100
21) Acrylonitrile	4.605	53	178692m	103.83	ug/L		
22) Ethyl-tert-butyl ether...	4.842	59	172177	21.78	ug/L		97
23) c-1,2-Dichloroethene	5.104	61	393786	105.06	ug/L		99
24) 2,2-Dichloropropane	5.207	77	394333	102.91	ug/L		97
25) Bromochloromethane	5.298	49	227664	97.91	ug/L		90
26) Chloroform	5.384	83	474265	100.05	ug/L		96
27) Carbon Tetrachloride	5.524	117	350629	109.11	ug/L		96
28) Tetrahydrofuran	5.554	42	179202	106.12	ug/L		97
29) 1,1,1-Trichloroethane	5.590	97	438285	104.13	ug/L		98
31) 1,1-Dichloropropene	5.718	75	402420	106.86	ug/L		95
32) 2-Butanone (MEK)	5.700	43	508448	214.91	ug/L		99
33) Benzene	5.968	78	1213450	103.03	ug/L		99
34) tert-Amyl methyl ether...	6.120	73	164593	21.92	ug/L		96
35) 1,2-Dichloroethane (EDC)	6.175	62	396654	102.67	ug/L		99
36) iso-Butyl Alcohol	6.272	43	810408	3007.60	ug/L		97
38) Trichloroethene (TCE)	6.588	130	316216	106.82	ug/L		97
39) tert-Amyl ethyl ether ...	6.868	59	129880	21.67	ug/L		91
40) Dibromomethane	7.026	93	179270	103.36	ug/L		88
41) 1,2-Dichloropropane	7.136	63	313962	106.76	ug/L		99
42) Bromodichloromethane	7.215	83	365858	111.79	ug/L		96
44) c-1,3-Dichloropropene	7.914	75	467195	114.84	ug/L		95
46) Toluene	8.188	91	1235726	102.67	ug/L		98
47) Tetrachloroethene (PCE)	8.644	166	268399	103.37	ug/L		89
48) 4-Methyl-2-Pentanone (	8.632	43	860414	223.41	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 13:15:12 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	453467	107.33	ug/L	97
50) 1,1,2-Trichloroethane	8.839	97	276203	101.88	ug/L	98
51) Dibromochloromethane	9.034	129	262482	116.90	ug/L	99
52) 1,3-Dichloropropane	9.125	76	496726	103.81	ug/L	97
53) 1,2-Dibromoethane (EDB)	9.265	107	290472	108.64	ug/L	99
54) 2-Hexanone	9.508	43	656536	247.18	ug/L	99
55) Chlorobenzene	9.794	112	750995	101.94	ug/L	98
56) Ethylbenzene	9.825	91	1304536	105.02	ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.855	131	268896	108.64	ug/L	99
58) m,p-Xylenes (2)	9.965	91	1919713	209.13	ug/L	98
59) o-Xylene	10.348	91	971630	110.56	ug/L	97
60) Styrene	10.390	104	739616	119.66	ug/L	99
61) Bromoform	10.409	173	174809	119.16	ug/L	97
62) Isopropylbenzene	10.622	105	1189441	110.62	ug/L	98
65) Bromobenzene	10.938	156	274001	104.08	ug/L	85
66) n-Propylbenzene	10.968	91	1350868	107.43	ug/L	97
67) 1,1,2,2-Tetrachloroethane	11.023	83	318496	101.35	ug/L	98
68) 2-Chlorotoluene	11.090	126	268071	107.25	ug/L	92
69) 1,3,5-Trimethylbenzene	11.127	105	924444	106.38	ug/L	95
70) 1,2,3-Trichloropropane	11.127	110	120574	101.22	ug/L	99
71) t-1,4-Dichloro-2-butene	11.163	88	55036	122.91	ug/L	95
72) 4-Chlorotoluene	11.224	91	815679	106.99	ug/L	96
73) tert-Butylbenzene	11.382	91	521369	107.92	ug/L	95
74) 1,2,4-Trimethylbenzene	11.437	105	924033	105.01	ug/L	98
75) sec-Butylbenzene	11.522	105	1146668	108.71	ug/L	98
76) 4-Isopropyltoluene	11.631	119	952638	111.61	ug/L	99
77) 1,3-Dichlorobenzene	11.686	146	478649	102.24	ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	472217	101.56	ug/L	96
79) n-Butylbenzene	11.948	91	833207	107.26	ug/L	95
80) 1,2-Dichlorobenzene	12.070	146	432908	101.93	ug/L	98
81) 1,2-Dibromo-3-Chloropr...	12.672	157	83374	137.67	ug/L	88
82) Hexachlorobutadiene	13.189	223	63506	98.69	ug/L	94
83) 1,2,4-Trichlorobenzene	13.213	180	280356	104.52	ug/L	94
84) Naphthalene	13.487	128	1070303	114.74	ug/L	99
85) 1,2,3-Trichlorobenzene	13.645	180	273584	106.21	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 12:40:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	122138	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	334260	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	142815	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	103774	48.98	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	383034	50.59	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	449815	49.76	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	111188	50.42	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	264089	118.82	ug/L		99
3) Chloromethane	1.886	50	354765	100.42	ug/L		100
4) Vinyl Chloride	1.977	62	253013	106.04	ug/L		95
5) Bromomethane	2.336	96	102534	76.78	ug/L		97
6) Chloroethane	2.457	64	61488	101.01	ug/L		95
7) Trichlorofluoromethane	2.591	101	69935	100.26	ug/L		99
8) Ethanol	3.315	45	380721	5418.37	ug/L		90
9) 1,1-Dichloroethene	3.127	61	385423	127.61	ug/L		98
10) Carbon Disulfide	3.139	76	638048	120.91	ug/L		99
11) Freon 113	3.181	101	236088	102.40	ug/L		93
12) Iodomethane	3.279	142	74202	185.72	ug/L		93
13) Methylene Chloride	3.759	84	243020	96.75	ug/L		98
14) Acetone	~~3.845~~	~~43~~	~~239343~~	~~165.26~~	~~ug/L~~		~~99~~ MI
15) t-1,2-Dichloroethene	3.924	61	397172	100.79	ug/L		98
16) n-Hexane	4.021	86	58843	105.20	ug/L	#	89
17) Methyl-tert-butyl-ether	4.082	73	931269	106.89	ug/L		97
18) tert-Butanol (TBA)	4.289	~~59~~	~~2577136~~	~~3626.84~~	~~ug/L~~	#	~~85~~ MI
19) Diisopropyl ether (DIPE)	4.477	45	188761	21.34	ug/L		93
20) 1,1-Dichloroethane	4.550	63	484451	101.17	ug/L		100
21) Acrylonitrile	~~4.605~~	~~53~~	~~153597~~	~~89.25~~	~~ug/L~~		~~98~~ MI
22) Ethyl-tert-butyl ether...	4.842	59	172177	21.78	ug/L		97
23) c-1,2-Dichloroethene	5.104	61	393786	105.06	ug/L		99
24) 2,2-Dichloropropane	5.207	77	394333	103.91	ug/L		97
25) Bromochloromethane	5.298	49	227664	97.91	ug/L		90
26) Chloroform	5.384	83	474265	100.05	ug/L		96
27) Carbon Tetrachloride	5.524	117	350629	109.11	ug/L		96
28) Tetrahydrofuran	5.554	42	179202	106.12	ug/L		97
29) 1,1,1-Trichloroethane	5.590	97	438285	104.13	ug/L		98
31) 1,1-Dichloropropene	5.718	75	402420	106.86	ug/L		95
32) 2-Butanone (MEK)	5.700	43	508448	214.91	ug/L		99
33) Benzene	5.968	78	1213450	103.03	ug/L		99
34) tert-Amyl methyl ether...	6.120	73	164593	21.92	ug/L		96
35) 1,2-Dichloroethane (EDC)	6.175	62	396654	102.67	ug/L		99
36) iso-Butyl Alcohol	6.272	43	810408	3007.60	ug/L		97
38) Trichloroethene (TCE)	6.588	130	316216	106.82	ug/L		97
39) tert-Amyl ethyl ether ...	6.868	59	129880	21.67	ug/L		91
40) Dibromomethane	7.026	93	179270	103.36	ug/L		88
41) 1,2-Dichloropropane	7.136	63	313962	106.76	ug/L		99
42) Bromodichloromethane	7.215	83	365858	111.79	ug/L		96
44) c-1,3-Dichloropropene	7.914	75	467195	114.84	ug/L		95
46) Toluene	8.188	91	1235726	102.67	ug/L		98
47) Tetrachloroethene (PCE)	8.644	166	268399	103.37	ug/L		89
48) 4-Methyl-2-Pentanone (	8.632	43	860414	223.01	ug/L		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 12:40:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

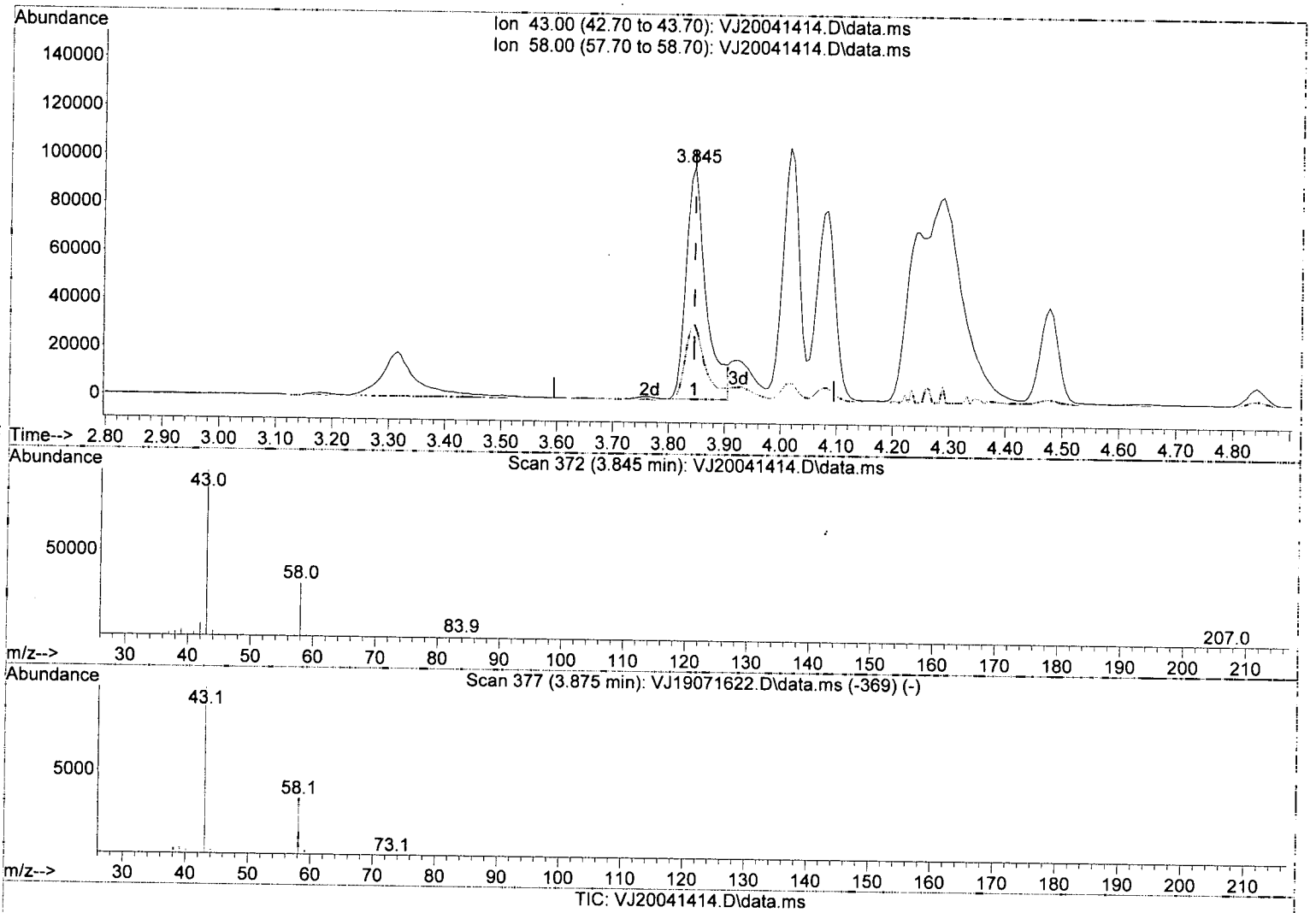
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	453467	107.33 ug/L	97
50) 1,1,2-Trichloroethane	8.839	97	276203	101.88 ug/L	98
51) Dibromochloromethane	9.034	129	262482	116.90 ug/L	99
52) 1,3-Dichloropropane	9.125	76	496726	103.81 ug/L	97
53) 1,2-Dibromoethane (EDB)	9.265	107	290472	108.64 ug/L	99
54) 2-Hexanone	9.508	43	656536	247.18 ug/L	99
55) Chlorobenzene	9.794	112	750995	101.94 ug/L	98
56) Ethylbenzene	9.825	91	1304536	105.02 ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.855	131	268896	108.64 ug/L	99
58) m,p-Xylenes (2)	9.965	91	1919713	209.13 ug/L	98
59) o-Xylene	10.348	91	971630	110.56 ug/L	97
60) Styrene	10.390	104	739616	119.66 ug/L	99
61) Bromoform	10.409	173	174809	119.16 ug/L	97
62) Isopropylbenzene	10.622	105	1189441	110.62 ug/L	98
65) Bromobenzene	10.938	156	274001	104.08 ug/L	85
66) n-Propylbenzene	10.968	91	1350868	107.43 ug/L	97
67) 1,1,2,2-Tetrachloroethane	11.023	83	318496	101.35 ug/L	98
68) 2-Chlorotoluene	11.090	126	268071	107.25 ug/L	92
69) 1,3,5-Trimethylbenzene	11.127	105	924444	106.38 ug/L	95
70) 1,2,3-Trichloropropane	11.127	110	120574	101.22 ug/L	99
71) t-1,4-Dichloro-2-butene	11.163	88	55036	122.91 ug/L	95
72) 4-Chlorotoluene	11.224	91	815679	106.99 ug/L	96
73) tert-Butylbenzene	11.382	91	521369	107.92 ug/L	95
74) 1,2,4-Trimethylbenzene	11.437	105	924033	105.01 ug/L	98
75) sec-Butylbenzene	11.522	105	1146668	108.71 ug/L	98
76) 4-Isopropyltoluene	11.631	119	952638	111.61 ug/L	99
77) 1,3-Dichlorobenzene	11.686	146	478649	102.24 ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	472217	101.56 ug/L	96
79) n-Butylbenzene	11.948	91	833207	107.26 ug/L	95
80) 1,2-Dichlorobenzene	12.070	146	432908	101.93 ug/L	98
81) 1,2-Dibromo-3-Chloropr...	12.672	157	83374	137.67 ug/L	88
82) Hexachlorobutadiene	13.189	223	63506	98.69 ug/L	94
83) 1,2,4-Trichlorobenzene	13.213	180	280356	104.52 ug/L	94
84) Naphthalene	13.487	128	1070303	114.74 ug/L	99
85) 1,2,3-Trichlorobenzene	13.645	180	273584	106.21 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 12:40:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



(14) Acetone

3.845min (+ 0.000) 165.26 ug/L

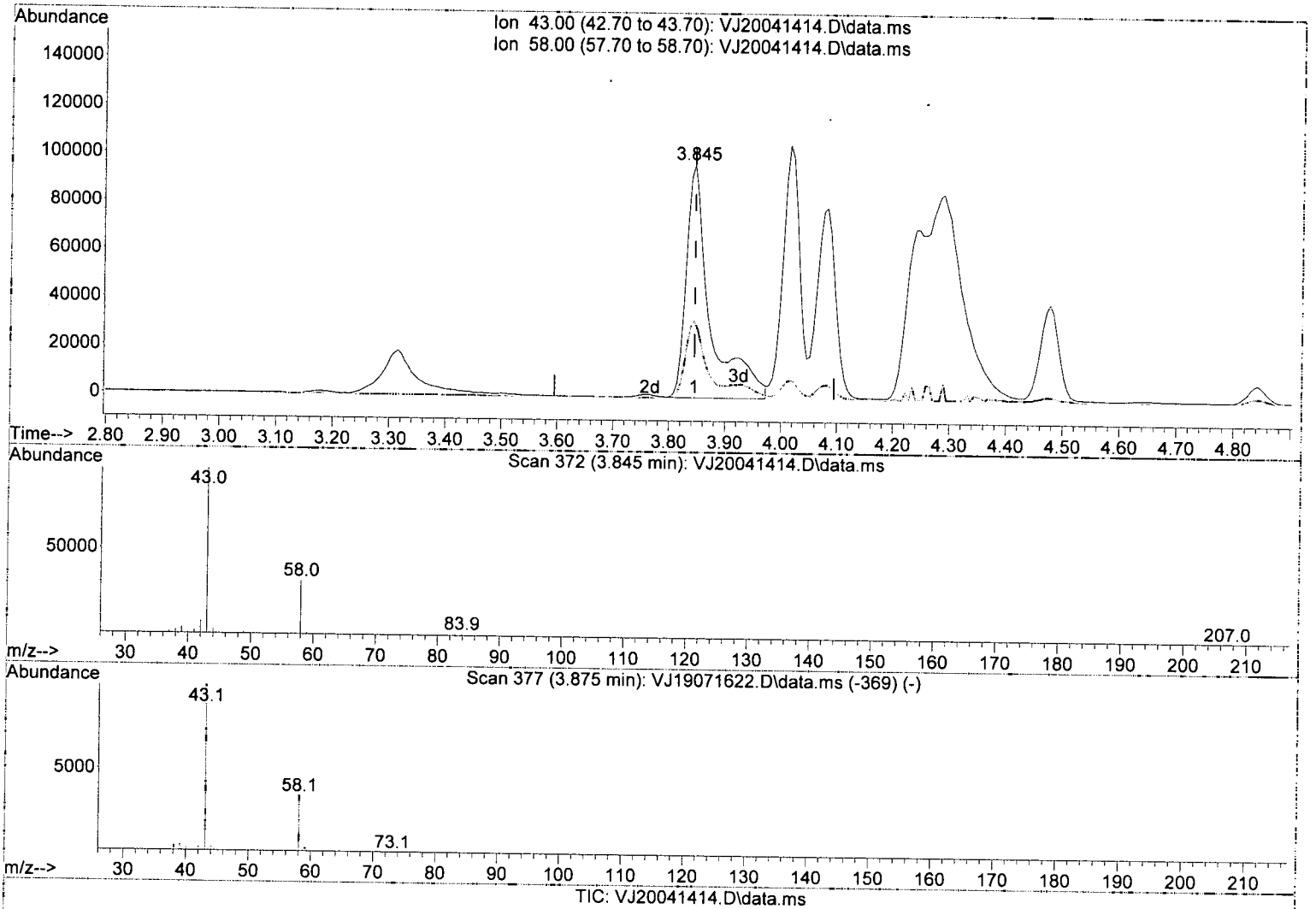
response 239343

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.56
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 12:40:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



(14) Acetone

3.845min (+ 0.000) 199.76 ug/L m

response 289316

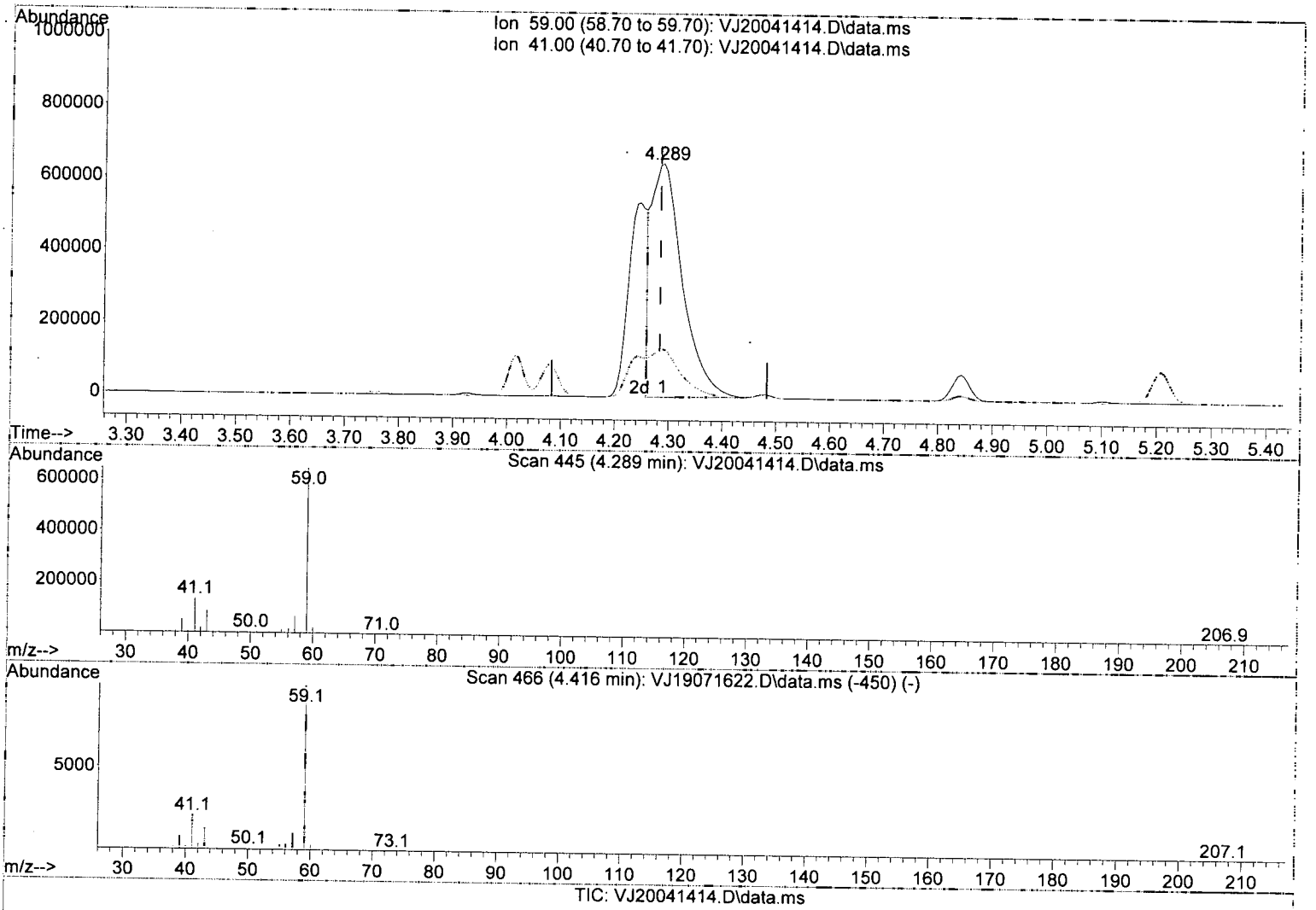
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.56
0.00	0.00	0.00
0.00	0.00	0.00

4/15/20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 12:40:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



TIC: VJ20041414.D\data.ms

(18) tert-Butanol (TBA)

4.289min (+ 0.006) 3626.84 ug/L

response 2577136

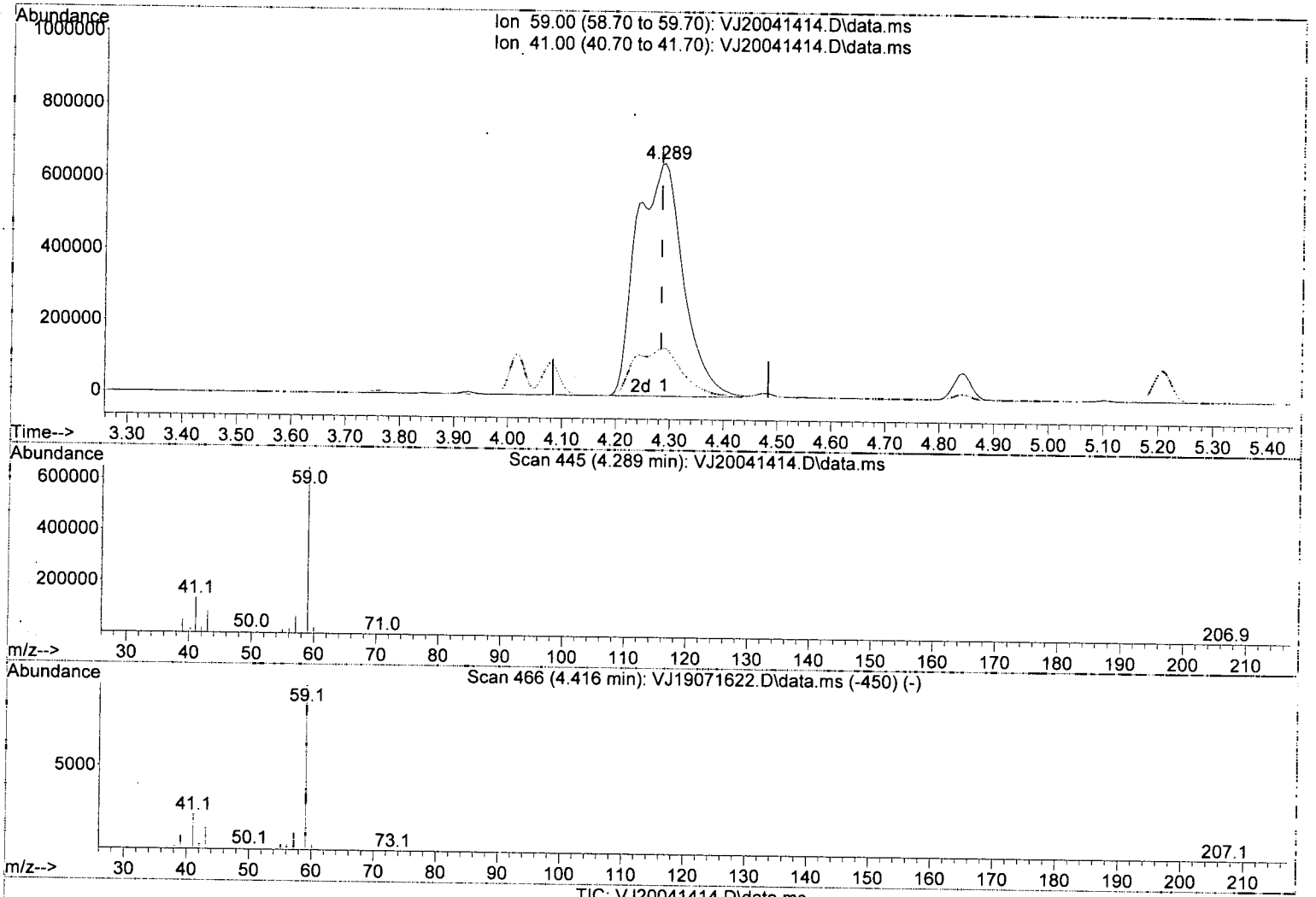
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	20.76#
0.00	0.00	0.00
0.00	0.00	0.00

MF

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 12:40:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



TIC: VJ20041414.D\data.ms

(18) tert-Butanol (TBA)

4.289min (+ 0.006) 5502.86 ug/L m

response 3910191

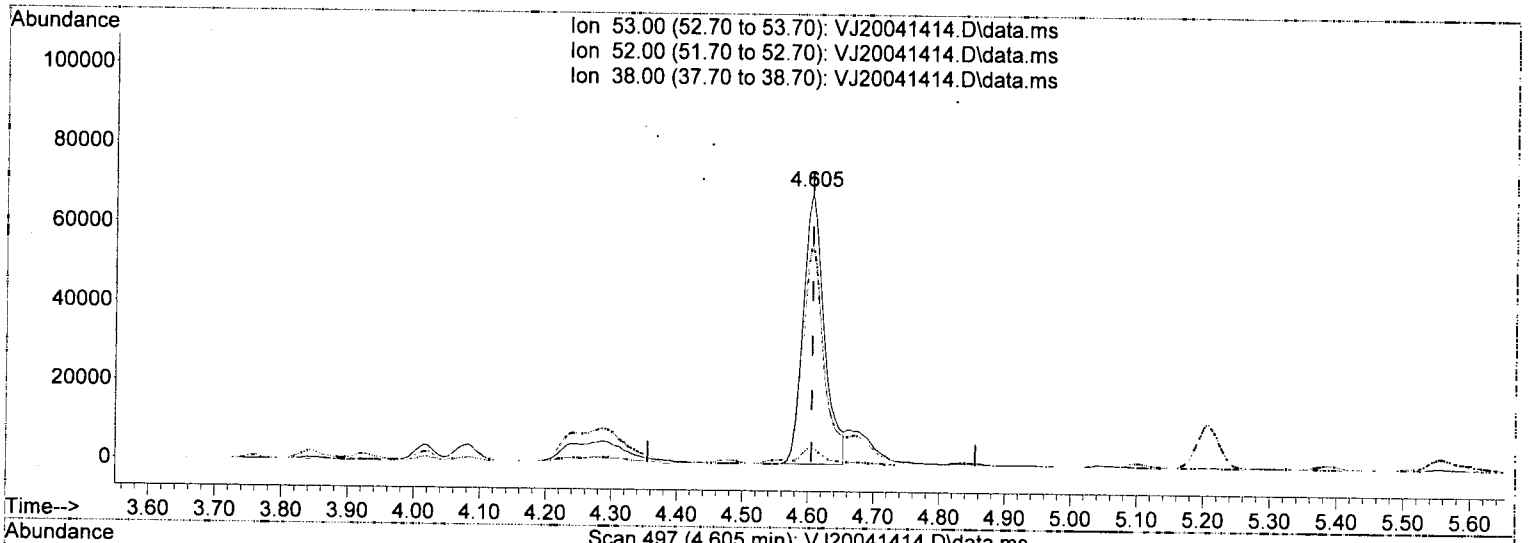
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	20.76#
0.00	0.00	0.00
0.00	0.00	0.00

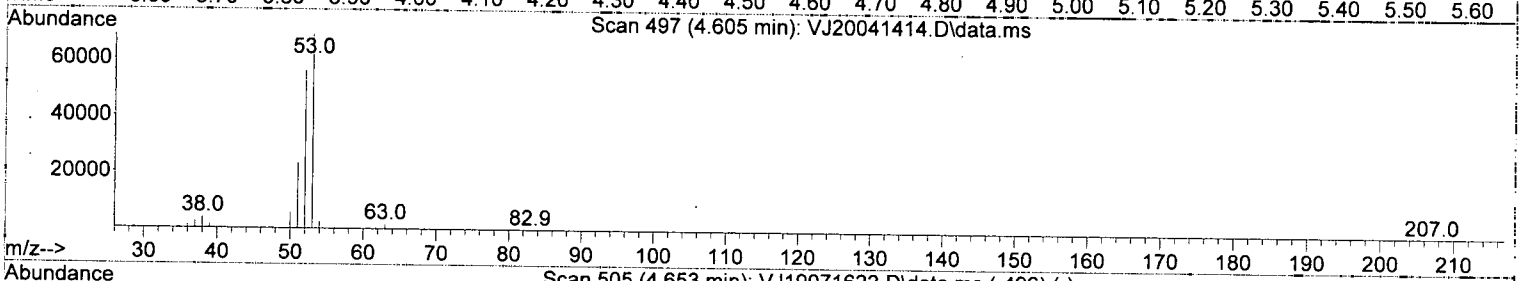
4/15/20

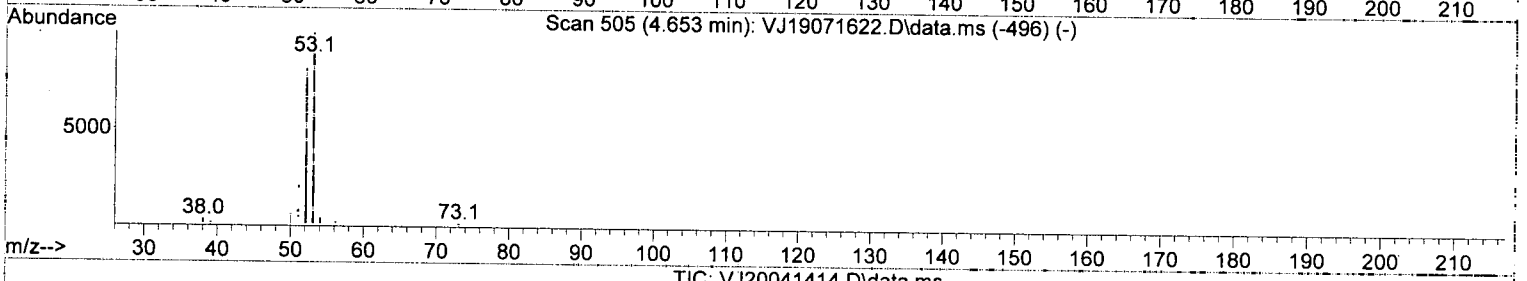
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 12:40:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration







TIC: VJ20041414.D\data.ms

(21) Acrylonitrile

4.605min (+ 0.000) 89.25 ug/L

response 153597

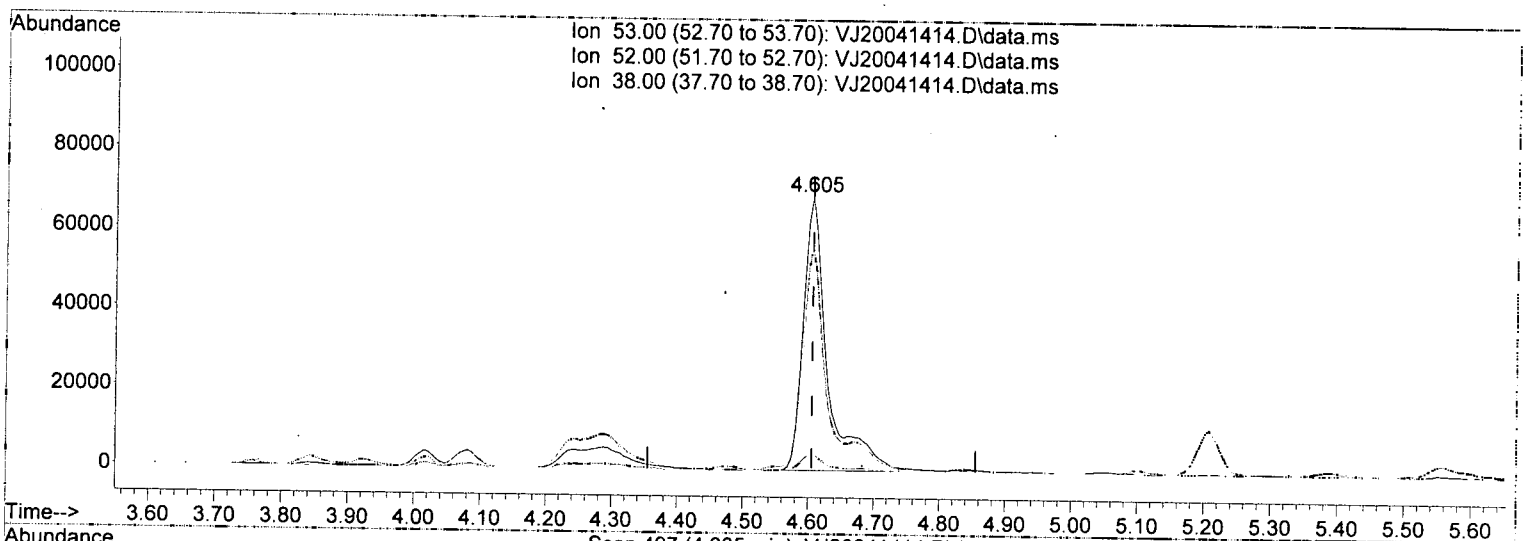
MF

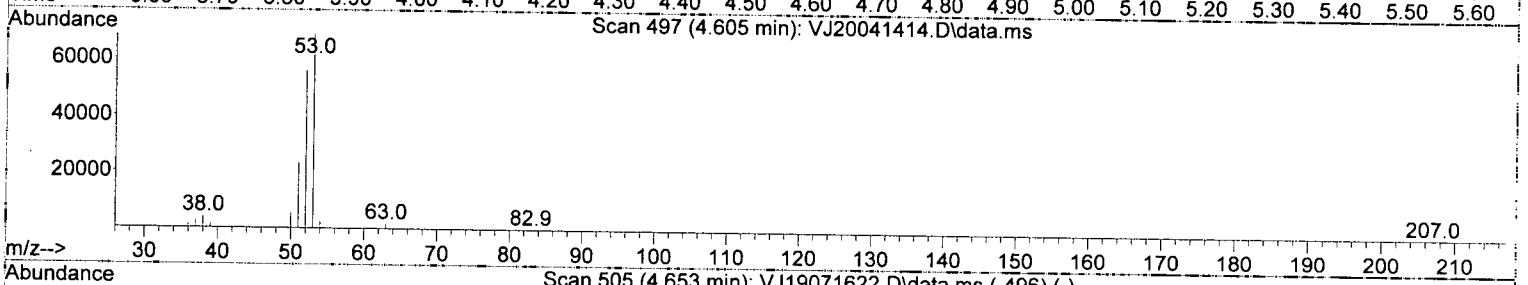
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	81.29
38.00	5.50	5.87
0.00	0.00	0.00

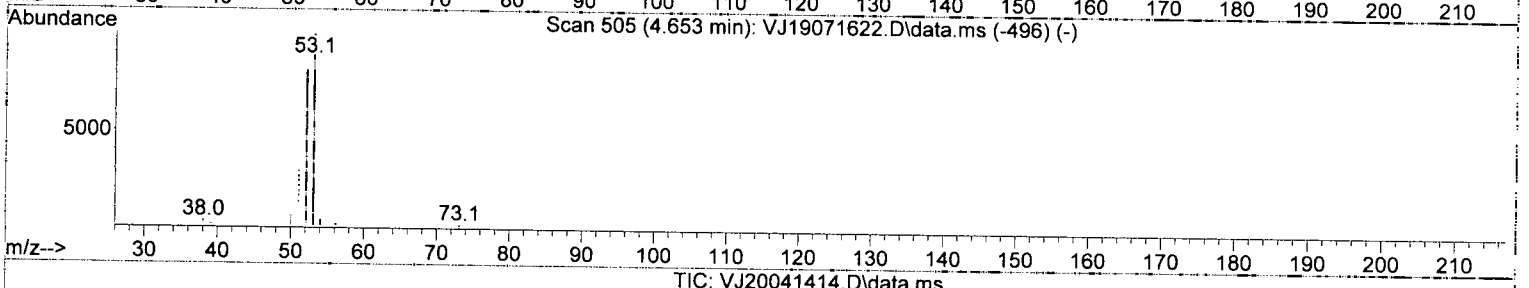
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 12:40:16 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration







TIC: VJ20041414.D\data.ms

(21) Acrylonitrile

4.605min (+ 0.000) 103.83 ug/L m

response 178692

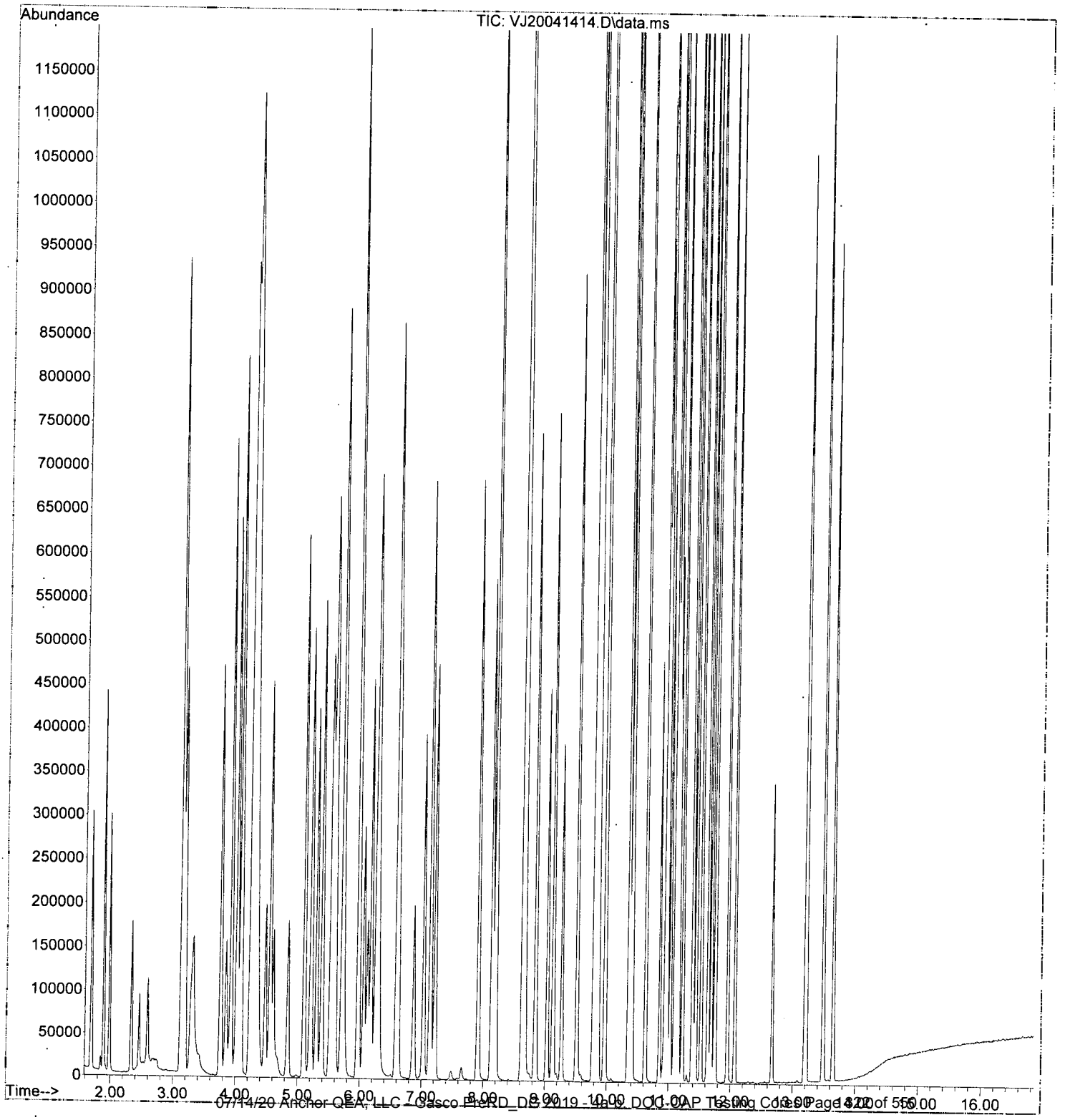
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	81.29
38.00	5.50	5.87
0.00	0.00	0.00

4/15/20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041414.D
Acq On : 14 Apr 2020 23:00
Operator : tb
Sample : 0D14058-CALA
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 13:15:12 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041415.D
Acq On : 14 Apr 2020 23:27
Operator : tb
Sample : 0D14058-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 15 14:25:36 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.059	99	108963	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	299443	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	134784	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.566	111	97266	50.84	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.619	114	344483	50.46	ug/L		0.00
45) Toluene-d8 (S)	8.133	98	408083	50.12	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	100964	49.31	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	828	0.37	ug/L		88
3) Chloromethane	1.886	50	11381	3.23	ug/L		96
4) Vinyl Chloride	1.989	62	235	0.10	ug/L	#	46
5) Bromomethane	2.330	96	11126	7.09	ug/L		94
6) Chloroethane	2.451	64	117	0.20	ug/L	#	1
8) Ethanol	3.340	45	64	0.95	ug/L	#	29
9) 1,1-Dichloroethene	3.127	61	767	0.23	ug/L	#	70
10) Carbon Disulfide	3.133	76	3261	0.61	ug/L		87
11) Freon 113	3.175	101	693	0.33	ug/L		93
12) Iodomethane	3.273	142	5838	15.13	ug/L		94
13) Methylene Chloride	3.759	84	4730	1.98	ug/L		94
14) Acetone	3.851	43	1556	1.15	ug/L		93
15) t-1,2-Dichloroethene	3.917	61	955	0.26	ug/L		93
16) n-Hexane	4.021	86	486	0.95	ug/L	#	79
18) tert-Butanol (TBA)	4.264	59	1566	2.38	ug/L	#	70
28) Tetrahydrofuran	5.566	42	434	0.27	ug/L	#	39
31) 1,1-Dichloropropene	5.718	75	918	0.28	ug/L		91
32) 2-Butanone (MEK)	5.700	43	415	0.19	ug/L		52
33) Benzene	5.968	78	1403	0.13	ug/L		78
36) iso-Butyl Alcohol	6.278	43	1363	13.72	ug/L		88
38) Trichloroethene (TCE)	6.582	130	572	0.21	ug/L	#	72
39) tert-Amyl ethyl ether ...	6.844	59	1344	0.28	ug/L	#	52
46) Toluene	8.200	91	1598	0.14	ug/L		76
47) Tetrachloroethene (PCE)	8.644	166	952	0.42	ug/L		85
55) Chlorobenzene	9.794	112	1184	0.17	ug/L	#	54
56) Ethylbenzene	9.825	91	2239	0.20	ug/L		92
58) m,p-Xylenes (2)	9.965	91	3557	0.50	ug/L		98
59) o-Xylene	10.348	91	1064	0.22	ug/L		83
60) Styrene	10.390	104	642	0.31	ug/L		79
62) Isopropylbenzene	10.622	105	2063	0.22	ug/L		85
65) Bromobenzene	10.938	156	412	0.17	ug/L	#	61
66) n-Propylbenzene	10.968	91	4191	0.36	ug/L		93
68) 2-Chlorotoluene	11.096	126	612	0.27	ug/L	#	72
69) 1,3,5-Trimethylbenzene	11.127	105	2145	0.28	ug/L		95
72) 4-Chlorotoluene	11.224	91	2330	0.33	ug/L		99
73) tert-Butylbenzene	11.382	91	1386	0.31	ug/L		91
74) 1,2,4-Trimethylbenzene	11.437	105	2042	0.27	ug/L		94
75) sec-Butylbenzene	11.522	105	3434	0.38	ug/L		92
76) 4-Isopropyltoluene	11.631	119	3059	0.41	ug/L		94
77) 1,3-Dichlorobenzene	11.686	146	1845	0.42	ug/L		94
78) 1,4-Dichlorobenzene	11.753	146	2333	0.50	ug/L		83
79) n-Butylbenzene	11.948	91	4334	0.61	ug/L		95
80) 1,2-Dichlorobenzene	12.069	146	1252	0.32	ug/L		88

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041415.D
Acq On : 14 Apr 2020 23:27
Operator : tb
Sample : 0D14058-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 15 14:25:36 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

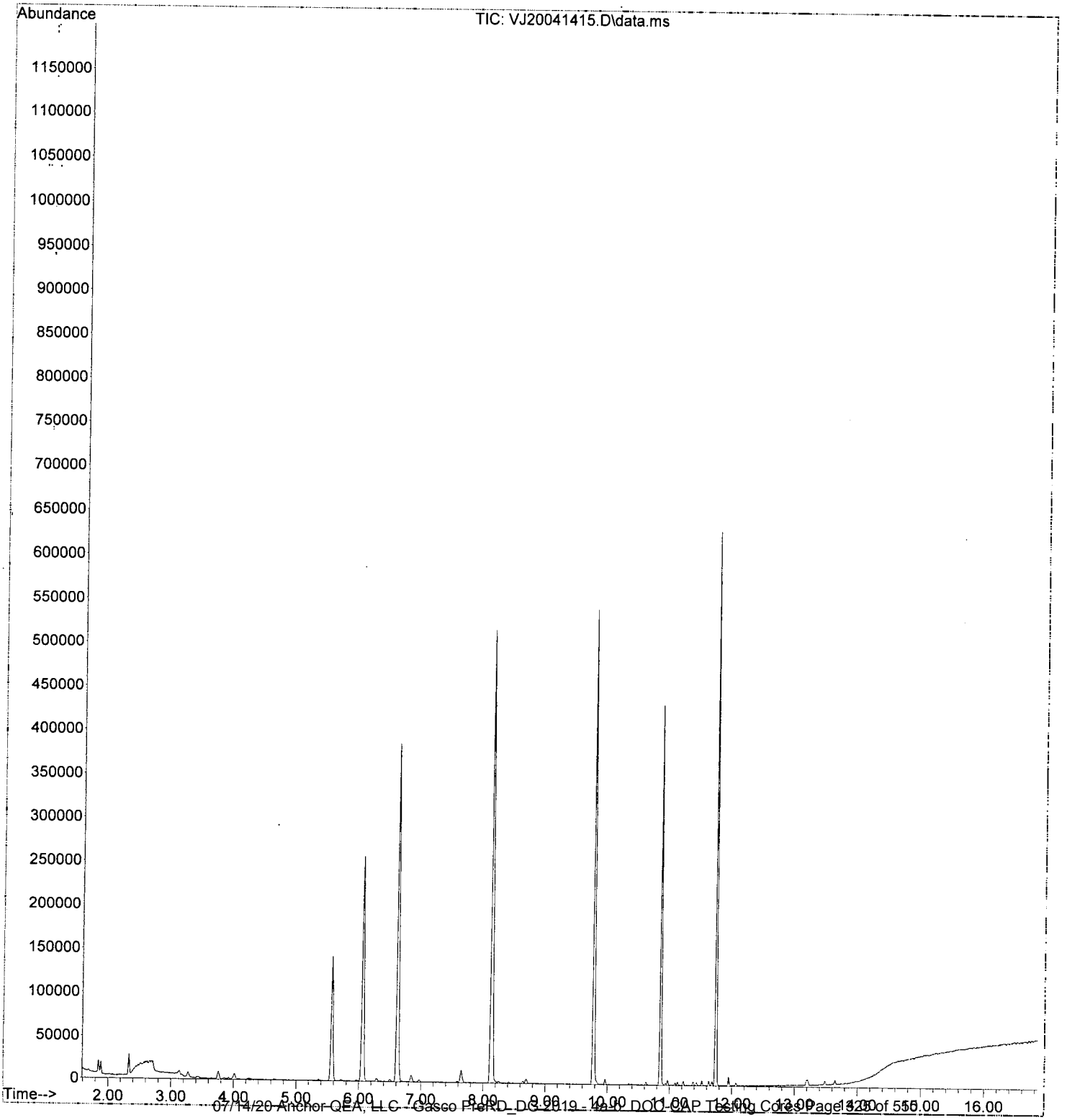
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
82) Hexachlorobutadiene	13.189	223	791	1.29 ug/L	83
83) 1,2,4-Trichlorobenzene	13.213	180	1926	0.80 ug/L	98
84) Naphthalene	13.487	128	3284	0.43 ug/L	85
85) 1,2,3-Trichlorobenzene	13.645	180	1694	0.71 ug/L	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041415.D
Acq On : 14 Apr 2020 23:27
Operator : tb
Sample : 0D14058-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 15 14:25:36 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041416.D
Acq On : 14 Apr 2020 23:54
Operator : tb
Sample : 0D14058-CALB
Misc : 1X 200ppb 5mL DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 13:17:53 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	117091	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	325548	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	143744	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	101832	50.13	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.612	114	371374	51.17	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	438887	49.85	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	108105	48.71	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.673	85	512521	240.53	ug/L		98
3) Chloromethane	1.873	50	708705	209.25	ug/L		99
4) Vinyl Chloride	1.971	62	582810	254.78	ug/L		95
5) Bromomethane	2.317	96	201911	157.71	ug/L		99
6) Chloroethane	2.439	64	111540	191.13	ug/L		98
7) Trichlorofluoromethane	2.567	101	128760	192.56	ug/L		99
8) Ethanol	0.000		0	N.D.	d		
9) 1,1-Dichloroethene	3.108	61	607289	209.74	ug/L		98
10) Carbon Disulfide	3.120	76	1124276	222.23	ug/L		99
11) Freon 113	3.163	101	444727	201.21	ug/L		93
12) Iodomethane	3.266	142	182559	476.61	ug/L		93
13) Methylene Chloride	3.747	84	474555	197.06	ug/L		98
14) Acetone	3.832	43	518921	373.74	ug/L		98
15) t-1,2-Dichloroethene	3.911	61	765331	202.58	ug/L		98
16) n-Hexane	4.003	86	111118	207.22	ug/L	#	85
17) Methyl-tert-butyl-ether	4.069	73	1814036	217.19	ug/L		98
18) tert-Butanol (TBA)	0.000		0	N.D.	d		
19) Diisopropyl ether (DIPE)	0.000		0	N.D.	d		
20) 1,1-Dichloroethane	4.544	63	907148	197.61	ug/L		100
21) Acrylonitrile	4.599	53	329130	199.49	ug/L		98
22) Ethyl-tert-butyl ether...	0.000		0	N.D.	d		
23) c-1,2-Dichloroethene	5.092	61	762386	212.16	ug/L		99
24) 2,2-Dichloropropane	5.201	77	744440	202.66	ug/L		95
25) Bromochloromethane	5.292	49	439068	196.97	ug/L		92
26) Chloroform	5.377	83	909798	200.20	ug/L		97
27) Carbon Tetrachloride	5.517	117	683501	221.86	ug/L		95
28) Tetrahydrofuran	5.548	42	380890	235.27	ug/L		97
29) 1,1,1-Trichloroethane	5.584	97	837558	207.57	ug/L		98
31) 1,1-Dichloropropene	5.712	75	770697	213.47	ug/L		96
32) 2-Butanone (MEK)	5.694	43	1060971	467.77	ug/L		98
33) Benzene	5.961	78	2335719	206.87	ug/L		100
34) tert-Amyl methyl ether...	0.000		0	N.D.	d		
35) 1,2-Dichloroethane (EDC)	6.168	62	760174	205.25	ug/L		99
36) iso-Butyl Alcohol	6.241	43	1712299	6628.62	ug/L		96
38) Trichloroethene (TCE)	6.582	130	618609	217.99	ug/L		97
39) tert-Amyl ethyl ether ...	0.000		0	N.D.	d		
40) Dibromomethane	7.020	93	348754	209.74	ug/L		87
41) 1,2-Dichloropropane	7.130	63	611540	216.92	ug/L		99
42) Bromodichloromethane	7.209	83	731916	233.29	ug/L		98
44) c-1,3-Dichloropropene	7.914	75	936076	236.26	ug/L		94
46) Toluene	8.188	91	2385651	203.51	ug/L		98
47) Tetrachloroethene (PCE)	8.638	166	513218	202.94	ug/L		86
48) 4-Methyl-2-Pentanone (	8.626	43	1661248	1043.89	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041416.D
Acq On : 14 Apr 2020 23:54
Operator : tb
Sample : 0D14058-CALB
Misc : 1X 200ppb 5mL DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 15 13:17:53 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	892991	217.02	ug/L		98
50) 1,1,2-Trichloroethane	8.839	97	539047	204.16	ug/L		98
51) Dibromochloromethane	9.034	129	536519	245.35	ug/L		99
52) 1,3-Dichloropropane	9.125	76	975410	209.29	ug/L		97
53) 1,2-Dibromoethane (EDB)	9.265	107	577502	221.77	ug/L		99
54) 2-Hexanone	9.508	43	1340796	518.30	ug/L		97
55) Chlorobenzene	9.794	112	1453899	202.63	ug/L		100
56) Ethylbenzene	9.825	91	2516565	208.02	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.855	131	512913	212.77	ug/L		98
58) m,p-Xylenes (2)	9.964	91	3693314	413.10	ug/L		99
59) o-Xylene	10.348	91	1917634	224.04	ug/L		97
60) Styrene	10.390	104	1457393	242.10	ug/L		98
61) Bromoform	10.409	173	341051	238.70	ug/L		97
62) Isopropylbenzene	10.621	105	2304336	220.05	ug/L		99
65) Bromobenzene	10.938	156	527897	199.22	ug/L	#	85
66) n-Propylbenzene	10.968	91	2585026	204.24	ug/L		97
67) 1,1,2,2-Tetrachloroethane	11.023	83	619643	195.90	ug/L		98
68) 2-Chlorotoluene	11.090	126	514965	204.70	ug/L		94
69) 1,3,5-Trimethylbenzene	11.133	105	1771155	202.51	ug/L		98
70) 1,2,3-Trichloropropane	11.126	110	231988	193.49	ug/L		99
71) t-1,4-Dichloro-2-butene	11.163	88	111843	248.17	ug/L	#	92
72) 4-Chlorotoluene	11.224	91	1561182	203.45	ug/L		96
73) tert-Butylbenzene	11.382	91	1001978	206.06	ug/L		95
74) 1,2,4-Trimethylbenzene	11.437	105	1770182	199.86	ug/L		99
75) sec-Butylbenzene	11.522	105	2186868	205.98	ug/L		98
76) 4-Isopropyltoluene	11.631	119	1832896	213.35	ug/L		98
77) 1,3-Dichlorobenzene	11.686	146	931568	197.71	ug/L		97
78) 1,4-Dichlorobenzene	11.753	146	925578	197.78	ug/L		96
79) n-Butylbenzene	11.948	91	1603056	205.04	ug/L		96
80) 1,2-Dichlorobenzene	12.069	146	871820	203.95	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.672	157	190481	312.50	ug/L		90
82) Hexachlorobutadiene	13.189	223	128695	198.70	ug/L		93
83) 1,2,4-Trichlorobenzene	13.213	180	585152	216.74	ug/L		96
84) Naphthalene	13.487	128	2246235	239.24	ug/L		99
85) 1,2,3-Trichlorobenzene	13.645	180	574176	221.46	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041416.D
Acq On : 14 Apr 2020 23:54
Operator : tb
Sample : 0D14058-CALB
Misc : 1X 200ppb 5mL DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 15 12:40:19 2020
Quant Method : C:\msdchem\1\methods\~~VJ200414S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

4/15/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	117091	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	325548	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	143744	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	101832	50.13	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.612	114	371374	51.17	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	438887	49.85	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	108105	48.71	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.673	85	512521	240.53	ug/L		98
3) Chloromethane	1.873	50	708705	209.25	ug/L		99
4) Vinyl Chloride	1.971	62	582810	254.78	ug/L		95
5) Bromomethane	2.317	96	201911	157.71	ug/L		99
6) Chloroethane	2.439	64	111540	191.13	ug/L		98
7) Trichlorofluoromethane	2.567	101	128760	192.56	ug/L		99
8) Ethanol	3.266	45	2911	43.21	ug/L		93
9) 1,1-Dichloroethene	3.108	61	607289	209.74	ug/L		98
10) Carbon Disulfide	3.120	76	1124276	222.23	ug/L		99
11) Freon 113	3.163	101	444727	201.21	ug/L		93
12) Iodomethane	3.266	142	182559	476.61	ug/L		93
13) Methylene Chloride	3.747	84	474555	197.06	ug/L		98
14) Acetone	3.832	43	518921	373.74	ug/L		98
15) t-1,2-Dichloroethene	3.911	61	765331	202.58	ug/L		98
16) n-Hexane	4.003	86	111118	207.22	ug/L	#	85
17) Methyl-tert-butyl-ether	4.069	73	1814036	217.19	ug/L		98
18) tert-Butanol (TBA)	4.295	59	383	0.56	ug/L	#	1
19) Diisopropyl ether (DIPE)	4.477	45	1397	0.16	ug/L		84
20) 1,1-Dichloroethane	4.544	63	907148	197.61	ug/L		100
21) Acrylonitrile	4.599	53	329130	199.49	ug/L		98
22) Ethyl-tert-butyl ether...	4.836	59	983	0.13	ug/L		87
23) c-1,2-Dichloroethene	5.092	61	762386	212.16	ug/L		99
24) 2,2-Dichloropropane	5.201	77	744440	202.66	ug/L		95
25) Bromochloromethane	5.292	49	439068	196.97	ug/L		92
26) Chloroform	5.377	83	909798	200.20	ug/L		97
27) Carbon Tetrachloride	5.517	117	683501	221.86	ug/L		95
28) Tetrahydrofuran	5.548	42	380890	235.27	ug/L		97
29) 1,1,1-Trichloroethane	5.584	97	837558	207.57	ug/L		98
31) 1,1-Dichloropropene	5.712	75	770697	213.47	ug/L		96
32) 2-Butanone (MEK)	5.694	43	1060971	467.77	ug/L		98
33) Benzene	5.961	78	2335719	206.87	ug/L		100
34) tert-Amyl methyl ether...	6.107	73	978	0.14	ug/L		59
35) 1,2-Dichloroethane (EDC)	6.168	62	760174	205.25	ug/L		99
36) iso-Butyl Alcohol	6.241	43	1712299	6628.62	ug/L		96
38) Trichloroethene (TCE)	6.582	130	618609	217.99	ug/L		97
39) tert-Amyl ethyl ether ...	6.844	59	2515	0.44	ug/L	#	64
40) Dibromomethane	7.020	93	348754	209.74	ug/L		87
41) 1,2-Dichloropropane	7.130	63	611540	216.92	ug/L		99
42) Bromodichloromethane	7.209	83	731916	233.29	ug/L		98
44) c-1,3-Dichloropropene	7.914	75	936076	236.26	ug/L		94
46) Toluene	8.188	91	2385651	203.51	ug/L		98
47) Tetrachloroethene (PCE)	8.638	166	513218	202.94	ug/L		86
48) 4-Methyl-2-Pentanone (	8.626	43	1661248	443.89	ug/L		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041416.D
Acq On : 14 Apr 2020 23:54
Operator : tb
Sample : 0D14058-CALB
Misc : 1X 200ppb 5mL DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 15 12:40:19 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration

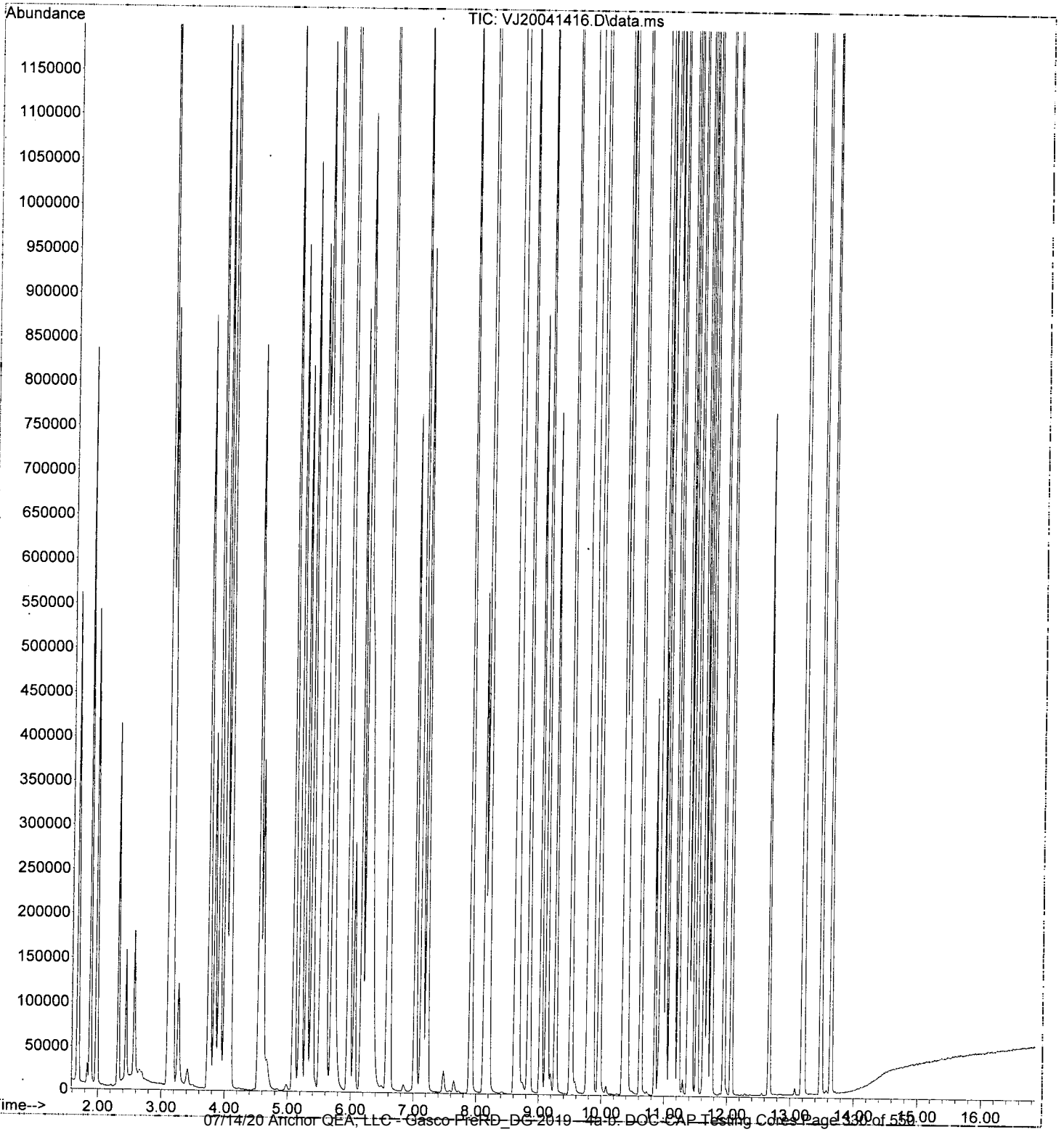
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	892991	217.02 ug/L	98
50) 1,1,2-Trichloroethane	8.839	97	539047	204.16 ug/L	98
51) Dibromochloromethane	9.034	129	536519	245.35 ug/L	99
52) 1,3-Dichloropropane	9.125	76	975410	209.29 ug/L	97
53) 1,2-Dibromoethane (EDB)	9.265	107	577502	221.77 ug/L	99
54) 2-Hexanone	9.508	43	1340796	518.30 ug/L	97
55) Chlorobenzene	9.794	112	1453899	202.63 ug/L	100
56) Ethylbenzene	9.825	91	2516565	208.02 ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.855	131	512913	212.77 ug/L	98
58) m,p-Xylenes (2)	9.964	91	3693314	413.10 ug/L	99
59) o-Xylene	10.348	91	1917634	224.04 ug/L	97
60) Styrene	10.390	104	1457393	242.10 ug/L	98
61) Bromoform	10.409	173	341051	238.70 ug/L	97
62) Isopropylbenzene	10.621	105	2304336	220.05 ug/L	99
65) Bromobenzene	10.938	156	527897	199.22 ug/L #	85
66) n-Propylbenzene	10.968	91	2585026	204.24 ug/L	97
67) 1,1,2,2-Tetrachloroethane	11.023	83	619643	195.90 ug/L	98
68) 2-Chlorotoluene	11.090	126	514965	204.70 ug/L	94
69) 1,3,5-Trimethylbenzene	11.133	105	1771155	202.51 ug/L	98
70) 1,2,3-Trichloropropane	11.126	110	231988	193.49 ug/L	99
71) t-1,4-Dichloro-2-butene	11.163	88	111843	248.17 ug/L #	92
72) 4-Chlorotoluene	11.224	91	1561182	203.45 ug/L	96
73) tert-Butylbenzene	11.382	91	1001978	206.06 ug/L	95
74) 1,2,4-Trimethylbenzene	11.437	105	1770182	199.86 ug/L	99
75) sec-Butylbenzene	11.522	105	2186868	205.98 ug/L	98
76) 4-Isopropyltoluene	11.631	119	1832896	213.35 ug/L	98
77) 1,3-Dichlorobenzene	11.686	146	931568	197.71 ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	925578	197.78 ug/L	96
79) n-Butylbenzene	11.948	91	1603056	205.04 ug/L	96
80) 1,2-Dichlorobenzene	12.069	146	871820	203.95 ug/L	98
81) 1,2-Dibromo-3-Chloropr...	12.672	157	190481	312.50 ug/L	90
82) Hexachlorobutadiene	13.189	223	128695	198.70 ug/L	93
83) 1,2,4-Trichlorobenzene	13.213	180	585152	216.74 ug/L	96
84) Naphthalene	13.487	128	2246235	239.24 ug/L	99
85) 1,2,3-Trichlorobenzene	13.645	180	574176	221.46 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041416.D
Acq On : 14 Apr 2020 23:54
Operator : tb
Sample : 0D14058-CALB
Misc : 1X 200ppb 5mL DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 15 13:17:53 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 12:35:25 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041417.D
Acq On : 15 Apr 2020 00:21
Operator : tb
Sample : 0D14058-IBL4
Misc : 1X 5mL DI+MeOH
ALS Vial : 17 Sample Multiplier: 1

NR

Quant Time: Apr 15 14:25:39 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.053	99	116884	50.00 ug/L	0.00
43) Chlorobenzene-d5 (I)	9.776	117	316562	50.00 ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	135880	50.00 ug/L	0.00
System Monitoring Compounds					
30) Dibromofluoromethane (S)	5.566	111	109181	53.20 ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.618	114	371688	50.76 ug/L	0.00
45) Toluene-d8 (S)	8.133	98	435445	50.59 ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.853	174	105770	51.25 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.679	85	1705	0.71 ug/L	91
3) Chloromethane	1.879	50	14782	3.91 ug/L	99
4) Vinyl Chloride	1.971	62	599	0.23 ug/L	87
5) Bromomethane	2.323	96	13651	8.82 ug/L	96
6) Chloroethane	2.451	64	143	0.23 ug/L #	1
7) Trichlorofluoromethane	2.591	101	213	Below Cal	63
8) Ethanol	3.291	45	1741	23.98 ug/L	88
9) 1,1-Dichloroethene	3.126	61	1980	0.56 ug/L	91
10) Carbon Disulfide	3.139	76	8178	1.43 ug/L	90
11) Freon 113	3.181	101	1592	0.72 ug/L	83
12) Iodomethane	3.272	142	7610	17.58 ug/L	93
13) Methylene Chloride	3.759	84	2762	1.08 ug/L	91
14) Acetone	3.844	43	1834	1.26 ug/L	84
15) t-1,2-Dichloroethene	3.923	61	1862	0.47 ug/L	94
16) n-Hexane	4.021	86	284	0.52 ug/L #	76
23) c-1,2-Dichloroethene	5.098	61	633	0.17 ug/L #	77
27) Carbon Tetrachloride	5.523	117	731	0.25 ug/L	80
28) Tetrahydrofuran	5.566	42	541	0.32 ug/L #	57
29) 1,1,1-Trichloroethane	5.596	97	470	0.12 ug/L #	69
31) 1,1-Dichloropropene	5.718	75	1935	0.54 ug/L	95
32) 2-Butanone (MEK)	5.694	43	295	0.12 ug/L	52
33) Benzene	5.967	78	2658	0.22 ug/L	94
35) 1,2-Dichloroethane (EDC)	6.174	62	341	0.09 ug/L #	49
36) iso-Butyl Alcohol	6.284	43	1684	14.51 ug/L	94
38) Trichloroethene (TCE)	6.594	130	1284	0.44 ug/L	85
39) tert-Amyl ethyl ether ...	6.843	59	1429	0.23 ug/L #	44
44) c-1,3-Dichloropropene	7.908	75	457	0.12 ug/L #	77
46) Toluene	8.188	91	3222	0.27 ug/L	94
47) Tetrachloroethene (PCE)	8.638	166	2137	0.89 ug/L	92
49) t-1,3-Dichloropropene	8.662	75	613	0.16 ug/L #	45
54) 2-Hexanone	9.508	43	215	0.49 ug/L #	32
55) Chlorobenzene	9.788	112	2495	0.34 ug/L #	54
56) Ethylbenzene	9.824	91	4554	0.38 ug/L	100
58) m,p-Xylenes (2)	9.964	91	7291	0.89 ug/L	93
59) o-Xylene	10.348	91	2285	0.36 ug/L	88
60) Styrene	10.396	104	1367	0.41 ug/L	96
62) Isopropylbenzene	10.621	105	4332	0.44 ug/L	93
65) Bromobenzene	10.938	156	870	0.35 ug/L	84
66) n-Propylbenzene	10.968	91	8107	0.69 ug/L	92
68) 2-Chlorotoluene	11.090	126	1124	0.49 ug/L	96
69) 1,3,5-Trimethylbenzene	11.126	105	4253	0.56 ug/L	97
72) 4-Chlorotoluene	11.224	91	4526	0.64 ug/L	93
73) tert-Butylbenzene	11.382	91	2502	0.58 ug/L	93

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041417.D
Acq On : 15 Apr 2020 00:21
Operator : tb
Sample : 0D14058-IBL4
Misc : 1X 5mL DI+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 15 14:25:39 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

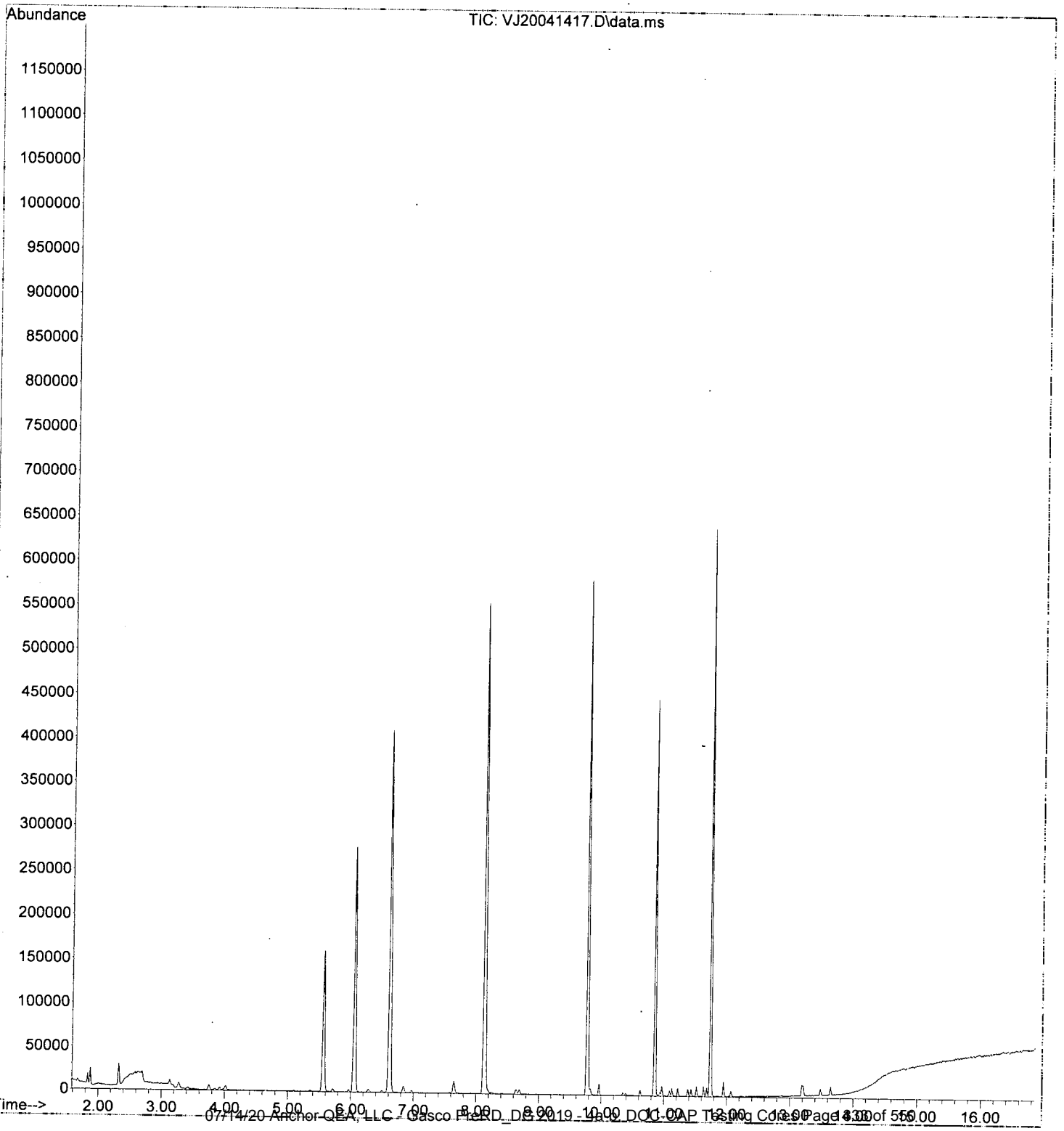
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
74) 1,2,4-Trimethylbenzene	11.437	105	4222	0.56 ug/L	98
75) sec-Butylbenzene	11.522	105	6945	0.76 ug/L	97
76) 4-Isopropyltoluene	11.631	119	5669	0.74 ug/L	98
77) 1,3-Dichlorobenzene	11.686	146	3606	0.82 ug/L	88
78) 1,4-Dichlorobenzene	11.753	146	4192	0.90 ug/L	91
79) n-Butylbenzene	11.948	91	7831	1.09 ug/L	96
80) 1,2-Dichlorobenzene	12.069	146	2456	0.61 ug/L	98
82) Hexachlorobutadiene	13.195	223	1391	2.25 ug/L	86
83) 1,2,4-Trichlorobenzene	13.213	180	3679	1.52 ug/L	92
84) Naphthalene	13.487	128	5930	0.76 ug/L	96
85) 1,2,3-Trichlorobenzene	13.645	180	3003	1.25 ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041417.D
Acq On : 15 Apr 2020 00:21
Operator : tb
Sample : 0D14058-IBL4
Misc : 1X 5mL DI+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 15 14:25:39 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041418.D
Acq On : 15 Apr 2020 00:48
Operator : tb
Sample : 0D14058-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 15 14:25:42 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.053	99	111486	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.776	117	301009	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.741	152	132286	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.560	111	101336	51.77	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.612	114	351195	50.28	ug/L		0.00
45) Toluene-d8 (S)	8.127	98	413328	50.50	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.853	174	101428	50.48	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	600	0.26	ug/L	#	51
3) Chloromethane	1.873	50	11358	3.15	ug/L		99
5) Bromomethane	2.317	96	11642	7.36	ug/L		98
6) Chloroethane	2.445	64	58	0.10	ug/L	#	1
8) Ethanol	3.273	45	3271	47.23	ug/L		74
9) 1,1-Dichloroethene	3.121	61	522	0.15	ug/L	#	48
10) Carbon Disulfide	3.127	76	2764	0.51	ug/L		87
11) Freon 113	3.169	101	605	0.29	ug/L		85
12) Iodomethane	3.260	142	5464	14.15	ug/L		96
13) Methylene Chloride	3.747	84	5288	2.16	ug/L		90
14) Acetone	3.838	43	2754	1.98	ug/L		96
15) t-1,2-Dichloroethene	3.911	61	643	0.17	ug/L		86
18) tert-Butanol (TBA)	4.240	59	753	1.12	ug/L	#	50
31) 1,1-Dichloropropene	5.712	75	597	0.18	ug/L	#	39
36) iso-Butyl Alcohol	6.278	43	1247	13.16	ug/L	#	59
38) Trichloroethene (TCE)	6.582	130	347	0.12	ug/L		89
39) tert-Amyl ethyl ether ...	6.844	59	1037	0.17	ug/L	#	64
46) Toluene	8.188	91	1159	0.10	ug/L		83
47) Tetrachloroethene (PCE)	8.644	166	654	0.28	ug/L	#	78
55) Chlorobenzene	9.788	112	868	0.12	ug/L	#	1
56) Ethylbenzene	9.831	91	1658	0.15	ug/L		92
58) m,p-Xylenes (2)	9.965	91	2464	0.37	ug/L		92
59) o-Xylene	10.342	91	631	0.17	ug/L		82
60) Styrene	10.396	104	411	0.27	ug/L	#	40
62) Isopropylbenzene	10.622	105	1388	0.15	ug/L		91
65) Bromobenzene	10.938	156	233	0.10	ug/L		88
66) n-Propylbenzene	10.968	91	2927	0.26	ug/L		94
68) 2-Chlorotoluene	11.090	126	325	0.15	ug/L	#	77
69) 1,3,5-Trimethylbenzene	11.127	105	1518	0.20	ug/L		87
72) 4-Chlorotoluene	11.224	91	1495	0.22	ug/L		94
73) tert-Butylbenzene	11.382	91	705	0.17	ug/L	#	74
74) 1,2,4-Trimethylbenzene	11.437	105	1414	0.19	ug/L		90
75) sec-Butylbenzene	11.522	105	2327	0.26	ug/L		94
76) 4-Isopropyltoluene	11.631	119	2126	0.29	ug/L		97
77) 1,3-Dichlorobenzene	11.686	146	1249	0.29	ug/L		94
78) 1,4-Dichlorobenzene	11.753	146	1403	0.31	ug/L	#	77
79) n-Butylbenzene	11.948	91	3259	0.47	ug/L		90
80) 1,2-Dichlorobenzene	12.069	146	692	0.18	ug/L		94
82) Hexachlorobutadiene	13.189	223	385	0.64	ug/L		88
83) 1,2,4-Trichlorobenzene	13.213	180	1422	0.60	ug/L		89
84) Naphthalene	13.481	128	1787	0.24	ug/L		77
85) 1,2,3-Trichlorobenzene	13.645	180	974	0.42	ug/L		83

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041418.D
Acq On : 15 Apr 2020 00:48
Operator : tb
Sample : 0D14058-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 15 14:25:42 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

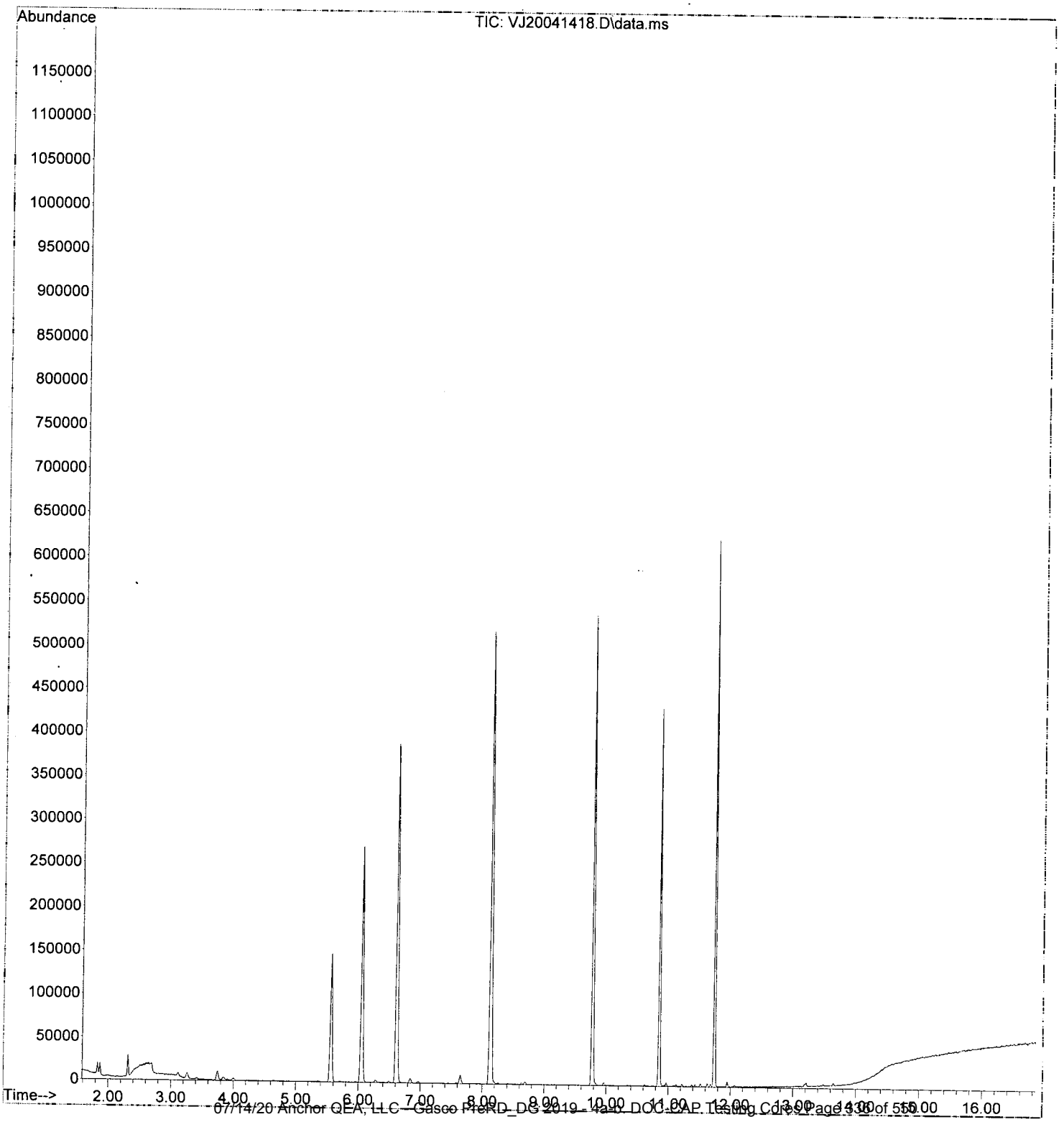
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041418.D
Acq On : 15 Apr 2020 00:48
Operator : tb
Sample : 0D14058-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 15 14:25:42 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

4/15/20

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
Internal Standards						
1) Pentafluorobenzene (I)	6.053	99	111862	50.00 ug/L	0.00	
43) Chlorobenzene-d5 (I)	9.776	117	314350	50.00 ug/L	0.00	
63) 1,4-Dichlorobenzene-d4...	11.741	152	142334	50.00 ug/L	0.00	
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.560	111	98576	50.19 ug/L	0.00	
37) 1,4-Difluorobenzene (S)	6.612	114	357016	50.94 ug/L	0.00	
45) Toluene-d8 (S)	8.127	98	422820	49.46 ug/L	0.00	
64) 4-Bromofluorobenzene (S)	10.853	174	107323	49.64 ug/L	0.00	
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.679	85	47233	20.54 ug/L	97	
3) Chloromethane	1.879	50	80885	22.36 ug/L	98	
4) Vinyl Chloride	1.977	62	54105	21.41 ug/L	95	
5) Bromomethane	2.317	96	28456	25.10 ug/L	98	
6) Chloroethane	2.439	64	10586	17.56 ug/L	78	
7) Trichlorofluoromethane	2.573	101	12110	18.00 ug/L	95	
8) Ethanol	3.248	45	~~54971~~	~~791.05 ug/L~~	~~88~~	MI
9) 1,1-Dichloroethene	3.114	61	74260	21.92 ug/L	97	
10) Carbon Disulfide	3.127	76	118184	21.59 ug/L	99	
11) Freon 113	3.169	101	44122	20.77 ug/L	96	
12) Iodomethane	3.266	142	12673	27.32 ug/L	92	
13) Methylene Chloride	3.747	84	50293	20.48 ug/L	97	
14) Acetone	3.832	43	~~45751~~	~~32.86 ug/L~~	~~99~~	MI
15) t-1,2-Dichloroethene	3.917	61	74797	19.58 ug/L	98	
16) n-Hexane	4.009	86	10441	19.85 ug/L #	76	
17) Methyl-tert-butyl-ether	4.076	73	173563	20.52 ug/L	98	
18) tert-Butanol (TBA)	4.222	59	~~626847~~	~~926.49 ug/L #~~	~~89~~	MI
19) Diisopropyl ether (DIPE)	4.471	45	45191	5.30 ug/L	97	
20) 1,1-Dichloroethane	4.544	63	92788	20.26 ug/L	99	
21) Acrylonitrile	4.599	53	~~27777~~	~~17.96 ug/L~~	~~96~~	MI
22) Ethyl-tert-butyl ether...	4.836	59	42169	5.70 ug/L	95	
23) c-1,2-Dichloroethene	5.092	61	73604	20.66 ug/L	100	
24) 2,2-Dichloropropane	5.201	77	67871	17.61 ug/L	96	
25) Bromochloromethane	5.292	49	43988	19.88 ug/L	91	
26) Chloroform	5.377	83	90418	20.19 ug/L	96	
27) Carbon Tetrachloride	5.517	117	61028	21.39 ug/L	94	
28) Tetrahydrofuran	5.554	42	34640	21.33 ug/L	95	
29) 1,1,1-Trichloroethane	5.584	97	79301	20.29 ug/L	97	
31) 1,1-Dichloropropene	5.712	75	72429	21.31 ug/L	94	
32) 2-Butanone (MEK)	5.694	43	97924	43.33 ug/L	98	
33) Benzene	5.968	78	228681	19.92 ug/L	100	
34) tert-Amyl methyl ether...	6.114	73	37548	5.07 ug/L	99	
35) 1,2-Dichloroethane (EDC)	6.168	62	74290	20.10 ug/L	100	
36) iso-Butyl Alcohol	6.235	43	~~64682~~	~~246.67 ug/L~~	~~95~~	MI
38) Trichloroethene (TCE)	6.588	130	56501	20.15 ug/L	98	
39) tert-Amyl ethyl ether ...	6.868	59	29146	4.80 ug/L	94	
40) Dibromomethane	7.020	93	33226	21.08 ug/L	86	
41) 1,2-Dichloropropane	7.136	63	57630	20.60 ug/L	100	
42) Bromodichloromethane	7.209	83	62133	20.89 ug/L	96	
44) c-1,3-Dichloropropene	7.914	75	83519	21.73 ug/L	96	
46) Toluene	8.188	91	230863	19.17 ug/L	100	
47) Tetrachloroethene (PCE)	8.638	166	50254	20.97 ug/L	89	
48) 4-Methyl-2-Pentanone (	8.626	43	159938	45.00 ug/L	98	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration

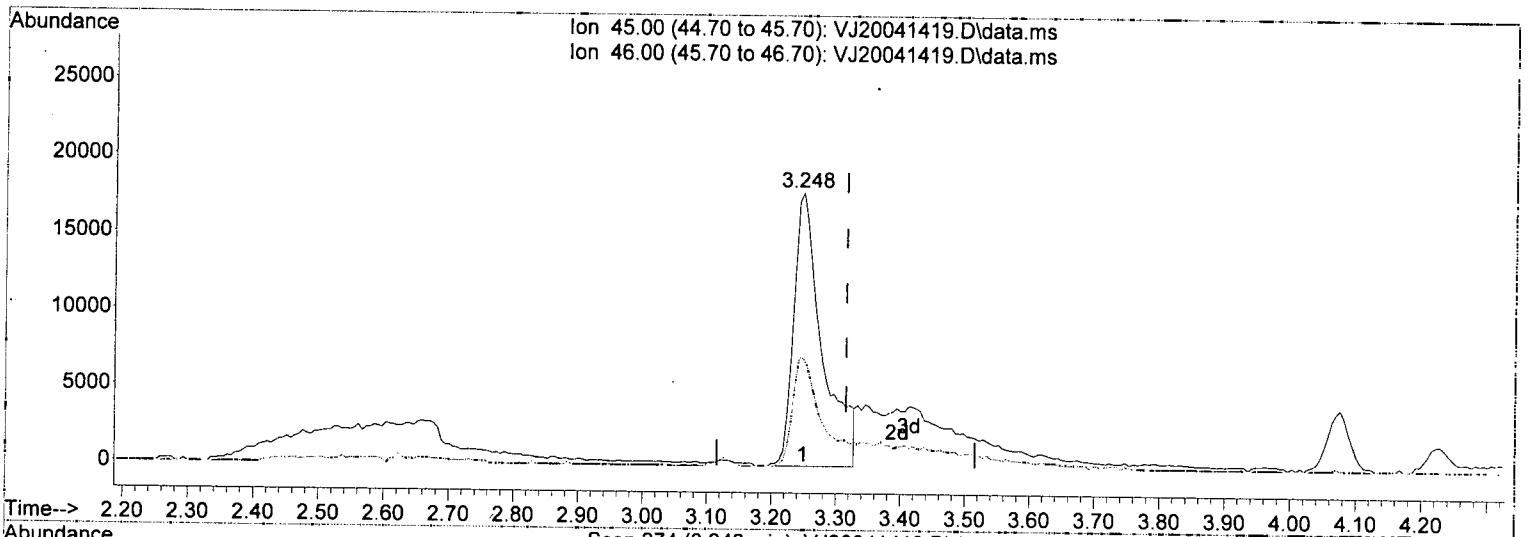
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	8.663	75	81623	21.83 ug/L	97
50) 1,1,2-Trichloroethane	8.839	97	52228	20.69 ug/L	98
51) Dibromochloromethane	9.028	129	43707	19.84 ug/L	99
52) 1,3-Dichloropropane	9.125	76	93207	20.47 ug/L	99
53) 1,2-Dibromoethane (EDB)	9.265	107	52400	21.10 ug/L	98
54) 2-Hexanone	9.514	43	113659	40.79 ug/L	99
55) Chlorobenzene	9.794	112	142458	19.43 ug/L	100
56) Ethylbenzene	9.825	91	240425	20.39 ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.855	131	46758	20.62 ug/L	97
58) m,p-Xylenes (2)	9.964	91	353417	39.44 ug/L	99
59) o-Xylene	10.348	91	171413	19.58 ug/L	96
60) Styrene	10.396	104	119784	18.97 ug/L	97
61) Bromoform	10.409	173	28721	21.42 ug/L	95
62) Isopropylbenzene	10.622	105	210584	21.77 ug/L	97
65) Bromobenzene	10.938	156	52592	20.06 ug/L #	82
66) n-Propylbenzene	10.968	91	247069	20.12 ug/L	96
67) 1,1,2,2-Tetrachloroethane	11.023	83	64792	21.19 ug/L	97
68) 2-Chlorotoluene	11.090	126	49615	20.78 ug/L	93
69) 1,3,5-Trimethylbenzene	11.126	105	171377	21.47 ug/L	94
70) 1,2,3-Trichloropropane	11.126	110	24510	21.10 ug/L	94
71) t-1,4-Dichloro-2-butene	11.163	88	9156	18.39 ug/L	95
72) 4-Chlorotoluene	11.224	91	151807	20.62 ug/L	96
73) tert-Butylbenzene	11.382	91	95260	21.19 ug/L	94
74) 1,2,4-Trimethylbenzene	11.437	105	173745	21.89 ug/L	97
75) sec-Butylbenzene	11.522	105	210913	22.03 ug/L	98
76) 4-Isopropyltoluene	11.631	119	171098	21.46 ug/L	99
77) 1,3-Dichlorobenzene	11.686	146	93819	20.42 ug/L	97
78) 1,4-Dichlorobenzene	11.753	146	93359	19.13 ug/L	95
79) n-Butylbenzene	11.948	91	152763	20.27 ug/L	96
80) 1,2-Dichlorobenzene	12.069	146	86768	20.68 ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.672	157	13103	20.78 ug/L	76
82) Hexachlorobutadiene	13.189	223	12933	19.93 ug/L	95
83) 1,2,4-Trichlorobenzene	13.213	180	53897	21.20 ug/L	98
84) Naphthalene	13.487	128	192581	22.32 ug/L	99
85) 1,2,3-Trichlorobenzene	13.645	180	52830	20.96 ug/L	97

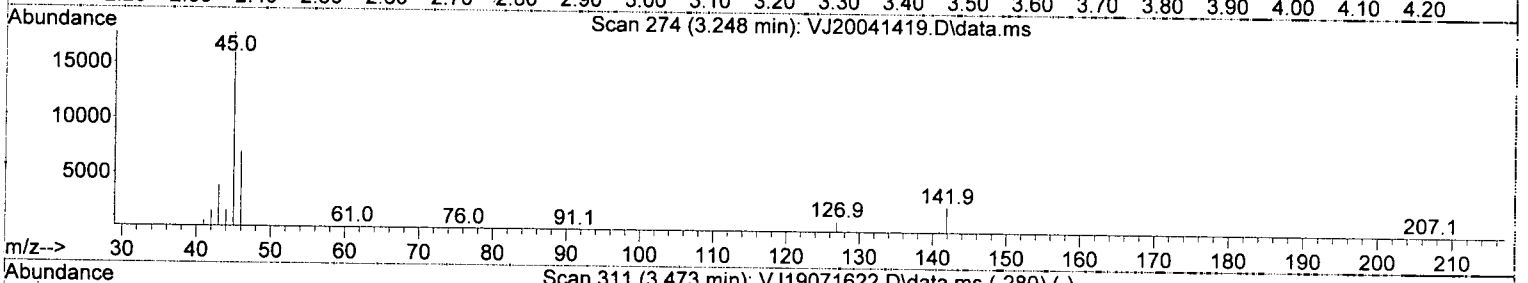
(#) = qualifier out of range (m) = manual integration (+) = signals summed

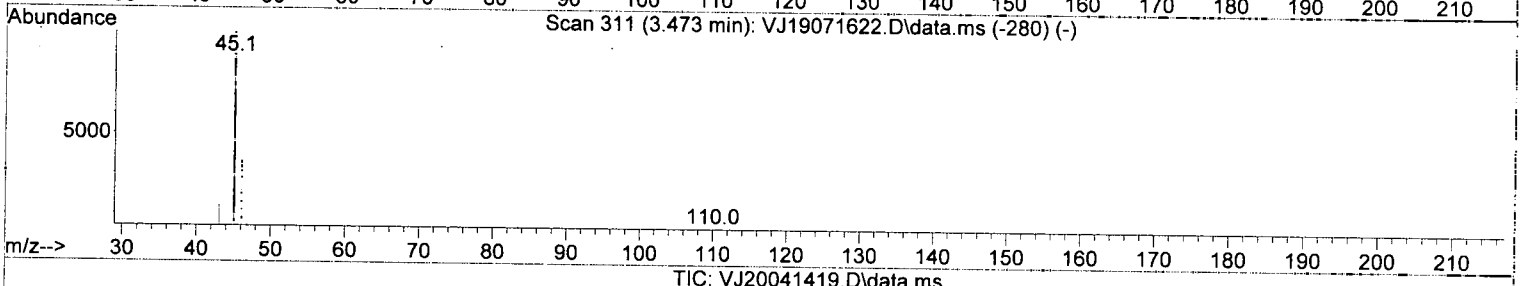
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20041419.D\data.ms

(8) Ethanol

3.248min (-0.067) 791.05 ug/L

response 54971

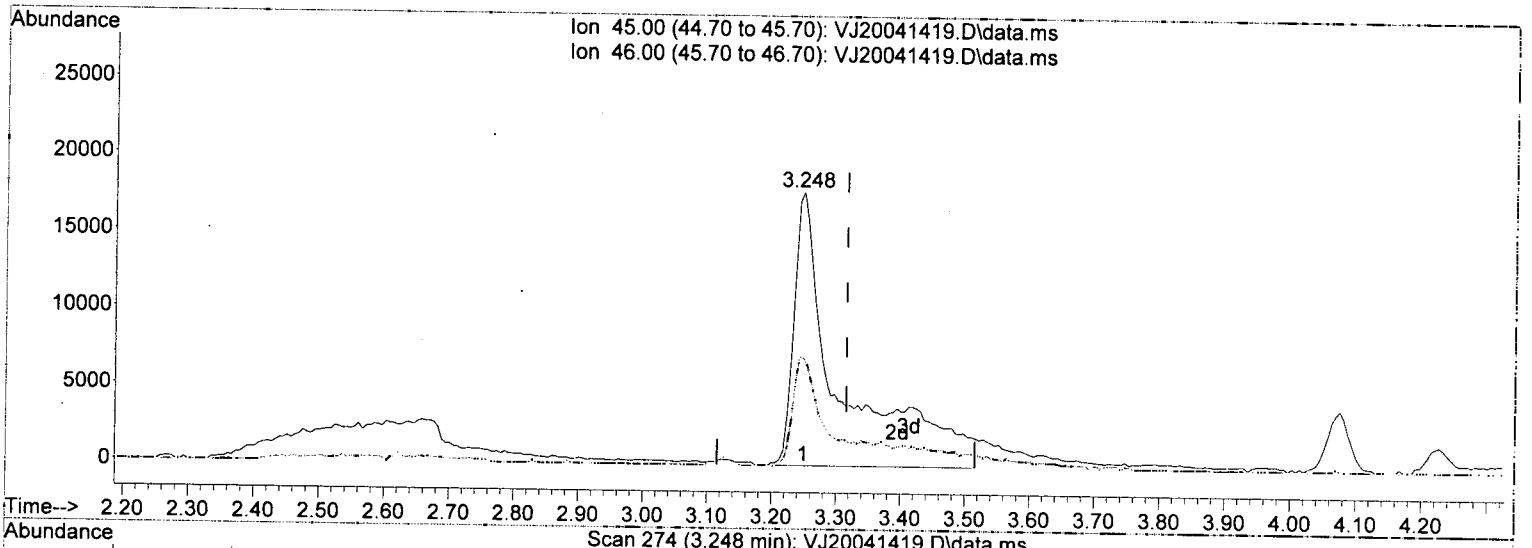
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.52
0.00	0.00	0.00
0.00	0.00	0.00

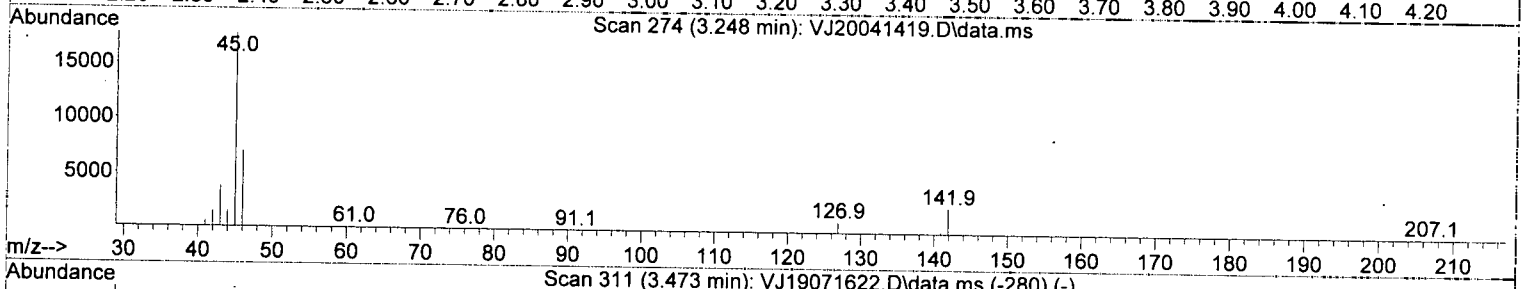
MF

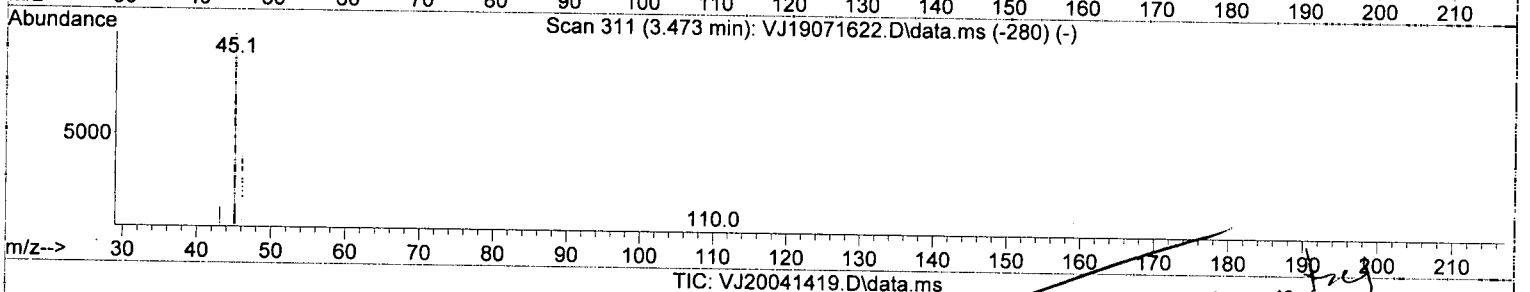
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20041419.D\data.ms

(8) Ethanol

3.248min (-0.067) 1305.28 ug/L m

response 90705

Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.52
0.00	0.00	0.00
0.00	0.00	0.00

4/15/20

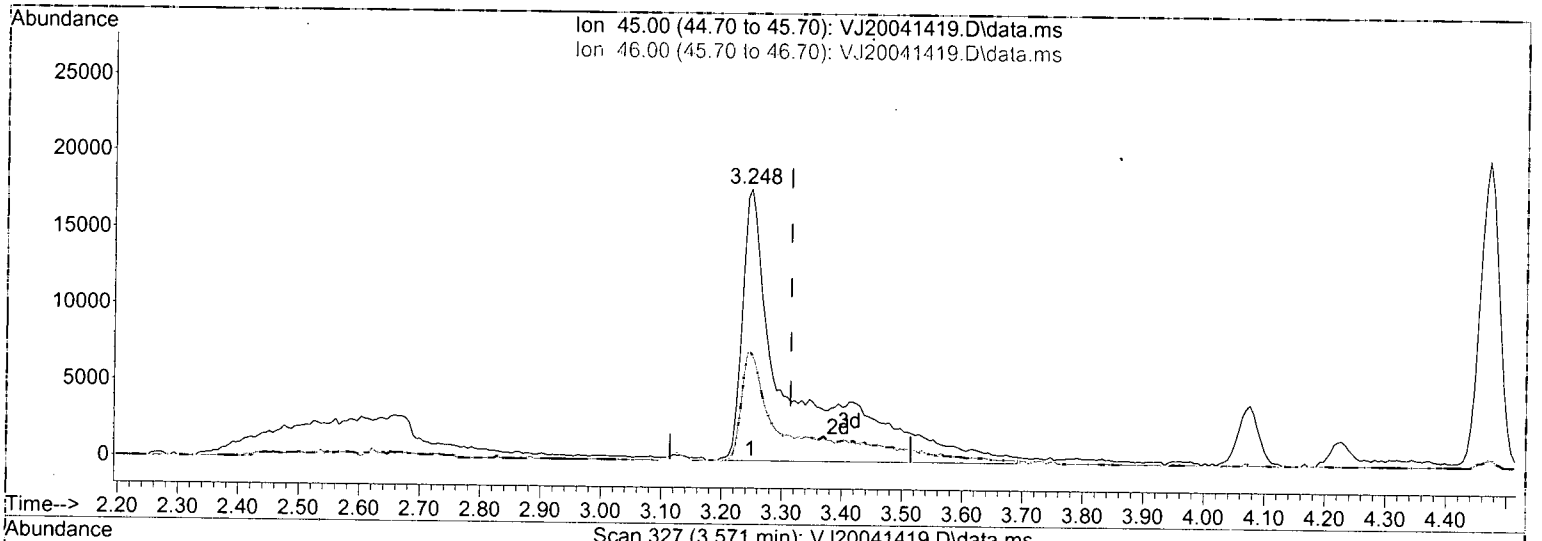
Incomplete integration see next pg.
MK 4/22/20

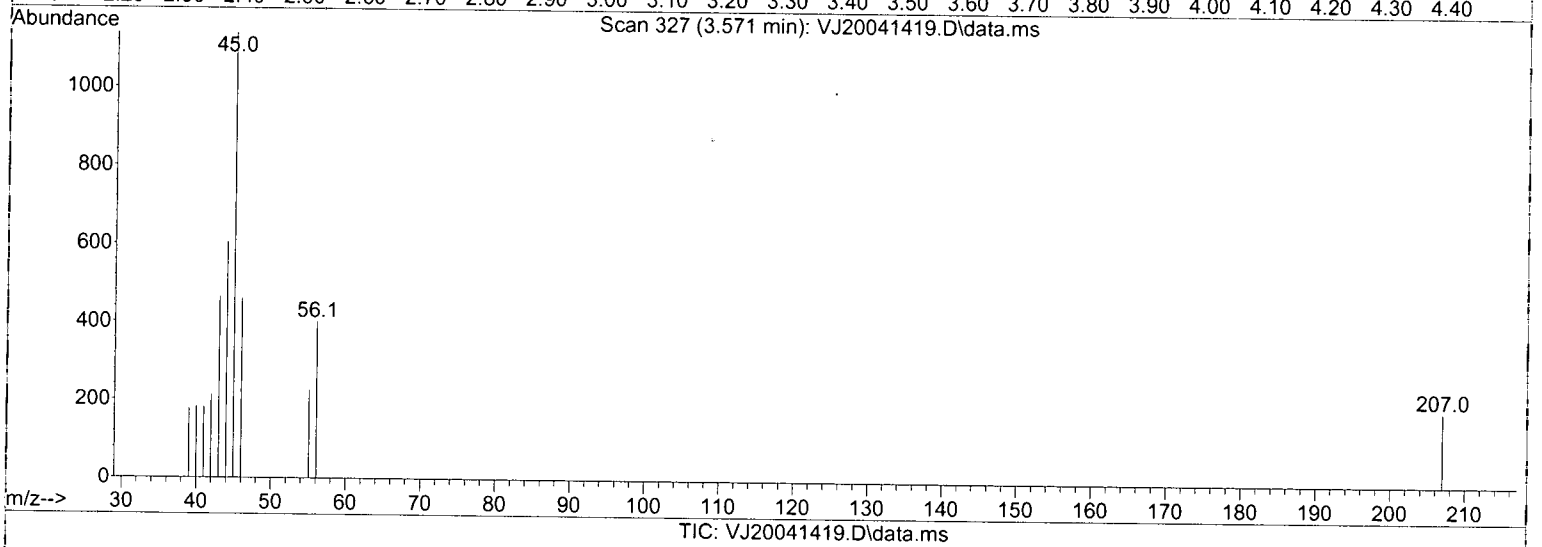
VJ200414S.M Wed Apr 15 14:34:28 2020 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15 am
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:35:21 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration





TIC: VJ20041419.D\data.ms

(8) Ethanol

3.248min (-0.067) 1454.31 ug/L m

response 101061

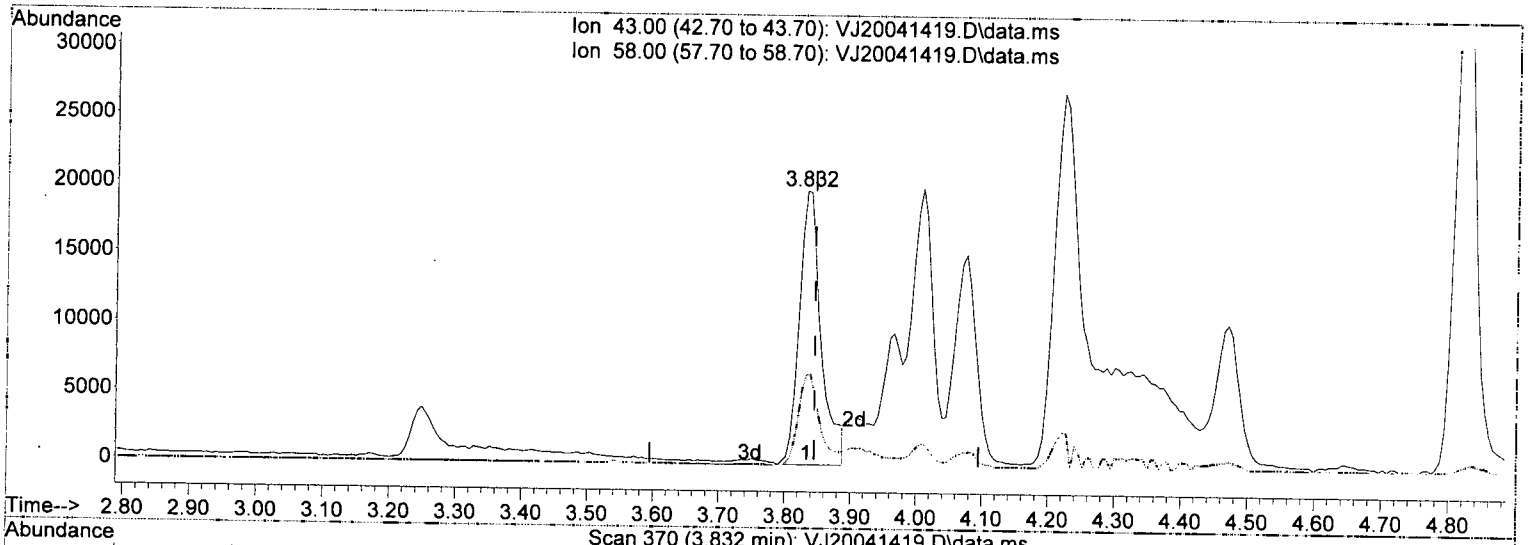
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.52
0.00	0.00	0.00
0.00	0.00	0.00

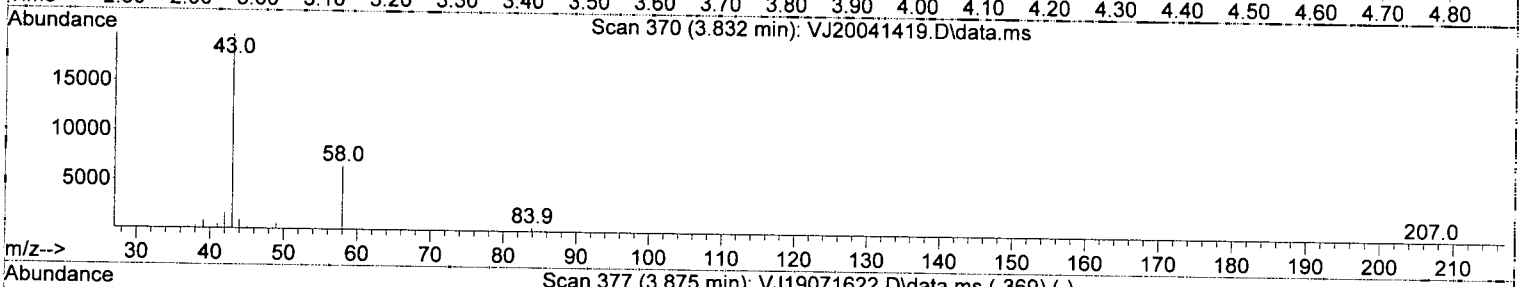
MWT 4/22/20

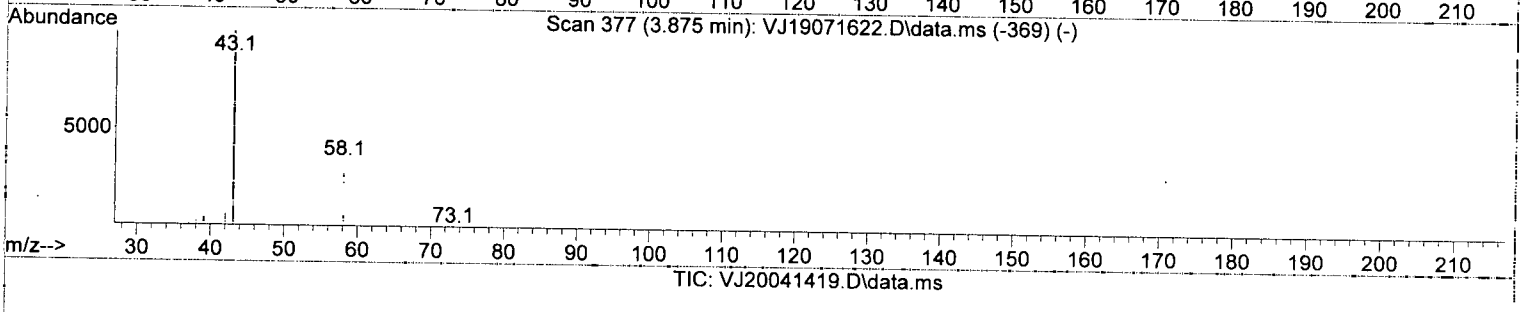
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20041419.D\data.ms

(14) Acetone

3.832min (-0.012) 32.86 ug/L

response 45751

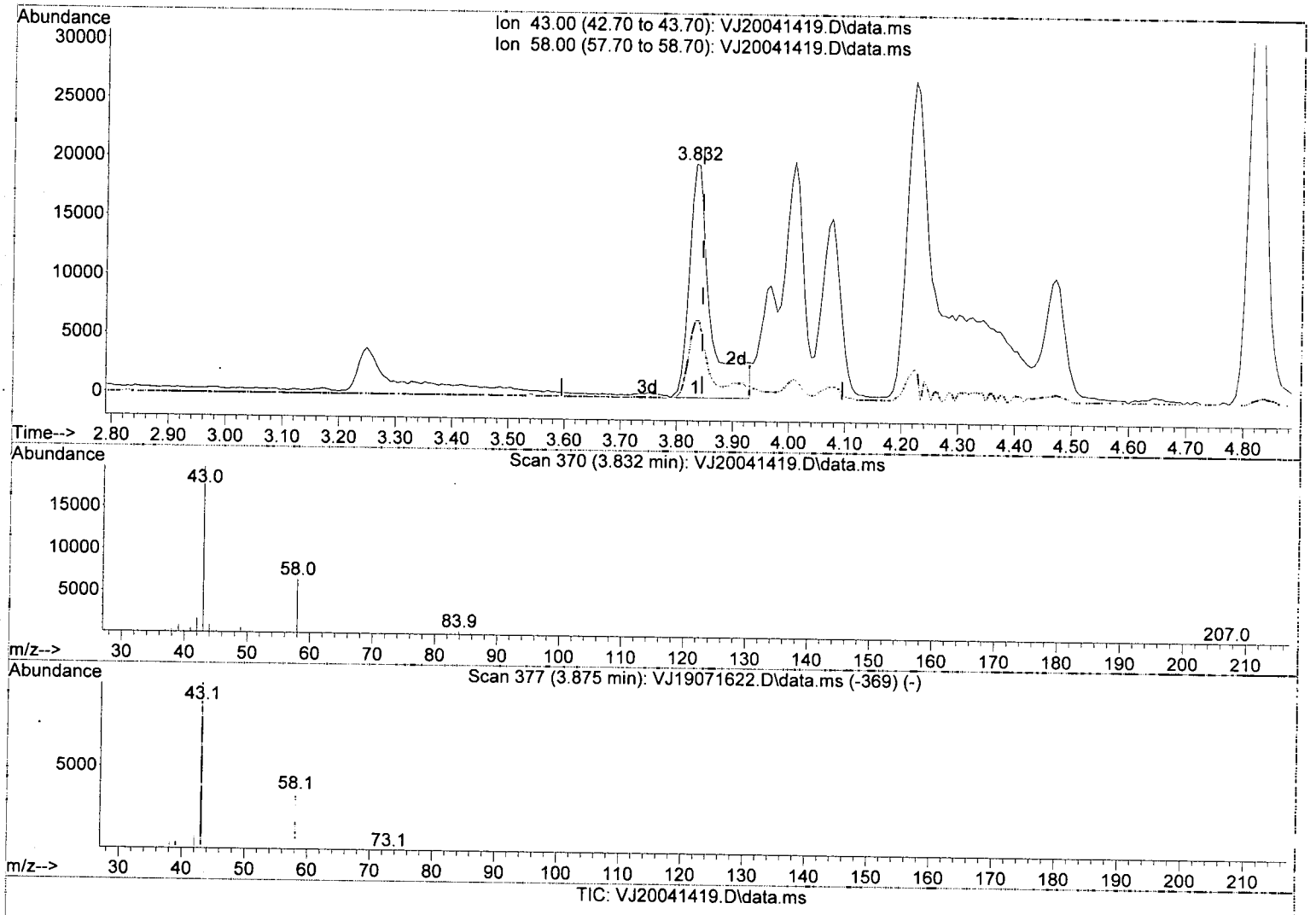
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.93
0.00	0.00	0.00
0.00	0.00	0.00

MF

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



(14) Acetone

3.832min (-0.012) 38.79 ug/L m

response 54009

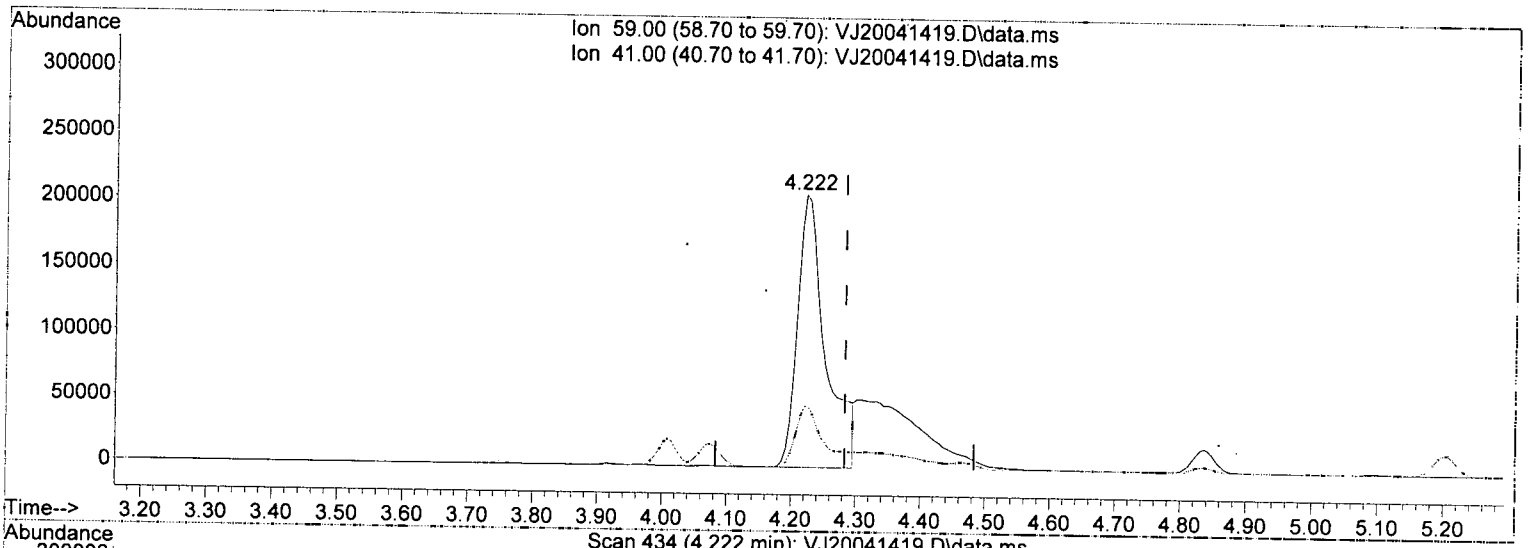
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.93
0.00	0.00	0.00
0.00	0.00	0.00

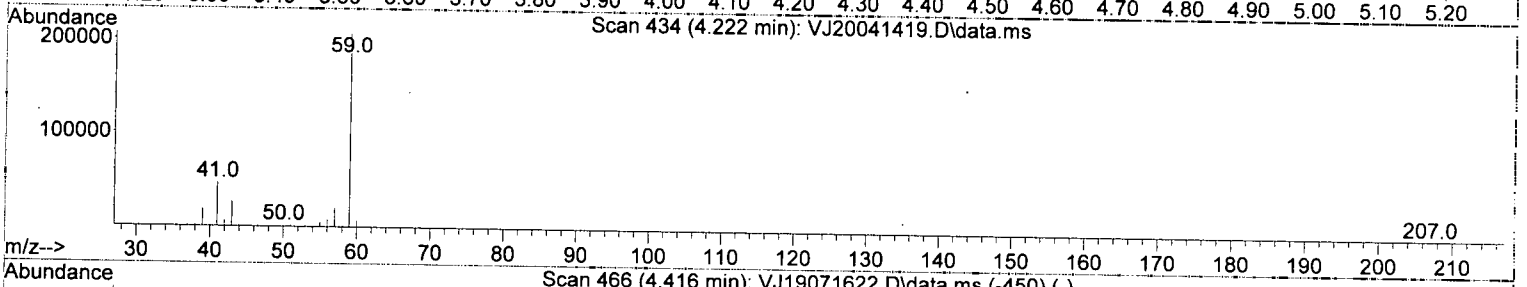
4/15/20

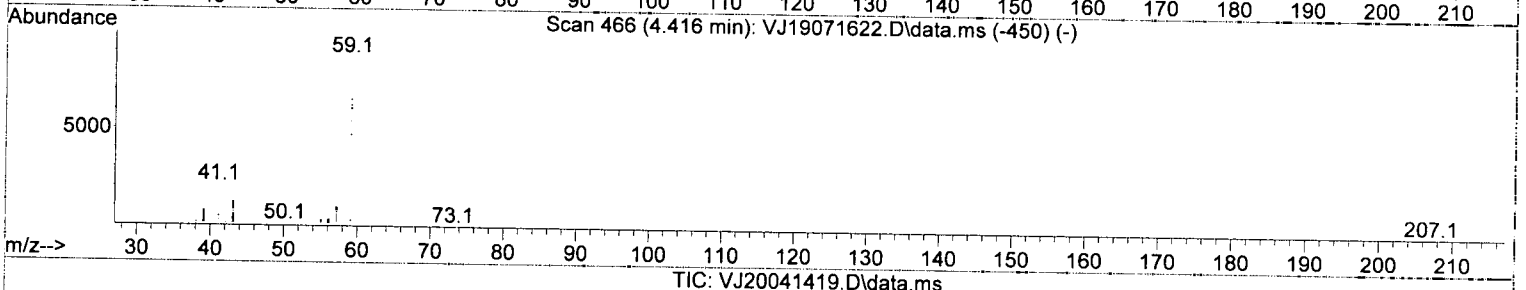
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20041419.D\data.ms

(18) tert-Butanol (TBA)

4.222min (-0.061) 926.49 ug/L

response 626847

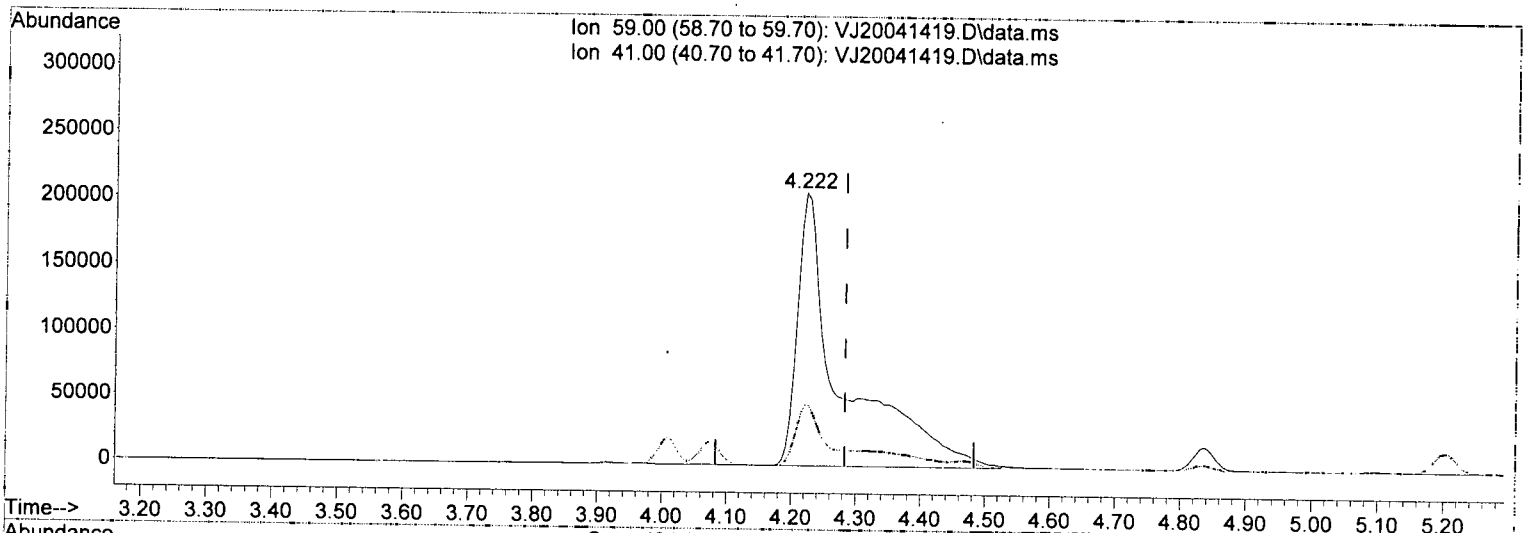
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	22.74#
0.00	0.00	0.00
0.00	0.00	0.00

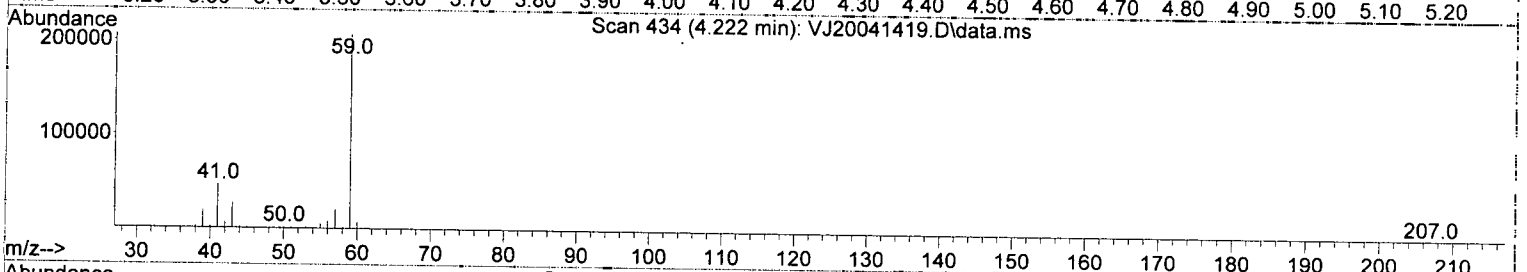
MF

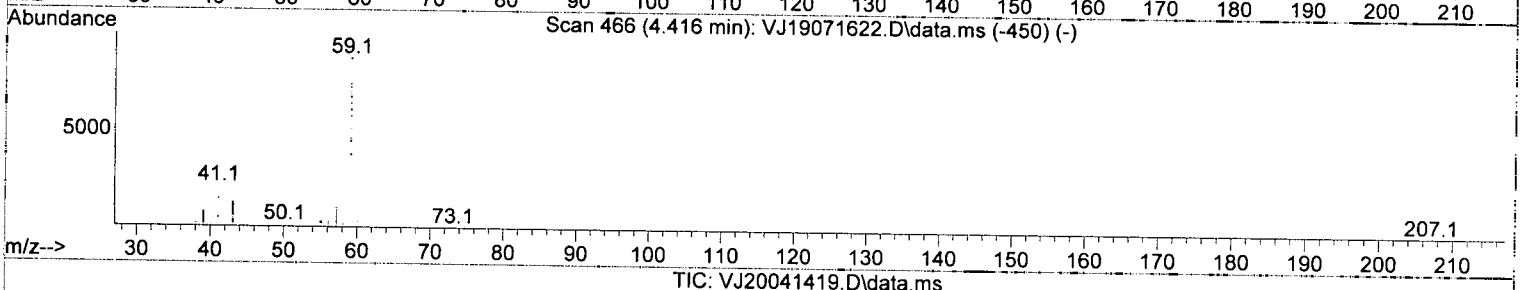
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20041419.D\data.ms

(18) tert-Butanol (TBA)

4.222min (-0.061) 1476.82 ug/L m

response 999190

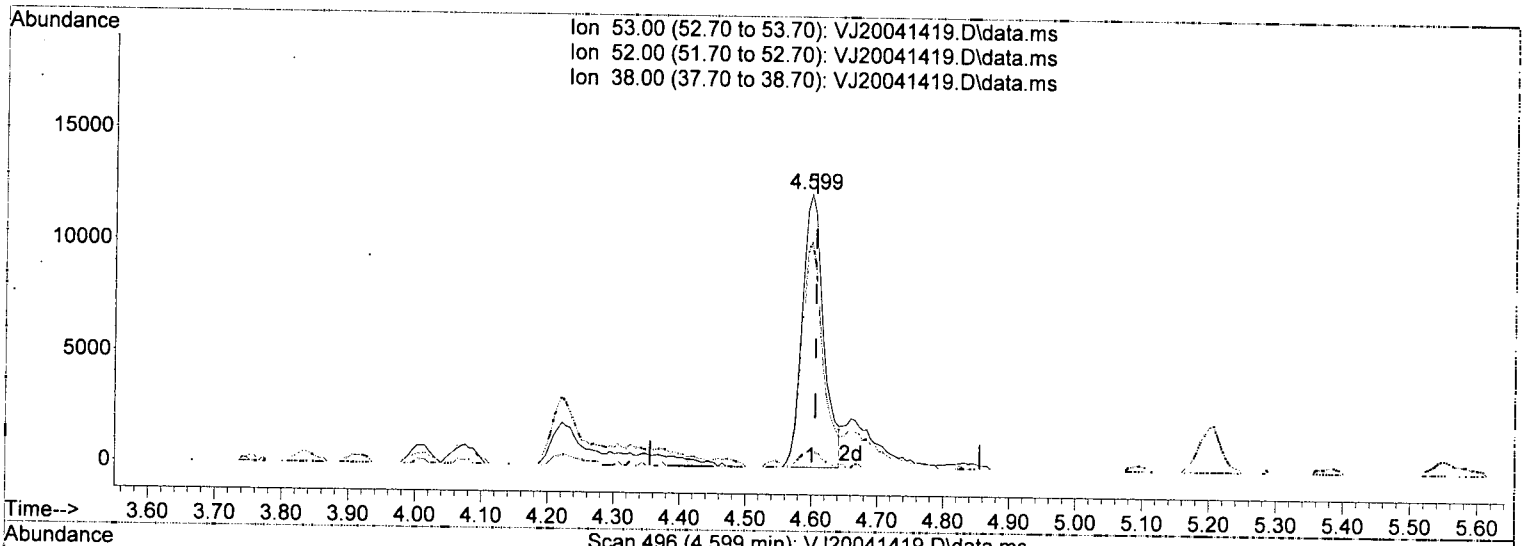
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	22.74#
0.00	0.00	0.00
0.00	0.00	0.00

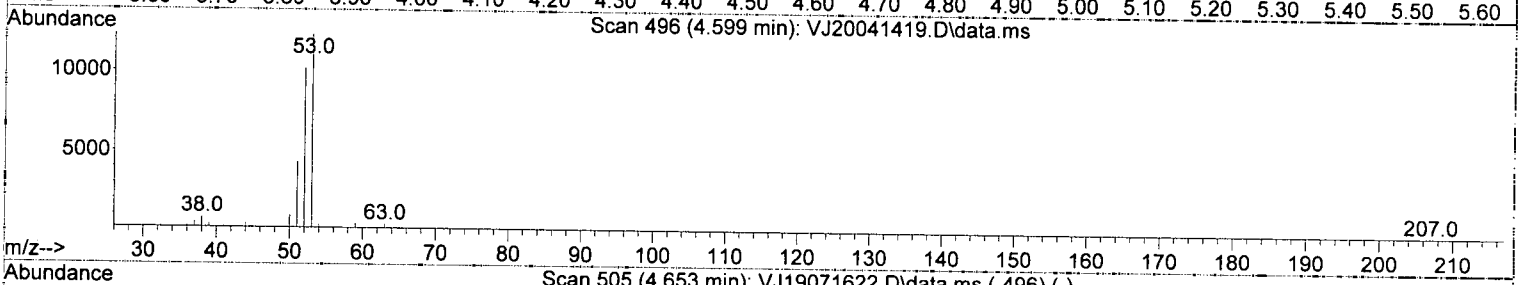
4/15/20

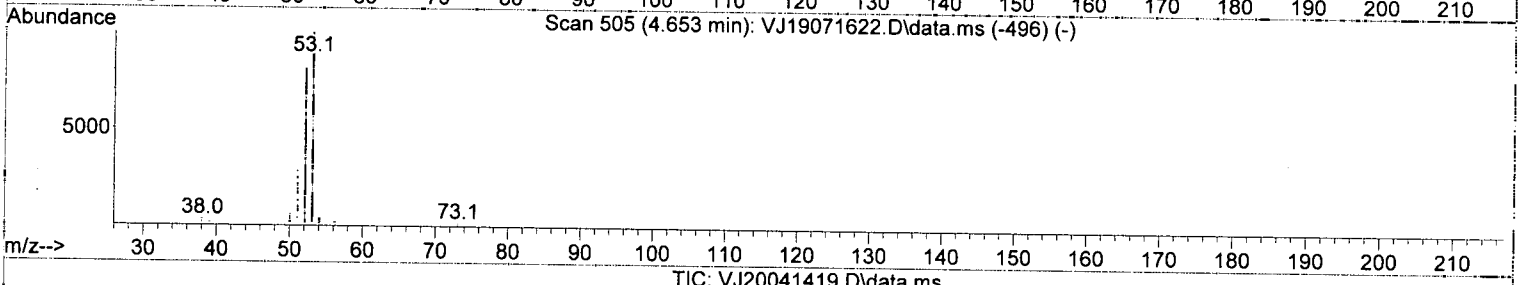
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20041419.D\data.ms

(21) Acrylonitrile

4.599min (-0.006) 17.96 ug/L

response 27777

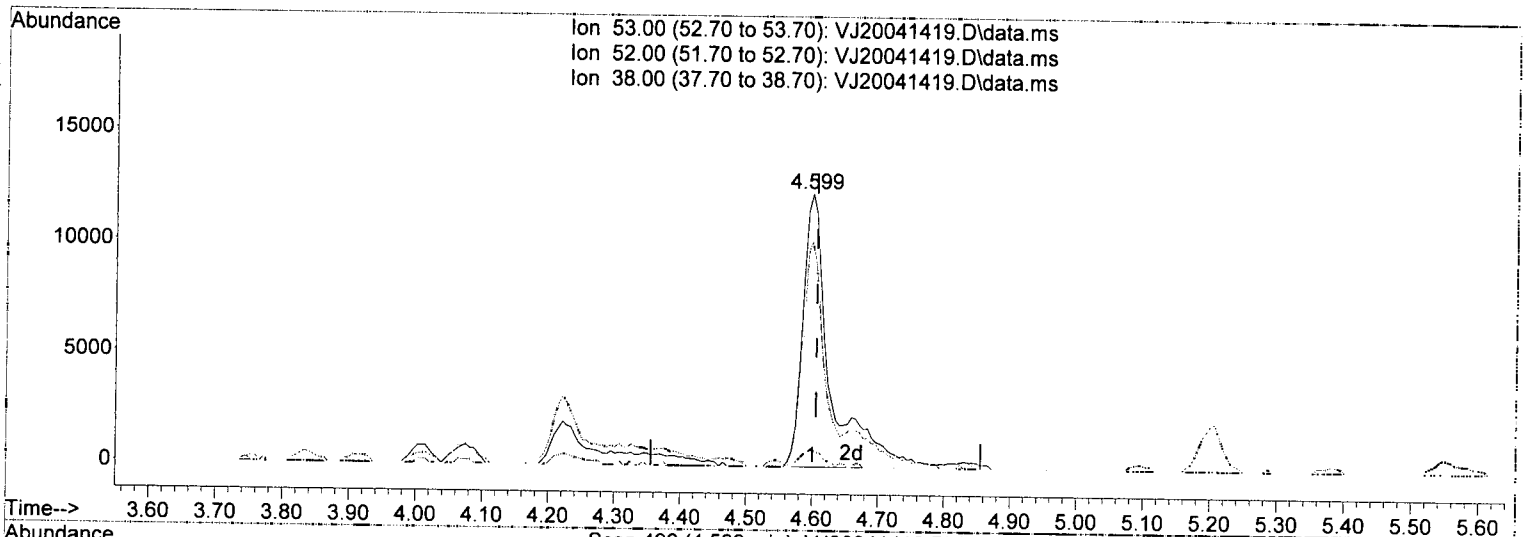
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	82.75
38.00	5.50	6.56
0.00	0.00	0.00

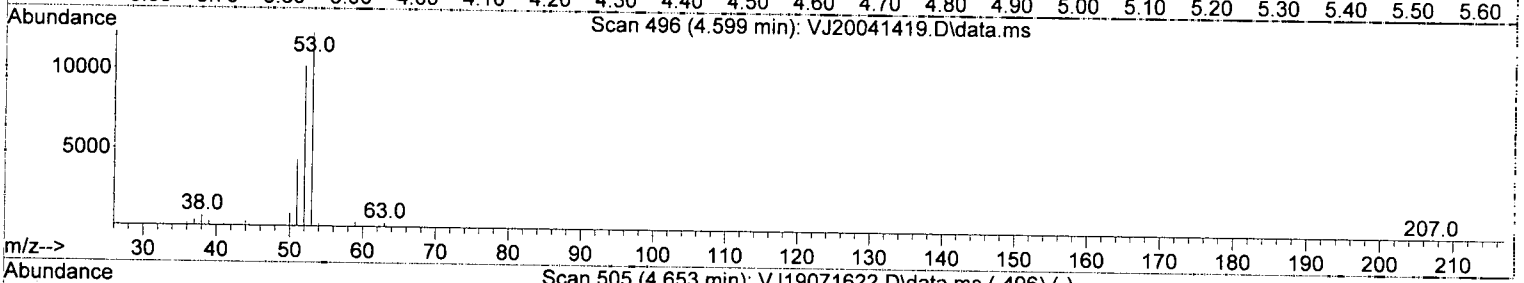
MI

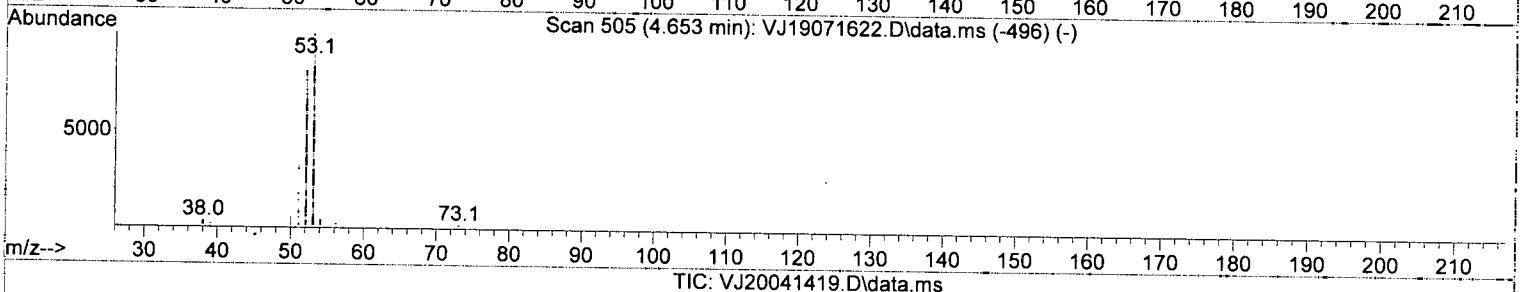
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration







TIC: VJ20041419.D\data.ms

(21) Acrylonitrile

4.599min (-0.006) 23.44 ug/L m

response 36266

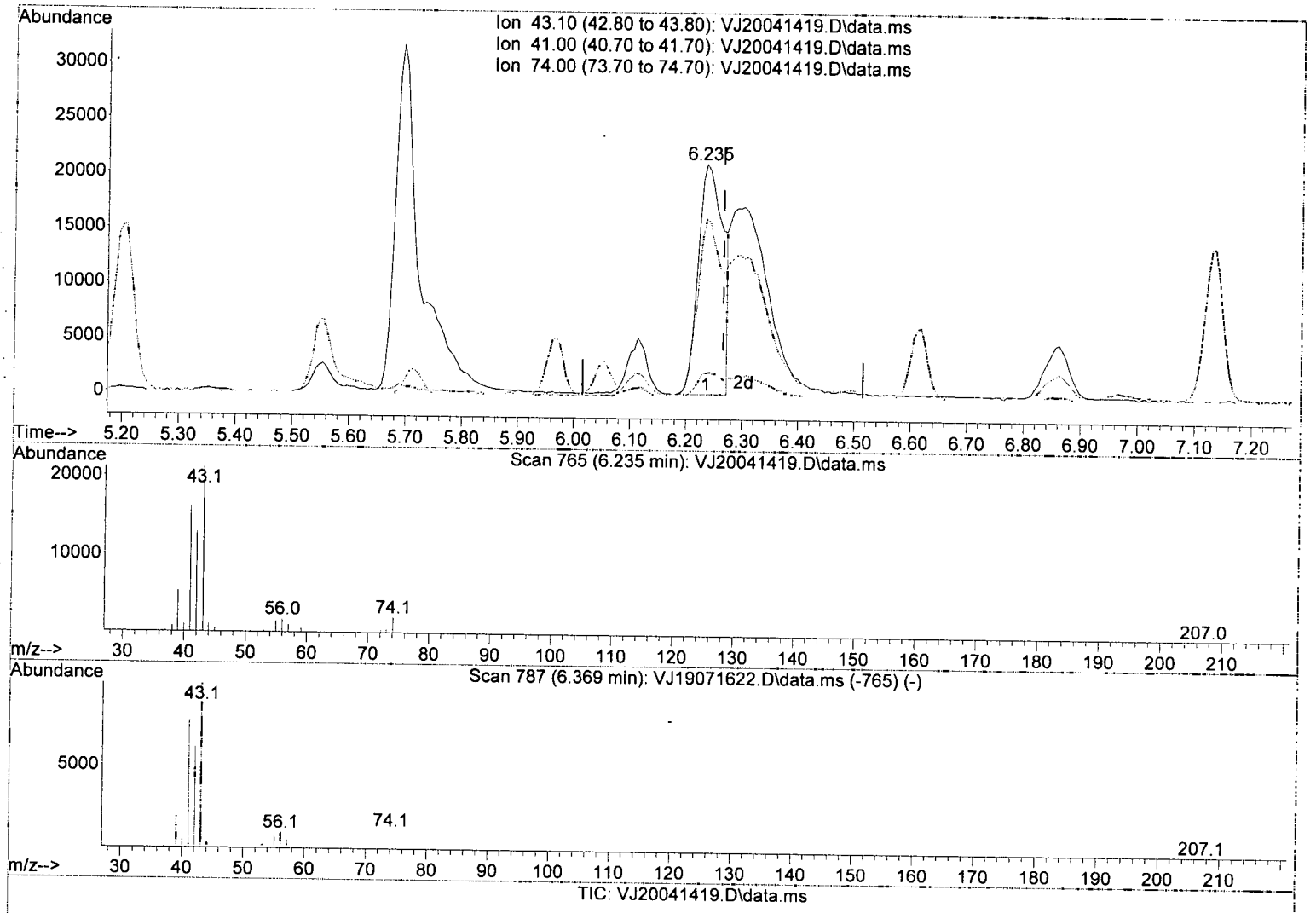
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	82.75
38.00	5.50	6.56
0.00	0.00	0.00

4/15/20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



TIC: VJ20041419.D\data.ms

(36) iso-Butyl Alcohol

6.235min (-0.030) 246.67 ug/L

response 64682

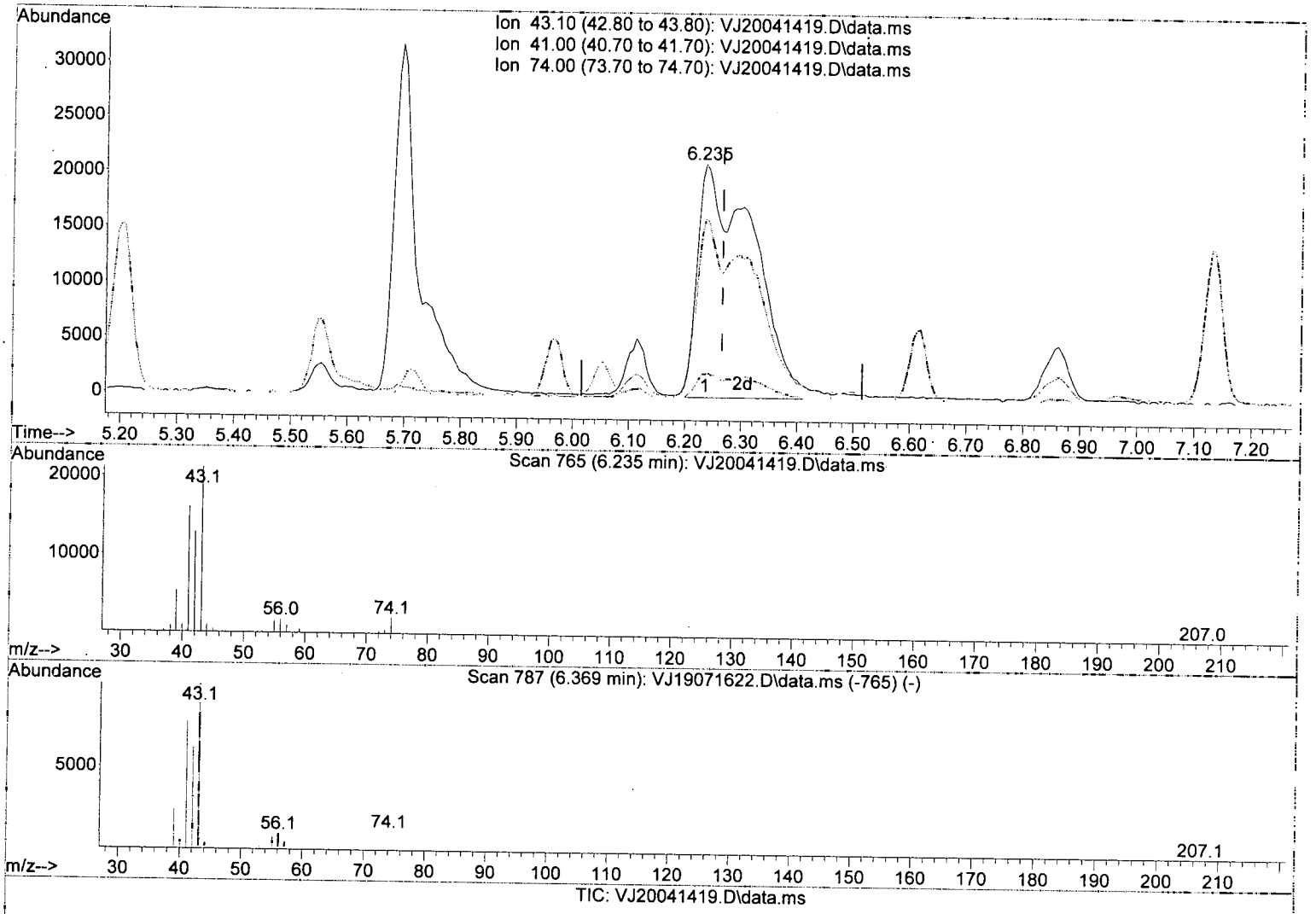
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	76.29
74.00	11.60	10.04
0.00	0.00	0.00

MI

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



TIC: VJ20041419.D\data.ms

(36) iso-Butyl Alcohol

6.235min (-0.030) 546.90 ug/L m

response 148171

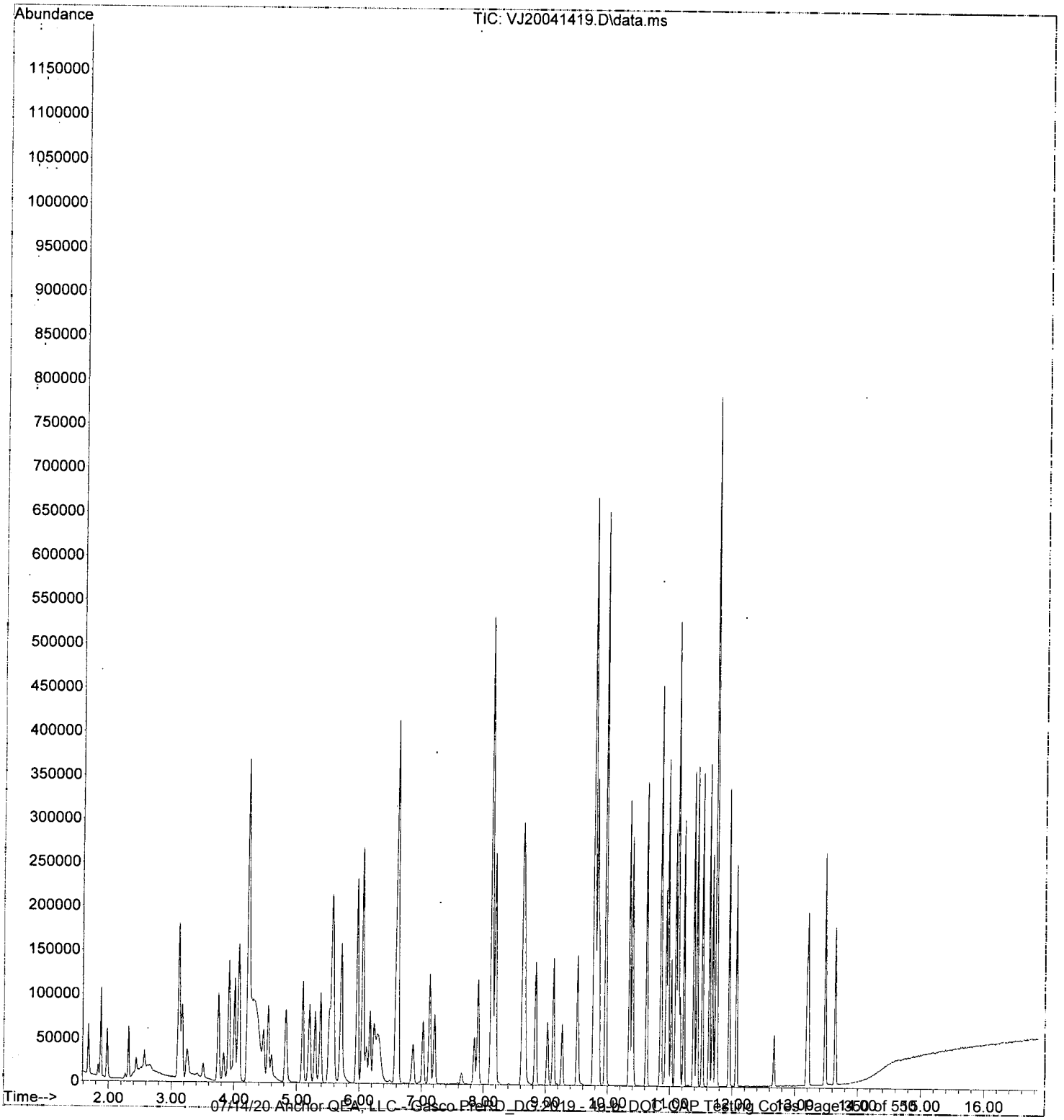
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	76.29
74.00	11.60	10.04
0.00	0.00	0.00

4/15/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041419.D
Acq On : 15 Apr 2020 1:15
Operator : tb
Sample : 0D14058-ICV1
Misc : 1X 20ppb 5mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 14:25:45 2020
Quant Method : C:\msdchem\1\methods\VJ200414S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 15 13:36:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041420.D
Acq On : 15 Apr 2020 1:42
Operator : tb
Sample : 0D14058-IBL6
Misc : 1X 5mL DI+MeOH
ALS Vial : 20 Sample Multiplier: 1

NR

Quant Time: Apr 16 09:58:57 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

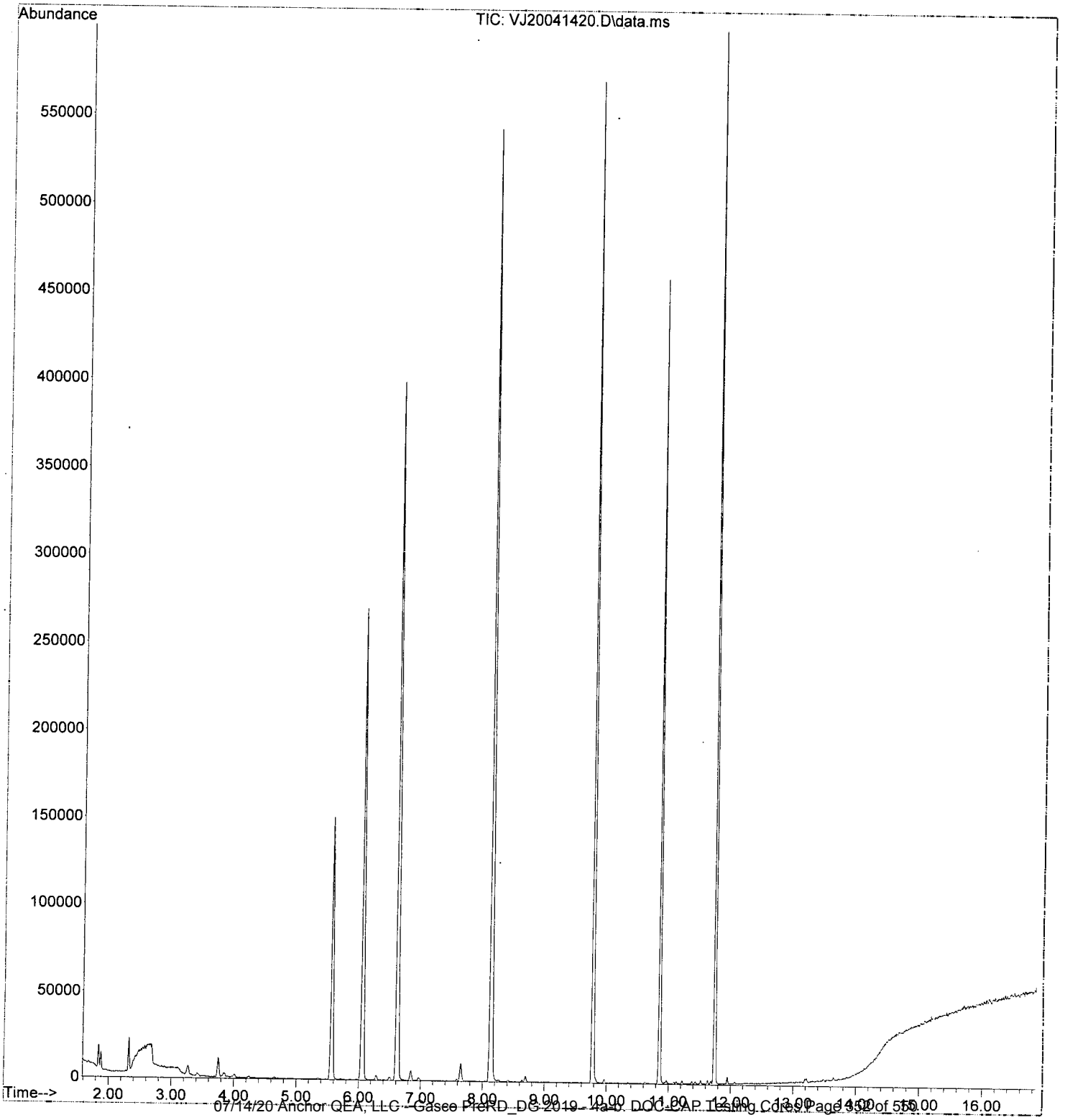
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.059	168	195318	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.618	114	355341	50.02	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	104389	50.68	ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	421209	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	310573	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	219539	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	133796m	25.96	ug/L	
5) TPHg (C5-C9)	9.780	TIC	461384m	8.10	ug/L	
6) TPHg (C6-C10)	9.780	TIC	404612m	17.44	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	491898m	14.64	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041420.D
Acq On : 15 Apr 2020 1:42
Operator : tb
Sample : 0D14058-IBL6
Misc : 1X 5mL DI+MeOH
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 16 09:58:57 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



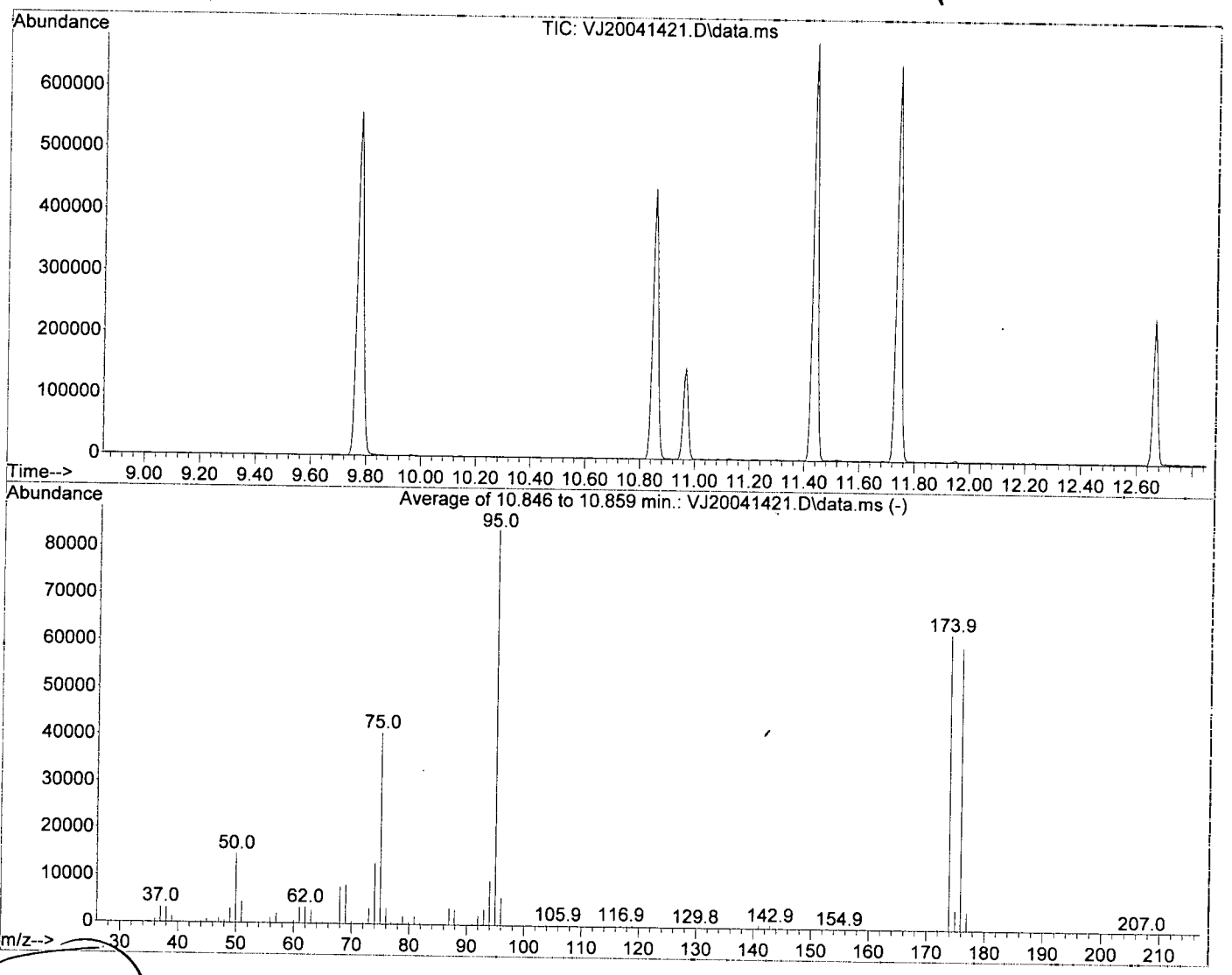
BFB

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041421.D
Acq On : 15 Apr 2020 2:09
Operator : tb
Sample : 0D14058-TUN2
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Integration File: APEXG.P

Method : C:\msdchem\1\methods\VJ200414G.M
Title : NWTPH-Gx by GC/MS
Last Update : Wed Apr 15 18:44:39 2020

4/16/20



AutoFind: Scans 1523, 1524, 1525; Background Corrected with Scan 1516

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	133.7	84080	PASS
96	95	5	9	7.0	5888	PASS
173	174	0.00	2	0.2	155	PASS
174	95	50	200	74.8	62869	PASS
175	174	5	9	7.0	4418	PASS
176	174	95	105	95.8	60221	PASS
177	176	5	10	6.6	3953	PASS

VJ200414G.M Thu Apr 16 10:02:49 2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041421.D
Acq On : 15 Apr 2020 2:09
Operator : tb
Sample : 0D14058-TUN2
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

RB 4/16/20

Quant Time: Apr 16 09:59:00 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

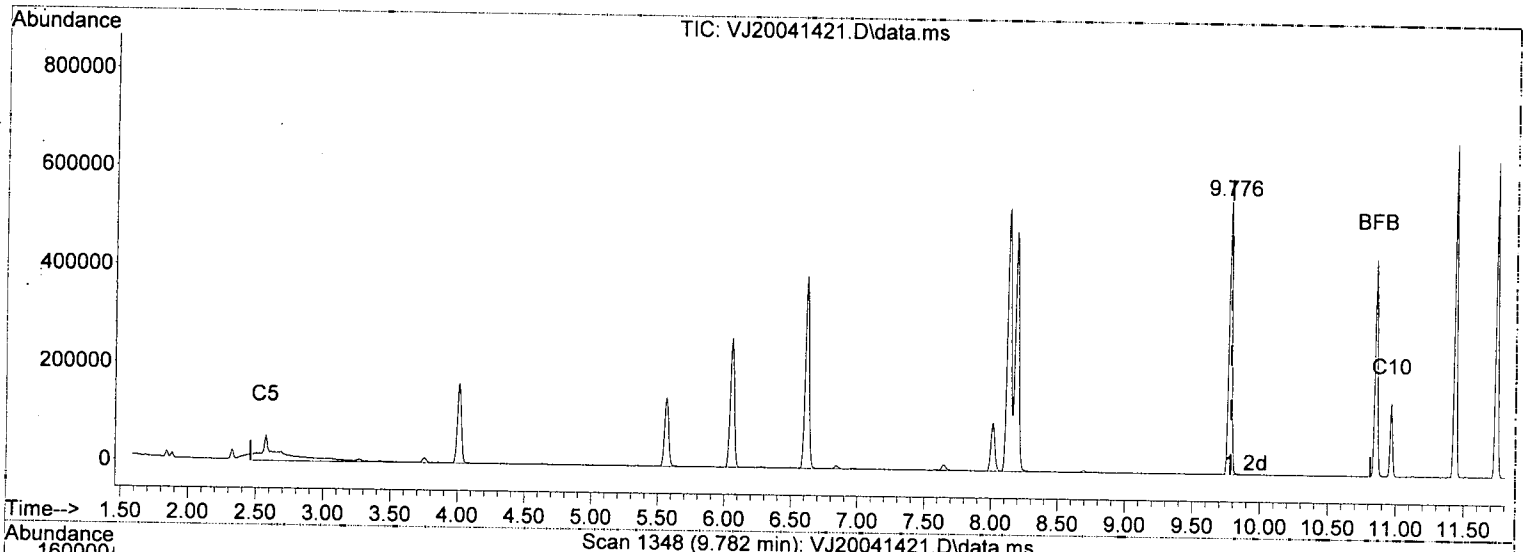
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.059	168	194249	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.618	114	351138	49.70	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	101397	49.50	ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	427168	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	301414	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	217166	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	3379330m	379.06	ug/L	
5) TPHg (C5-C9)	9.780	TIC	2293398m	179.72	ug/L	
6) TPHg (C6-C10)	9.780	TIC	1920496m	176.75	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	3618577m	253.58	ug/L	

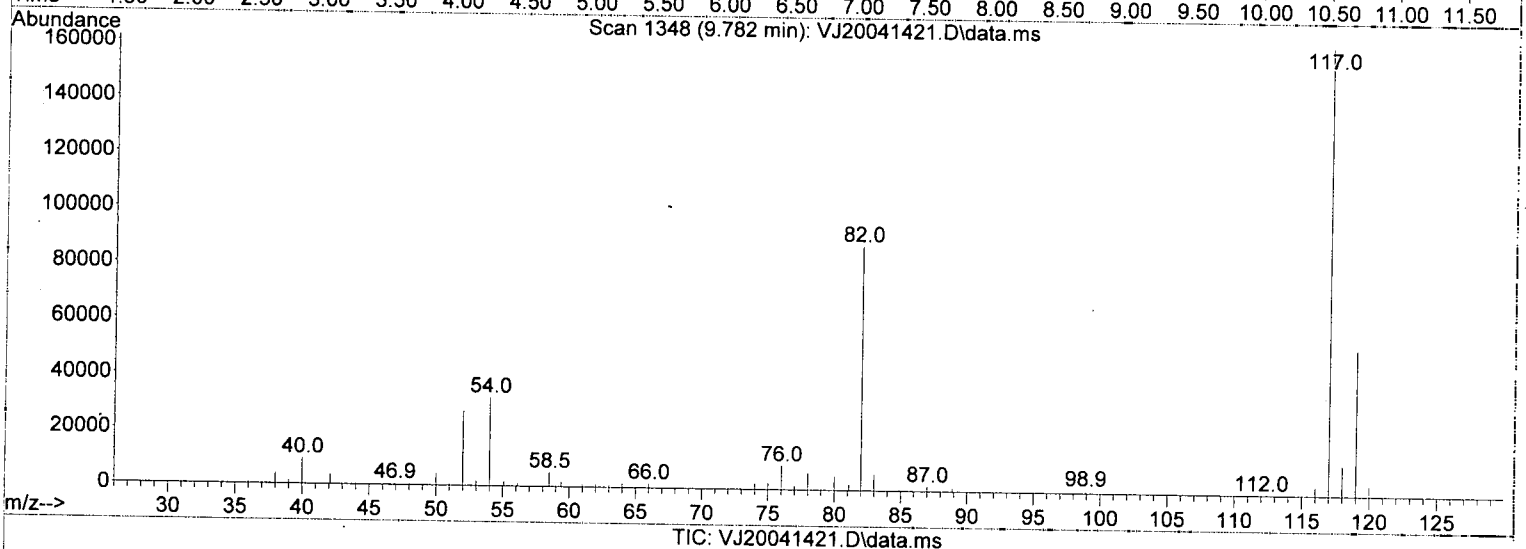
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041421.D
Acq On : 15 Apr 2020 2:09
Operator : tb
Sample : 0D14058-TUN2
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 16 09:59:00 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration





TIC: VJ20041421.D\data.ms

(5) TPHg (C5-C9) (H)

9.780min (0.000) 179.72 ug/L m

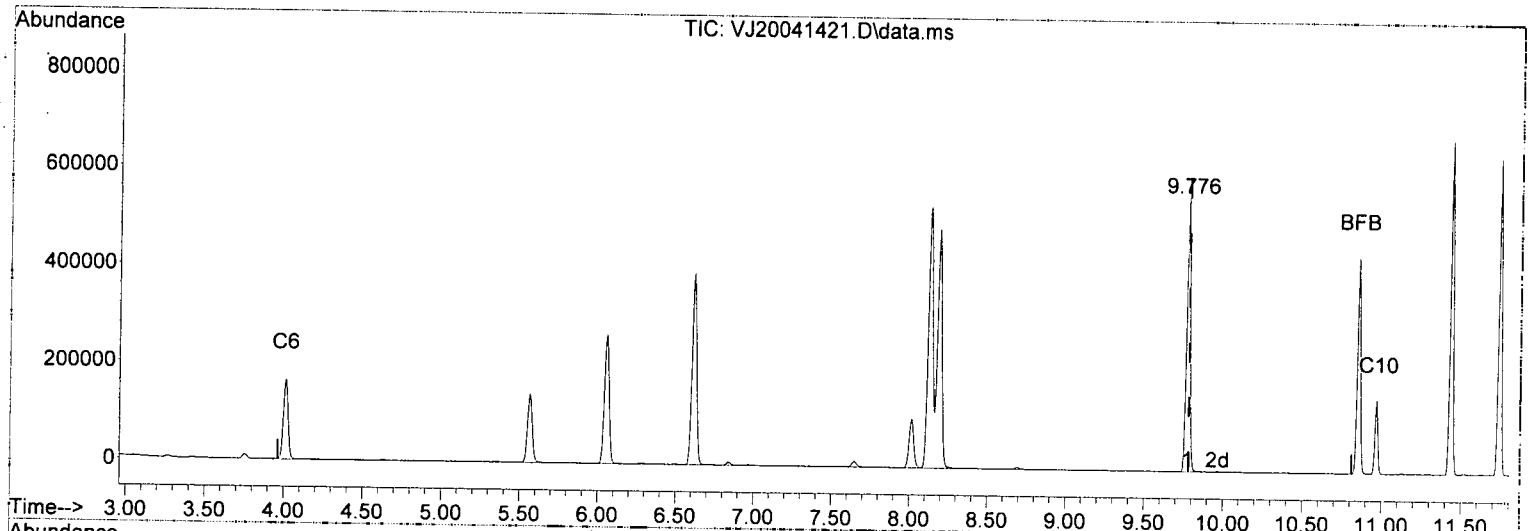
response 2293398

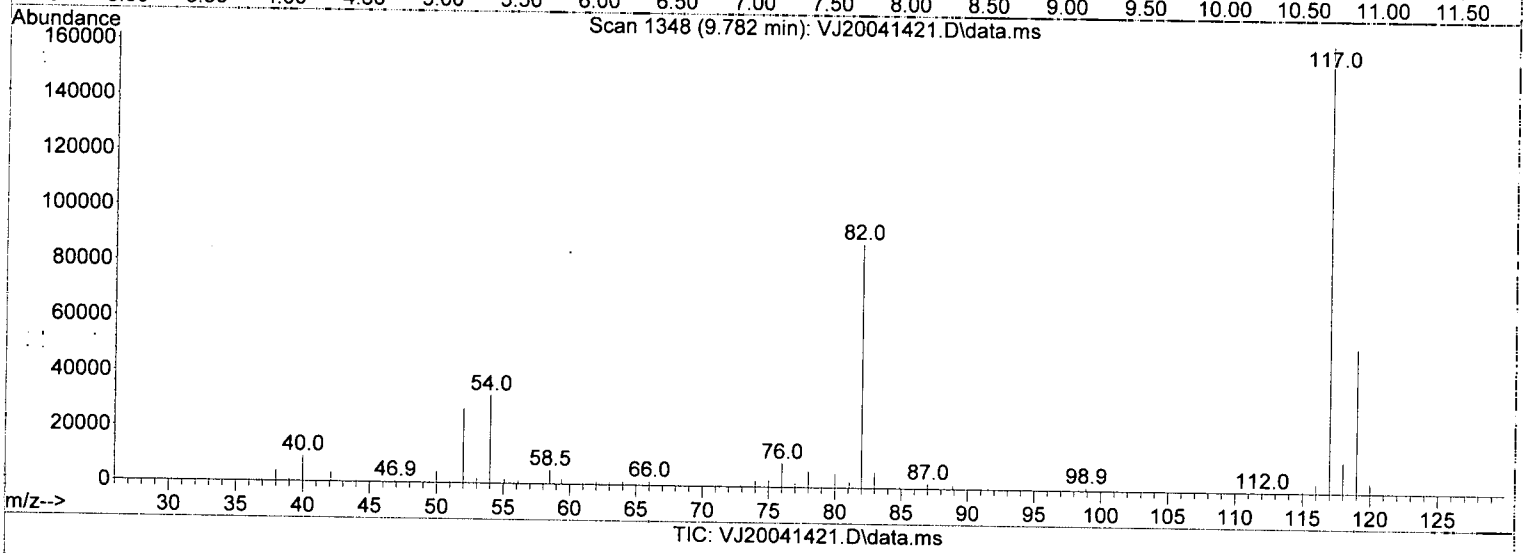
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.36#
0.00	0.00	1.03#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041421.D
Acq On : 15 Apr 2020 2:09
Operator : tb
Sample : 0D14058-TUN2
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 16 09:59:00 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration





(6) TPHg (C6-C10) (H)

9.780min (0.000) 176.75 ug/L m

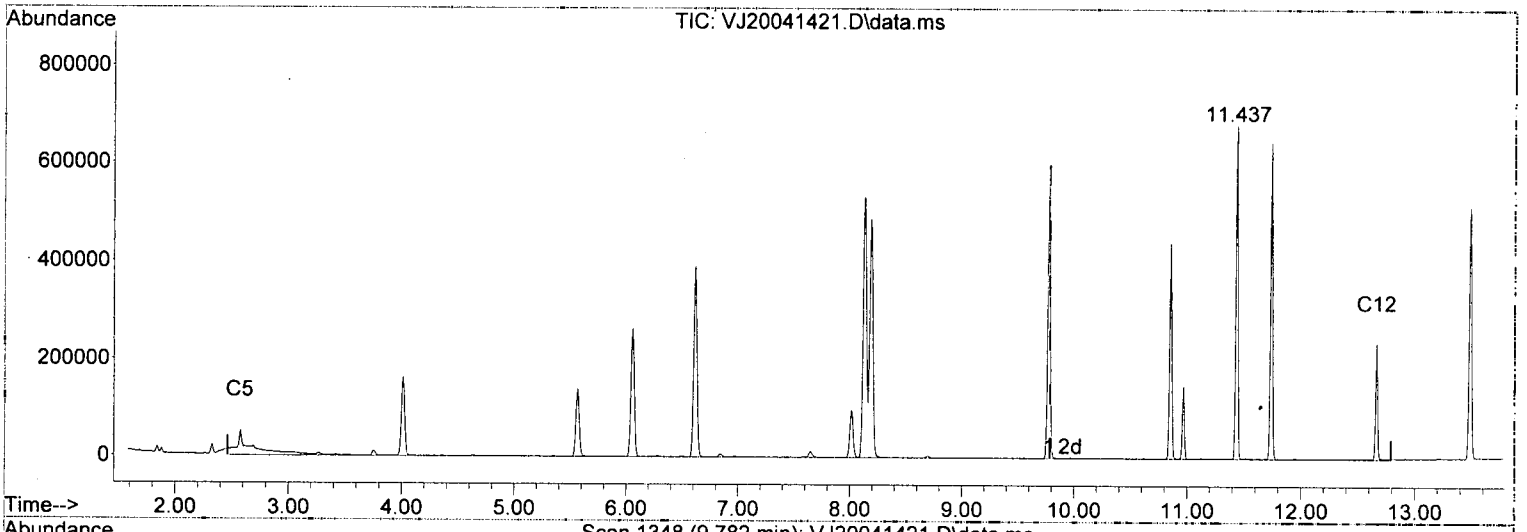
response 1920496

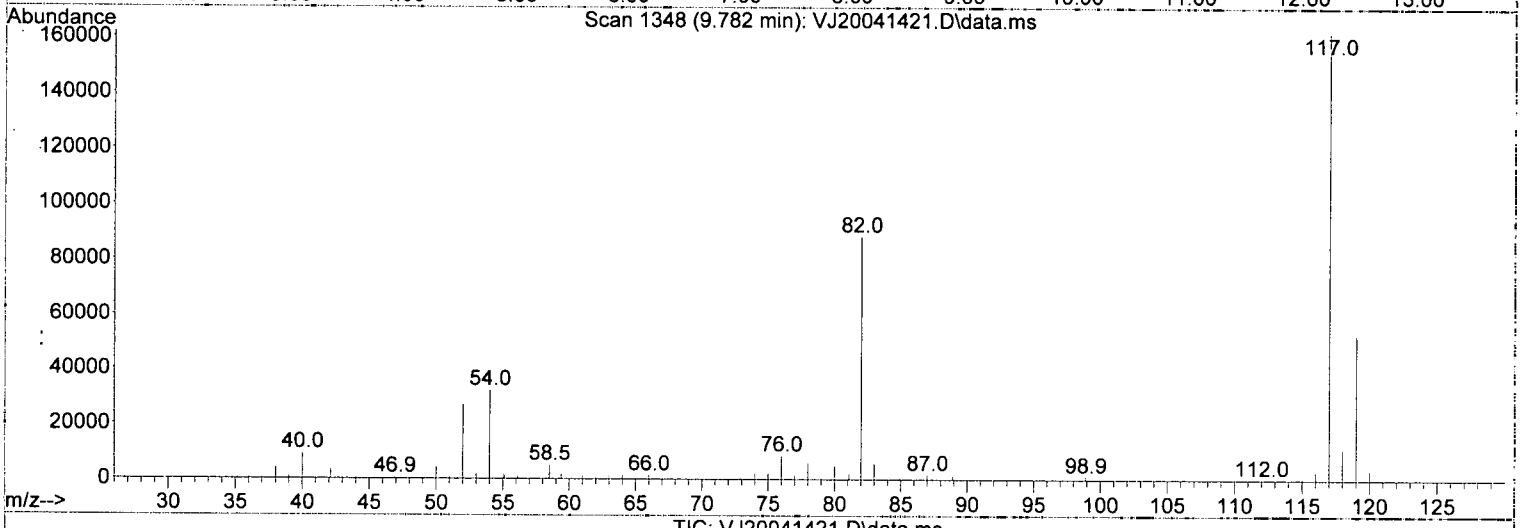
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.63#
0.00	0.00	1.23#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041421.D
Acq On : 15 Apr 2020 2:09
Operator : tb
Sample : 0D14058-TUN2
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 16 09:59:00 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration





TIC: VJ20041421.D\data.ms

(7) CA-LUFT (C5-C12) (H)

9.780min (0.000) 253.58 ug/L m

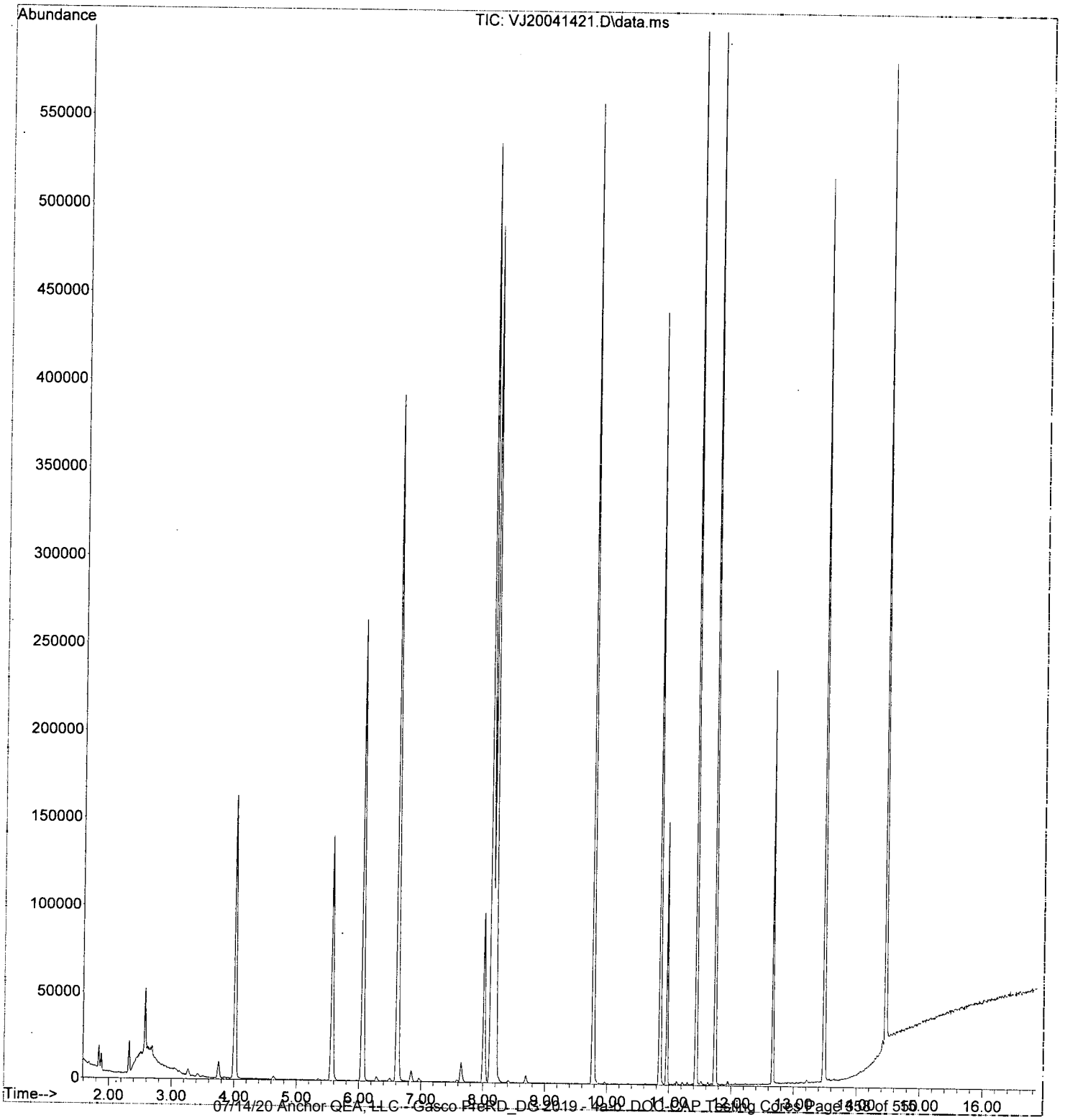
response 3618577

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.87#
0.00	0.00	0.65#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041421.D
Acq On : 15 Apr 2020 2:09
Operator : tb
Sample : 0D14058-TUN2
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 16 09:59:00 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041422.D
Acq On : 15 Apr 2020 2:35
Operator : tb
Sample : 0D14058-IBL7
Misc : 1X 5mL DI+MeOH
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 16 09:59:02 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

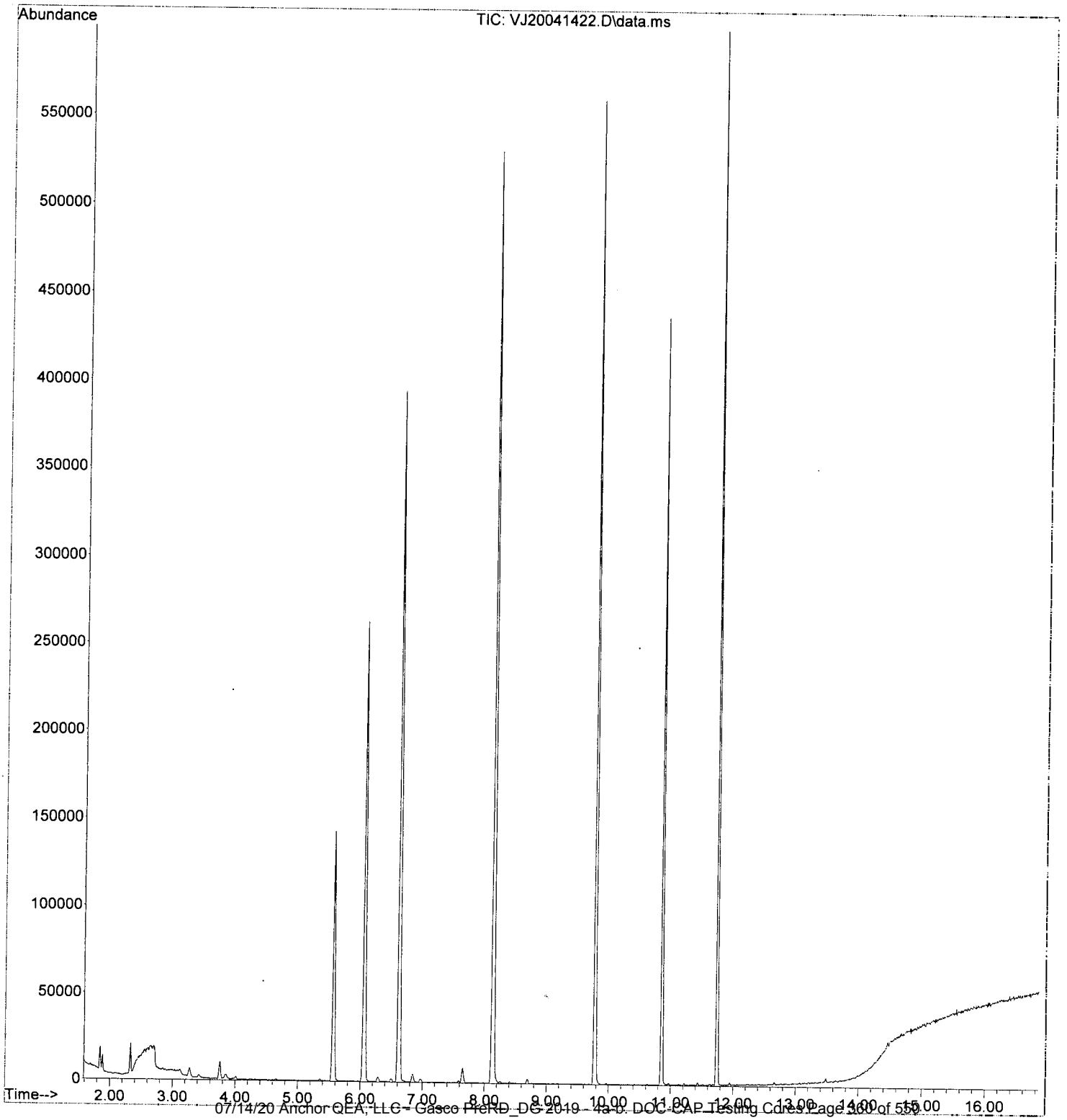
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	6.059	168	187269	50.00 ug/L	0.00
System Monitoring Compounds					
2) 1,4-Difluorobenzene (Sur)	6.619	114	344764	50.62 ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	100019	50.64 ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	408880	0.00 ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	298225	0.00 ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	208529	0.00 ug/L	0.00
Target Compounds					Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	82889m	20.82 ug/L	
5) TPHg (C5-C9)	9.780	TIC	410959m	5.05 ug/L	
6) TPHg (C6-C10)	9.780	TIC	363258m	14.75 ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	418072m	10.39 ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041422.D
Acq On : 15 Apr 2020 2:35
Operator : tb
Sample : 0D14058-IBL7
Misc : 1X 5mL DI+MeOH
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 16 09:59:02 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041423.D
Acq On : 15 Apr 2020 3:02
Operator : tb
Sample : 0D14058-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

4/16/20

Quant Time: Apr 16 09:59:04 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

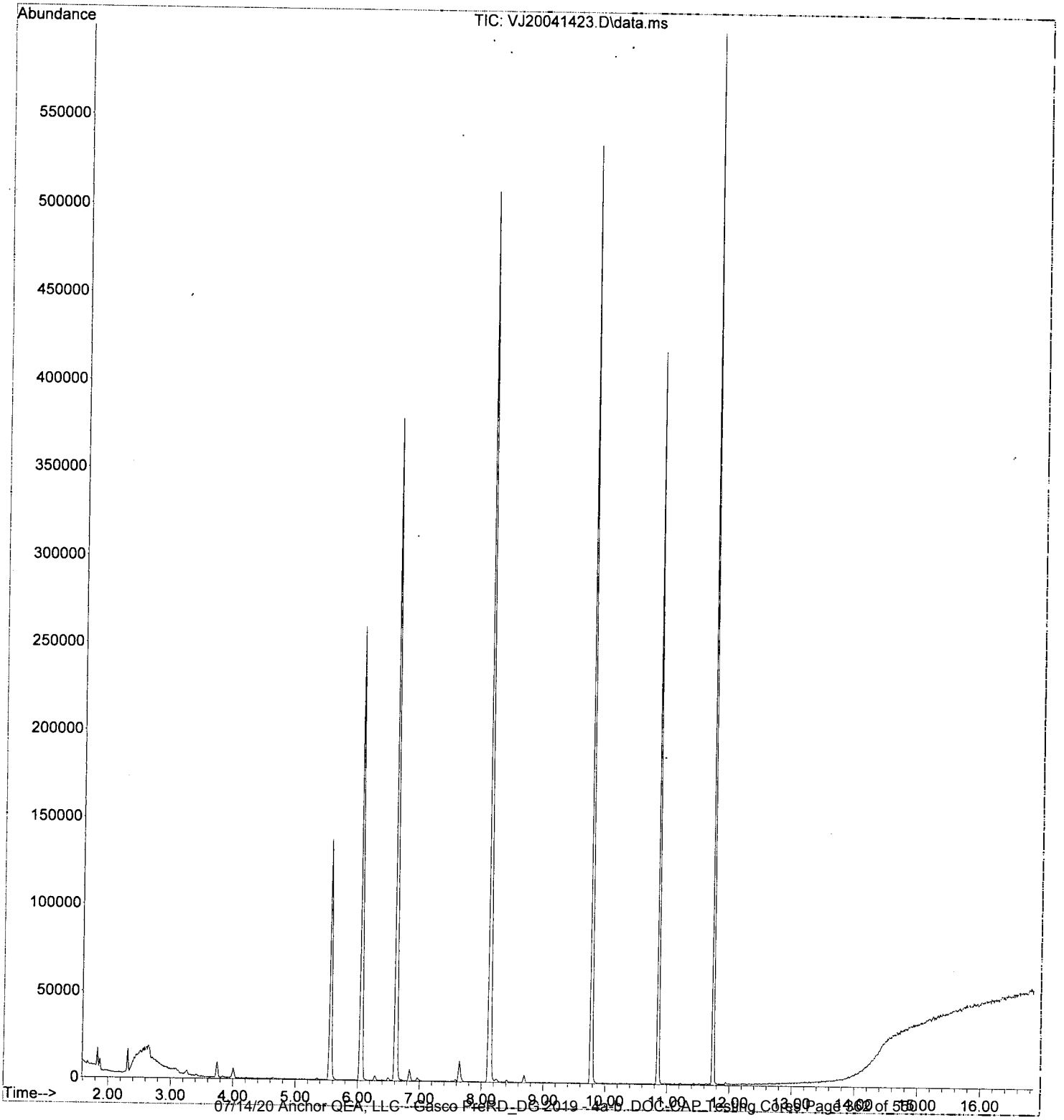
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	6.053	168	184462	50.00 ug/L	0.00
System Monitoring Compounds					
2) 1,4-Difluorobenzene (Sur)	6.612	114	337929	50.37 ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	96638	49.67 ug/L	0.00
9) Toluene-d8 (NR)	8.127	98	400933	0.00 ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	290772	0.00 ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	199219	0.00 ug/L	0.00
Target Compounds					Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	82313m	20.89 ug/L	<MRL
5) TPHg (C5-C9)	9.780	TIC	406978m	5.26 ug/L	
6) TPHg (C6-C10)	9.780	TIC	373170m	16.45 ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	403028m	9.69 ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041423.D
Acq On : 15 Apr 2020 3:02
Operator : tb
Sample : 0D14058-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 16 09:59:04 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041424.D
Acq On : 15 Apr 2020 3:29
Operator : tb
Sample : 0D14058-CALC
Misc : 1X 50ppb 5mL DI+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 15 18:43:22 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration

4/15/20

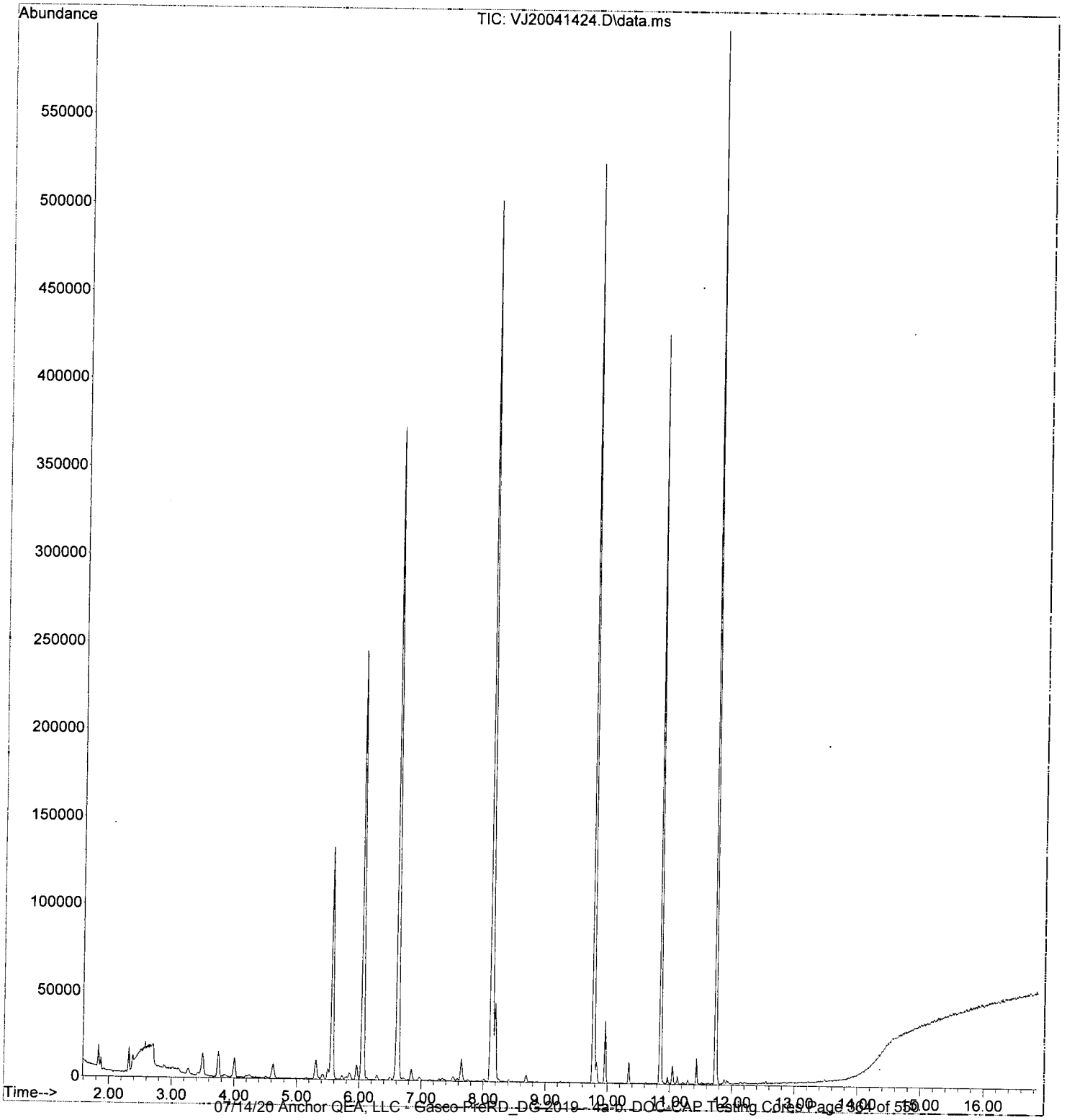
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.059	168	180730	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.618	114	329542	50.26	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	96165	51.80	ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	388951	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	285735	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	202337	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	392885m	46.88	ug/L	
5) TPHg (C5-C9)	9.780	TIC	863411m	82.29	ug/L	
6) TPHg (C6-C10)	9.780	TIC	713439m	76.45	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	925840m	73.53	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041424.D
Acq On : 15 Apr 2020 3:29
Operator : tb
Sample : 0D14058-CALC
Misc : 1X 50ppb 5mL DI+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 15 18:43:22 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041425.D
Acq On : 15 Apr 2020 3:56
Operator : tb
Sample : 0D14058-CALD
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 15 18:43:25 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration

4/15/20

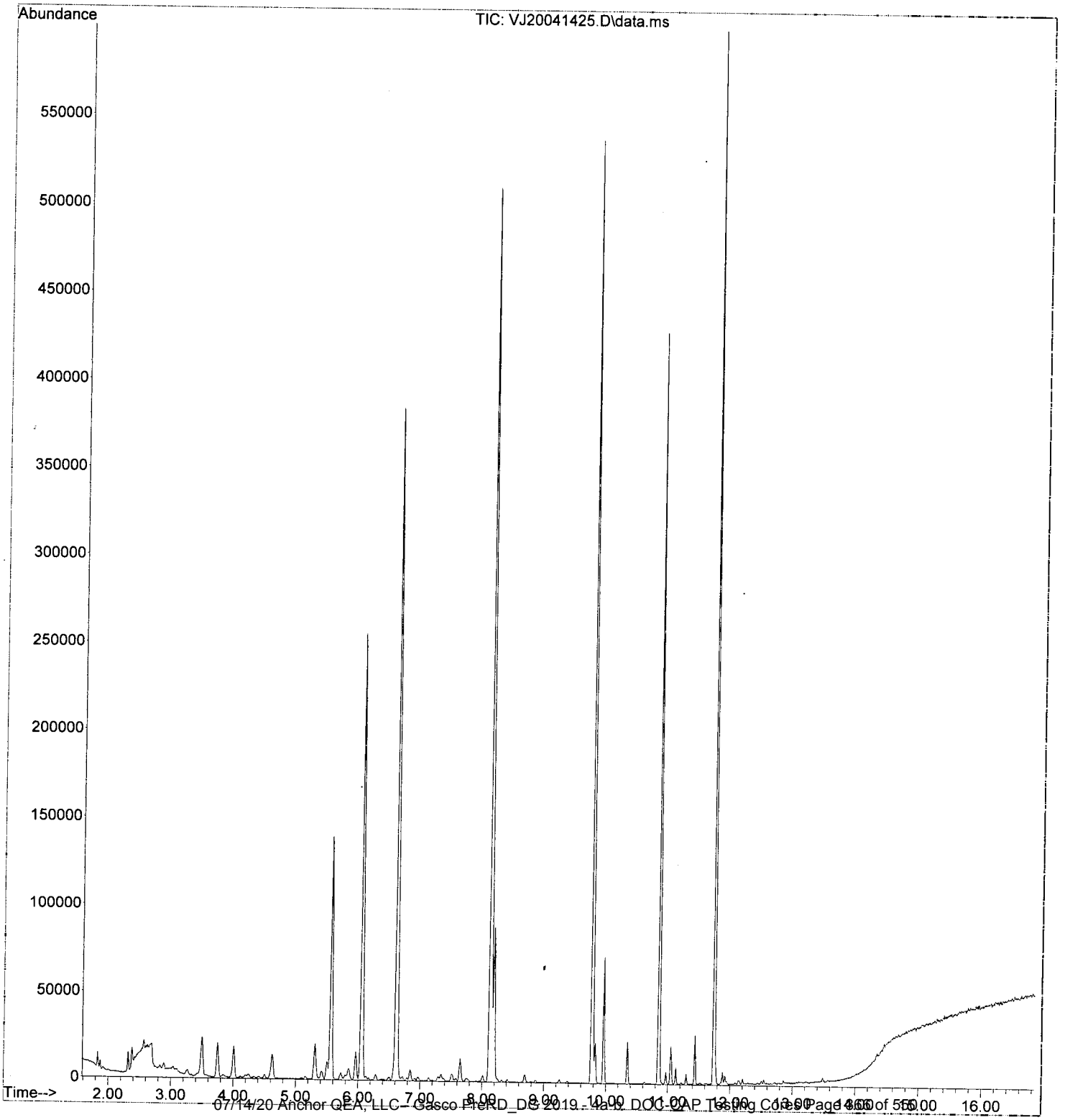
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.053	168	183916	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.619	114	338767	50.78	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	99023	52.41	ug/L	0.00
9) Toluene-d8 (NR)	8.127	98	402825	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	295239	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	208049	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	708495m	83.08	ug/L	
5) TPHg (C5-C9)	9.780	TIC	1367012m	128.02	ug/L	
6) TPHg (C6-C10)	9.780	TIC	1063071m	111.95	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	1511274m	117.95	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041425.D
Acq On : 15 Apr 2020 3:56
Operator : tb
Sample : 0D14058-CALD
Misc : 1X 100ppb 5mL DI+MeOH
ALS Vial : 25 . Sample Multiplier: 1

Quant Time: Apr 15 18:43:25 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041426.D
Acq On : 15 Apr 2020 4:23
Operator : tb
Sample : 0D14058-CALE
Misc : 1X 250ppb 5mL DI+MeOH
ALS Vial : 26 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 18:43:27 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration

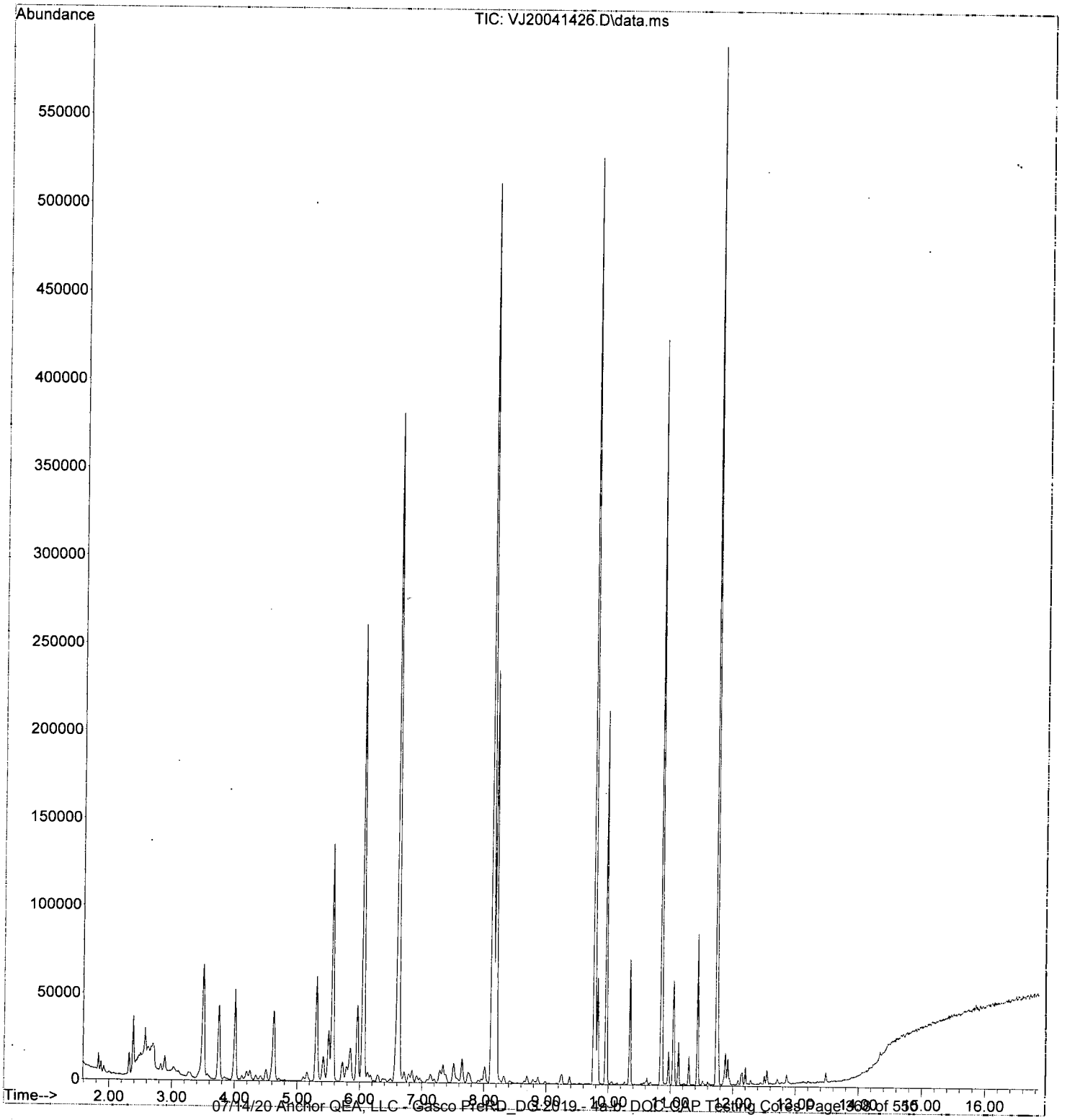
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.053	168	188219	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.619	114	340956	49.94	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	96895	50.11	ug/L	0.00
9) Toluene-d8 (NR)	8.127	98	401655	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	289932	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	200143	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	1965892m	225.24	ug/L	
5) TPHg (C5-C9)	9.780	TIC	2909808m	266.28	ug/L	
6) TPHg (C6-C10)	9.780	TIC	2442606m	251.34	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	3359508m	256.20	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041426.D
Acq On : 15 Apr 2020 4:23
Operator : tb
Sample : 0D14058-CALE
Misc : 1X 250ppb 5mL DI+MeOH
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 15 18:43:27 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041427.D
Acq On : 15 Apr 2020 4:50
Operator : tb
Sample : 0D14058-CALF
Misc : 1X 500ppb 5mL DI+MeOH
ALS Vial : 27 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 18:43:29 2020
Quant Method : C:\msdchem\1\methods\~~VJ200414G.M~~
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration

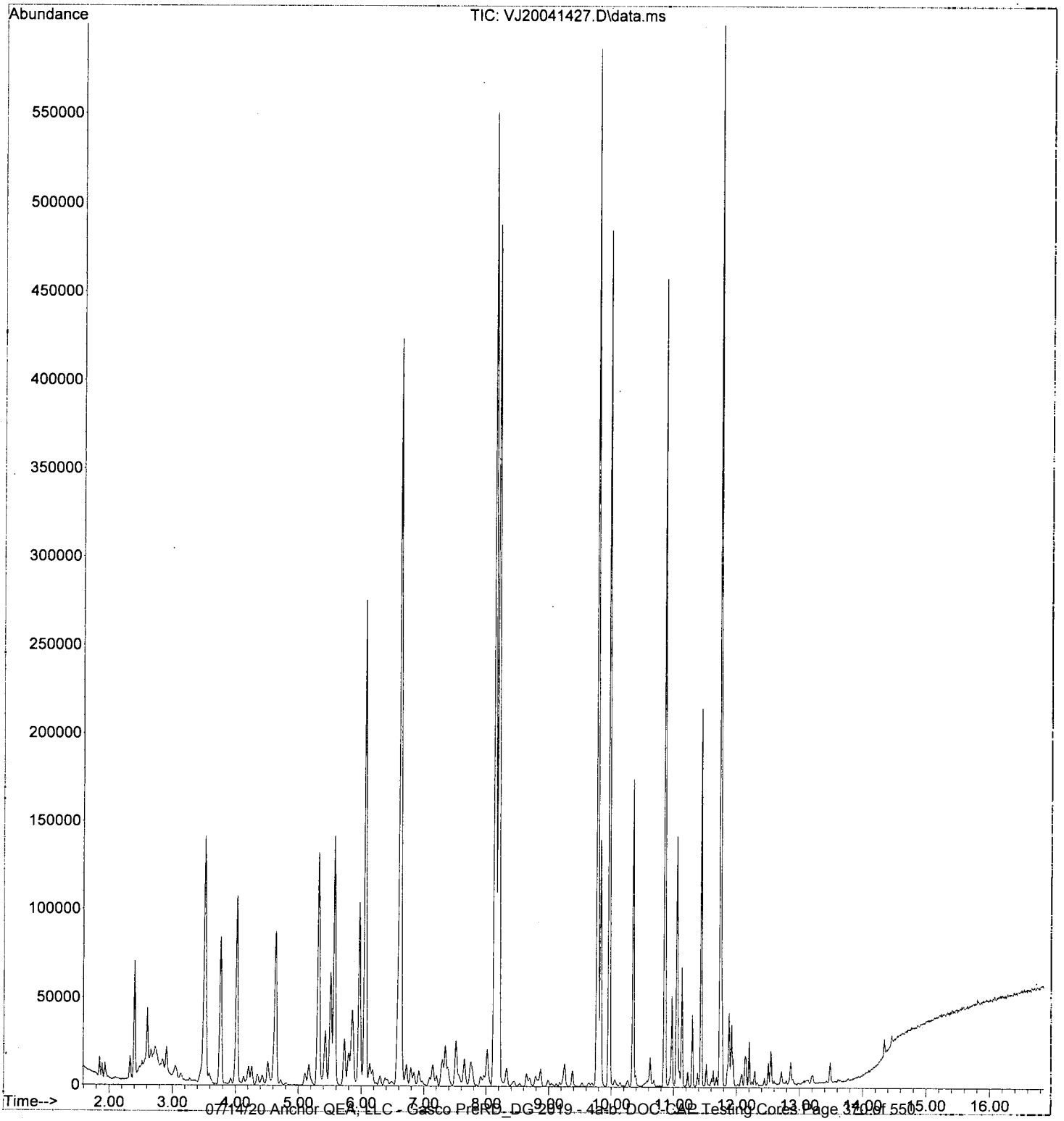
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.059	168	200322	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.619	114	363347	50.00	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	102889	50.00	ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	430068	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	310596	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	213374	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	4644560m	500.00	ug/L	
5) TPHg (C5-C9)	9.780	TIC	5815130m	500.00	ug/L	
6) TPHg (C6-C10)	9.780	TIC	5171623m	500.00	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	6978049m	500.00	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041427.D
Acq On : 15 Apr 2020 4:50
Operator : tb
Sample : 0D14058-CALF
Misc : 1X 500ppb 5mL DI+MeOH
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 15 18:43:29 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041428.D
Acq On : 15 Apr 2020 5:16
Operator : tb
Sample : 0D14058-CALG
Misc : 1X 1000ppb 5mL DI+MeOH
ALS Vial : 28 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 18:43:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration

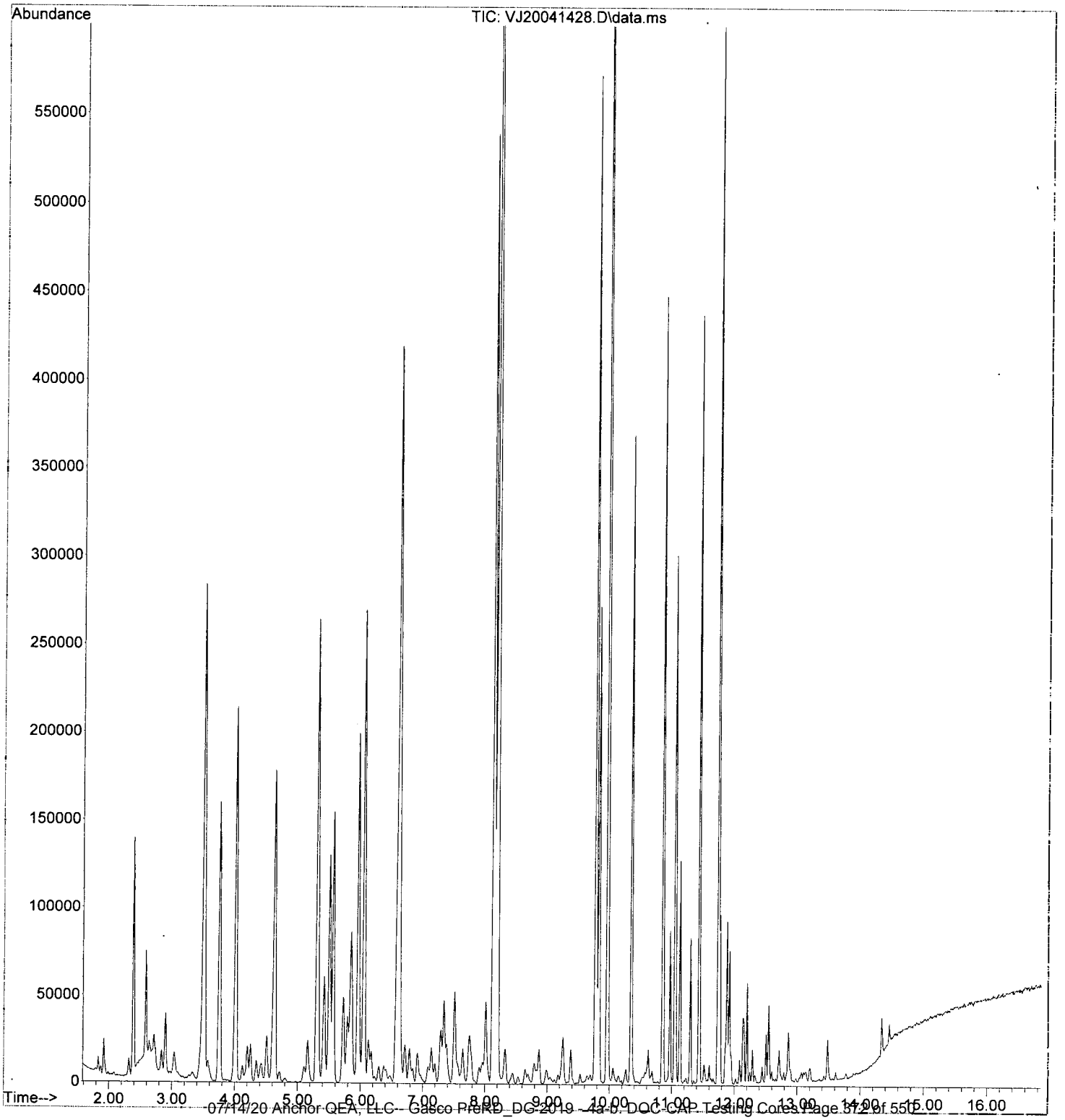
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.053	168	198303	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.618	114	360202	50.07	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	101586	49.87	ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	424247	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	306373	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	205440	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	9140971m	994.07	ug/L	
5) TPHg (C5-C9)	9.780	TIC	11221593m	974.69	ug/L	
6) TPHg (C6-C10)	9.780	TIC	9985887m	975.28	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	13504961m	977.53	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041428.D
Acq On : 15 Apr 2020 5:16
Operator : tb
Sample : 0D14058-CALG
Misc : 1X 1000ppb 5mL DI+MeOH
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 15 18:43:31 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041429.D
Acq On : 15 Apr 2020 5:43
Operator : tb
Sample : 0D14058-CALH
Misc : 1X 2500ppb 5mL DI+MeOH
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 15 18:43:33 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration

4/15/20

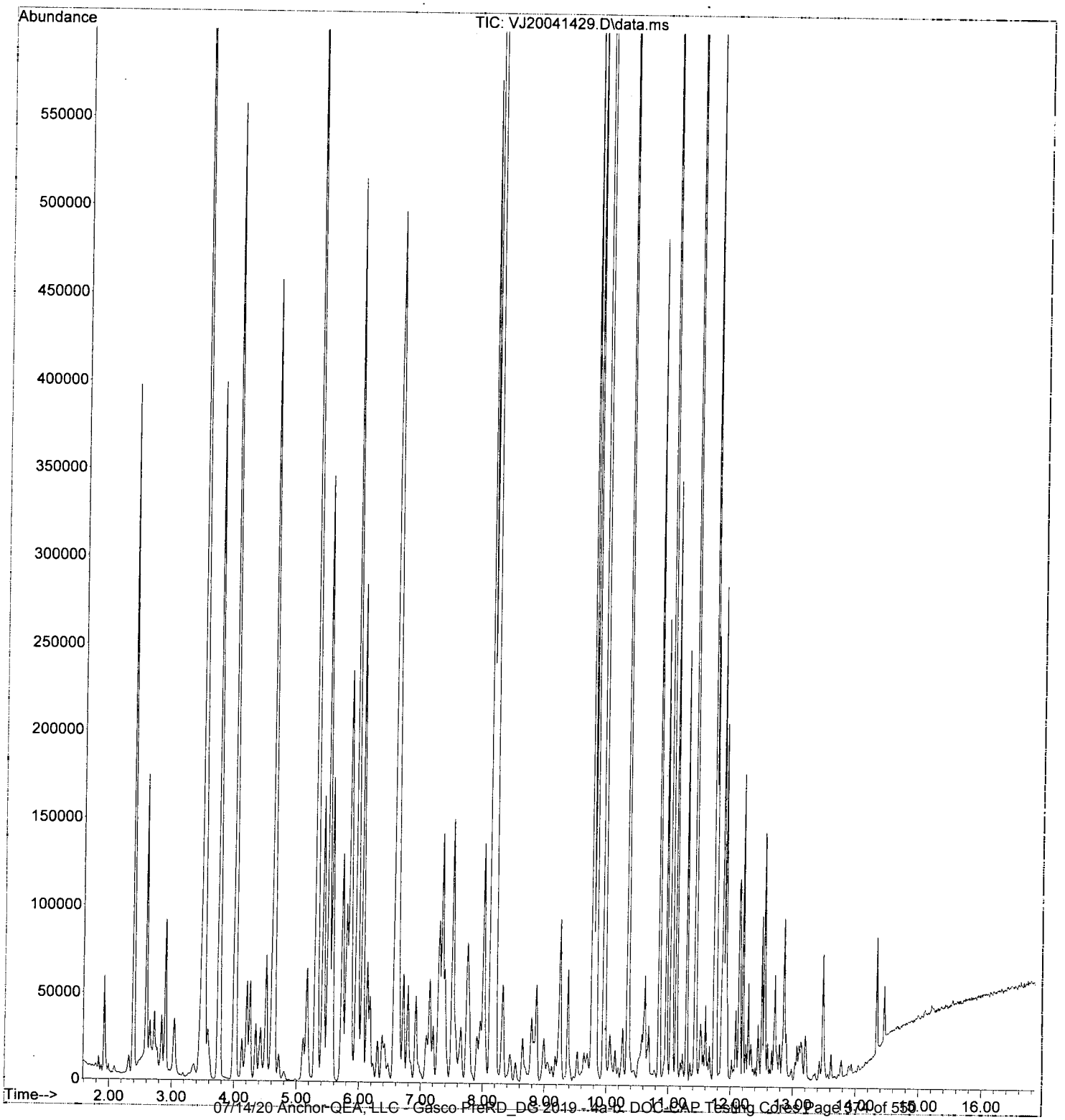
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.053	168	206043	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.618	114	376211	50.33	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	110917	52.40	ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	444769	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	327924	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	222336	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	24807731m	2596.47	ug/L	
5) TPHg (C5-C9)	9.780	TIC	28891311m	2415.18	ug/L	
6) TPHg (C6-C10)	9.780	TIC	25658184m	2411.79	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	35417036m	2467.28	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041429.D
Acq On : 15 Apr 2020 5:43
Operator : tb
Sample : 0D14058-CALH
Misc : 1X 2500ppb 5mL DI+MeOH
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 15 18:43:33 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041430.D
Acq On : 15 Apr 2020 6:10
Operator : tb
Sample : 0D14058-CALI
Misc : 1X 5000ppb 5mL DI+MeOH
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 15 18:43:35 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration

4/15/20

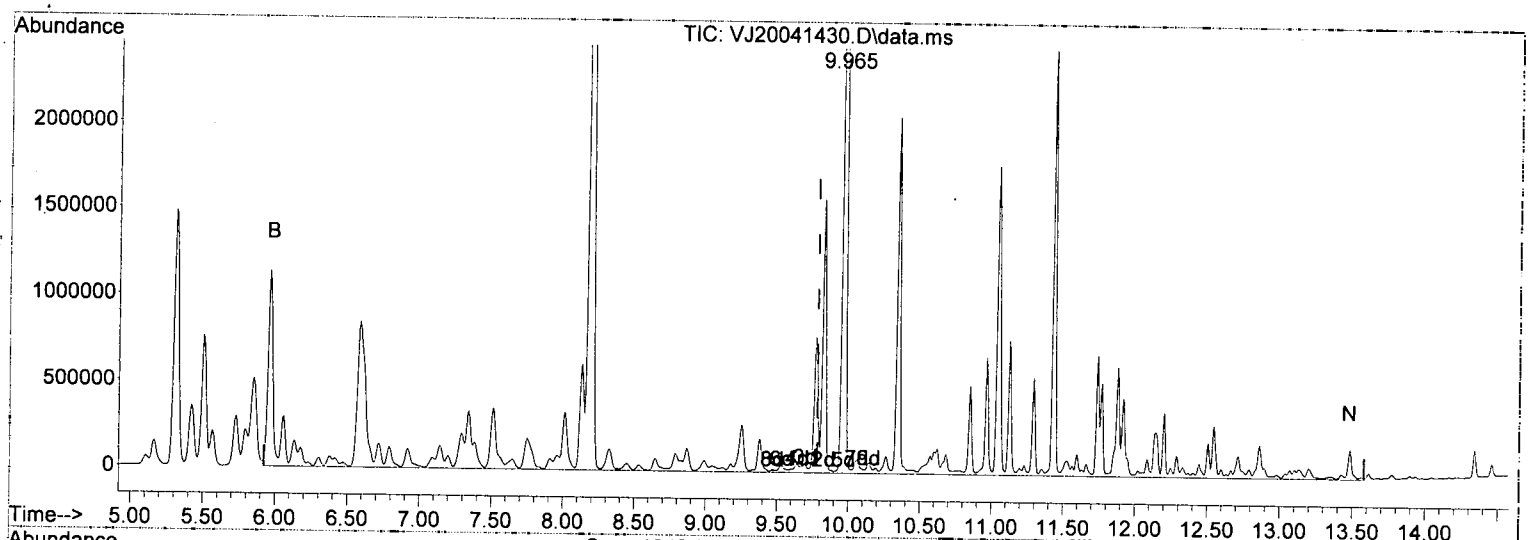
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.059	168	215192	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.619	114	387892	49.69	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	116207	52.57	ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	466967	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	344210	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	230586	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	54805248m	5492.25	ug/L	
5) TPHg (C5-C9)	9.780	TIC	62740396m	5021.81	ug/L	
6) TPHg (C6-C10)	9.780	TIC	55719277m	5014.77	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	77186591m	5148.50	ug/L	

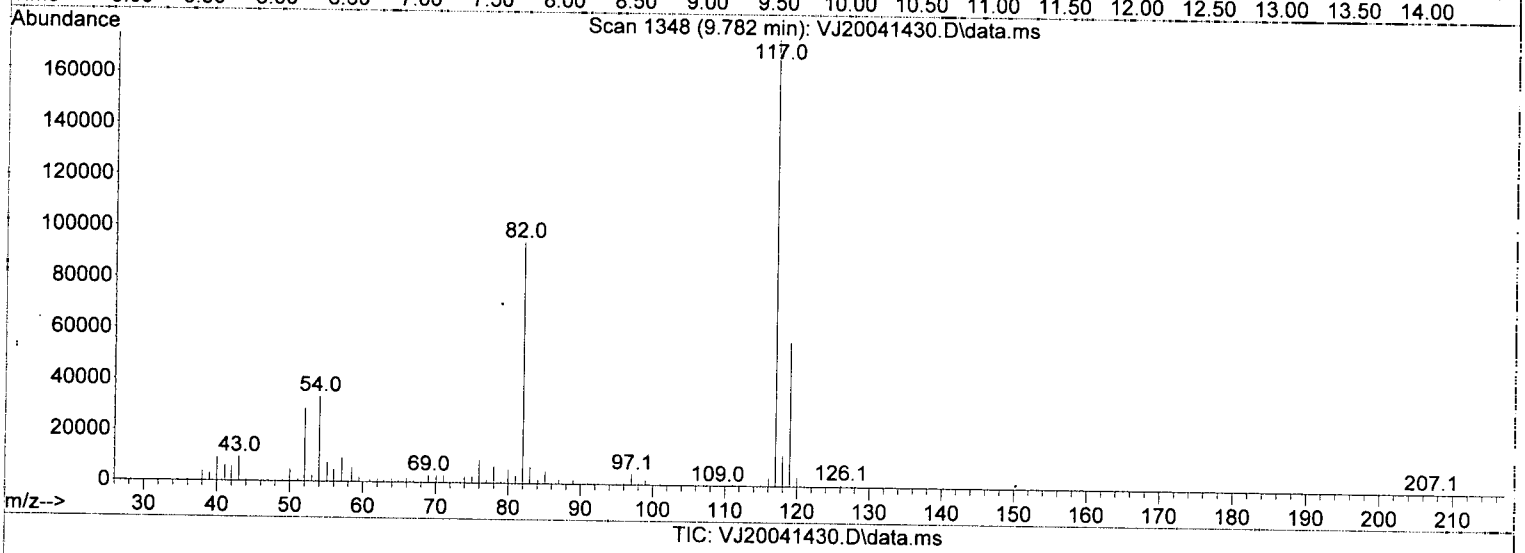
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041430.D
Acq On : 15 Apr 2020 6:10
Operator : tb
Sample : 0D14058-CALI
Misc : 1X 5000ppb 5mL DI+MeOH
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 15 18:43:35 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration





TIC: VJ20041430.D\data.ms

(4) NWTPH-Gx (TPH) (H)

9.780min (0.000) 5492.25 ug/L m

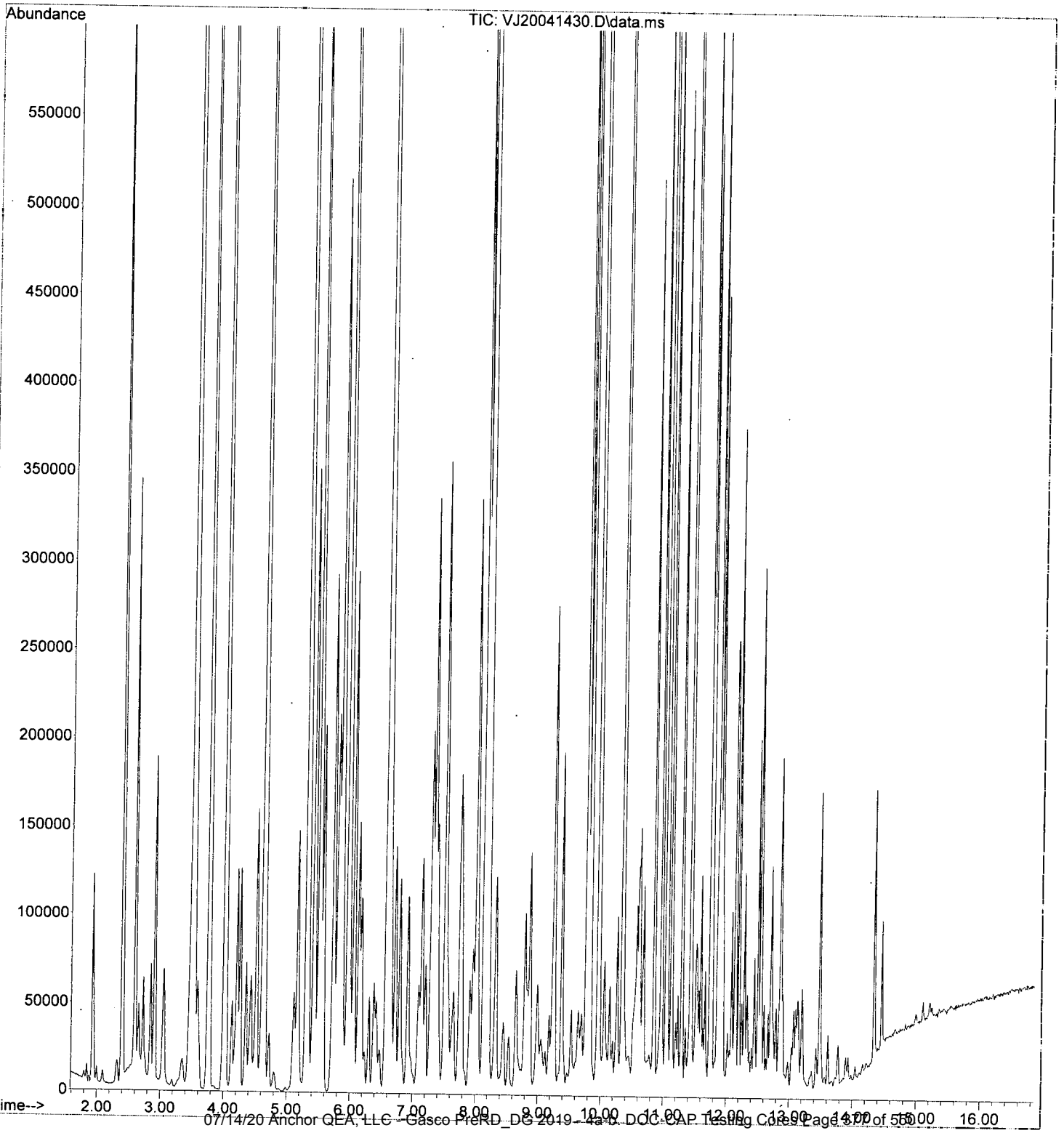
response 54805248

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.02#
0.00	0.00	0.01#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041430.D
Acq On : 15 Apr 2020 6:10
Operator : tb
Sample : 0D14058-CALI
Misc : 1X 5000ppb 5mL DI+MeOH
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 15 18:43:35 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041431.D
Acq On : 15 Apr 2020 6:37
Operator : tb
Sample : 0D14058-CALJ
Misc : 1X 10000ppb 5mL DI+MeOH
ALS Vial : 31 Sample Multiplier: 1

4/15/20

Quant Time: Apr 15 18:43:37 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration

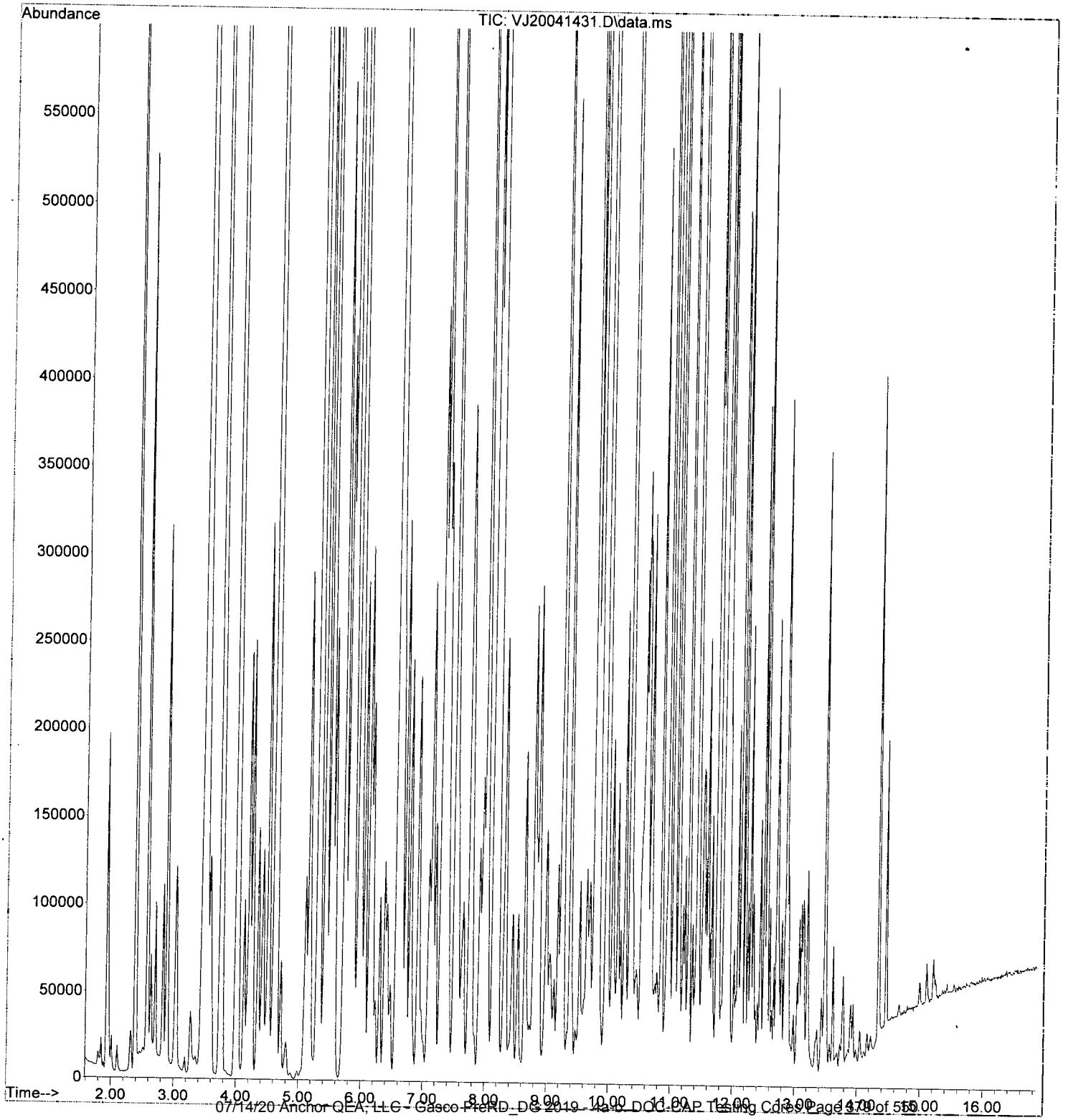
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.059	168	211849	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.618	114	384211	49.99	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	112073	51.50	ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	459261	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	336569	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	224872	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	112342581m	11435.95	ug/L	
5) TPHg (C5-C9)	9.780	TIC	125021993m	10164.81	ug/L	
6) TPHg (C6-C10)	9.780	TIC	111502102m	10193.62	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	154738446m	10484.23	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041431.D
Acq On : 15 Apr 2020 6:37
Operator : tb
Sample : 0D14058-CALJ
Misc : 1X 10000ppb 5mL DI+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 15 18:43:37 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 15:28:14 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041432.D
Acq On : 15 Apr 2020 7:04
Operator : tb
Sample : 0D14058-IBL8
Misc : 1X 5mL DI+MeOH
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Apr 16 09:59:06 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

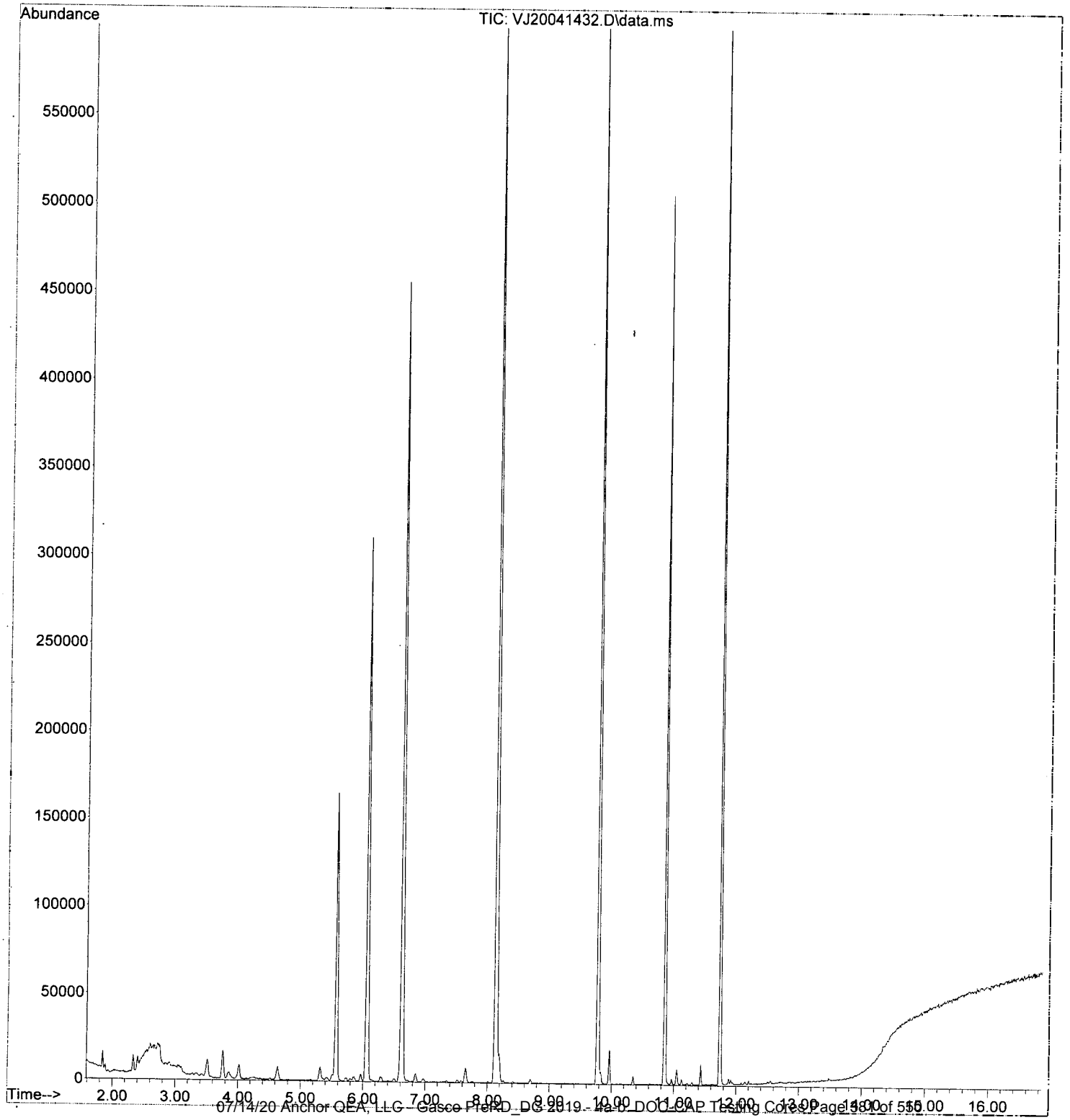
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	6.059	168	228871	50.00 ug/L	0.00
System Monitoring Compounds					
2) 1,4-Difluorobenzene (Sur)	6.618	114	414356	49.77 ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	116938	48.45 ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	479965	0.00 ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	349459	0.00 ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	233800	0.00 ug/L	0.00
Target Compounds					Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	246771m	34.31 ug/L	
5) TPHg (C5-C9)	9.780	TIC	691635m	20.10 ug/L	
6) TPHg (C6-C10)	9.780	TIC	604968m	29.10 ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	757517m	26.40 ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041432.D
Acq On : 15 Apr 2020 7:04
Operator : tb
Sample : 0D14058-IBL8
Misc : 1X 5mL DI+MeOH
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Apr 16 09:59:06 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041433.D
Acq On : 15 Apr 2020 7:31
Operator : tb
Sample : 0D14058-IBL9
Misc : 1X 5mL DI+MeOH
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 16 09:59:08 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

NR

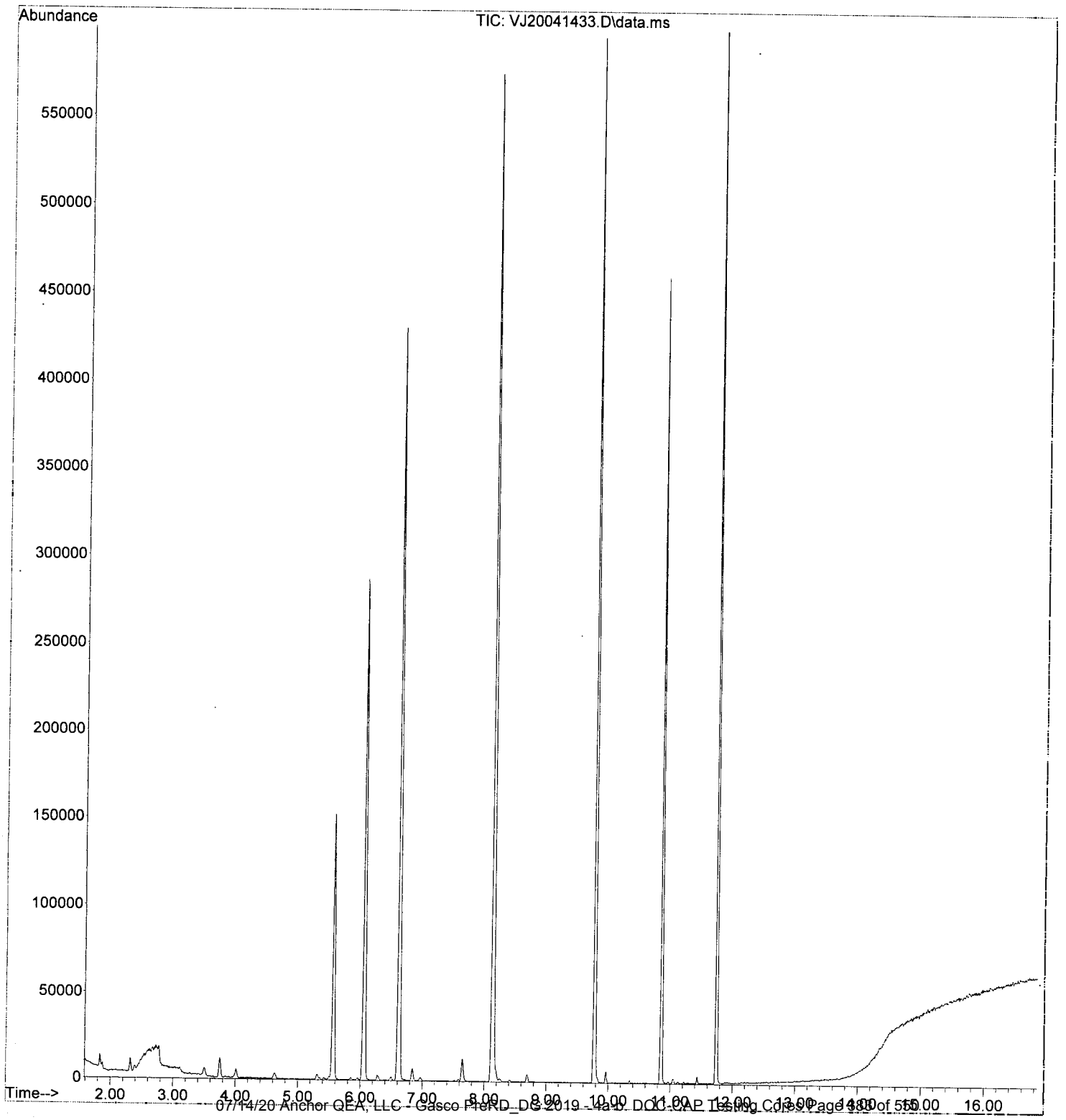
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	6.059	168	214404	50.00 ug/L	0.00
System Monitoring Compounds					
2) 1,4-Difluorobenzene (Sur)	6.619	114	386499	49.56 ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	110505	48.87 ug/L	0.00
9) Toluene-d8 (NR)	8.127	98	454920	0.00 ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	331653	0.00 ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	224741	0.00 ug/L	0.00
Target Compounds					Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	162966m	27.55 ug/L	
5) TPHg (C5-C9)	9.780	TIC	532303m	10.29 ug/L	
6) TPHg (C6-C10)	9.780	TIC	487888m	21.60 ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	557423m	15.85 ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041433.D
Acq On : 15 Apr 2020 7:31
Operator : tb
Sample : 0D14058-IBL9
Misc : 1X 5mL DI+MeOH
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 16 09:59:08 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041434.D
Acq On : 15 Apr 2020 7:57
Operator : tb
Sample : 0D14058-ICV2
Misc : 1X 500ppb 5mL DI+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Apr 16 09:59:10 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

4/16/20

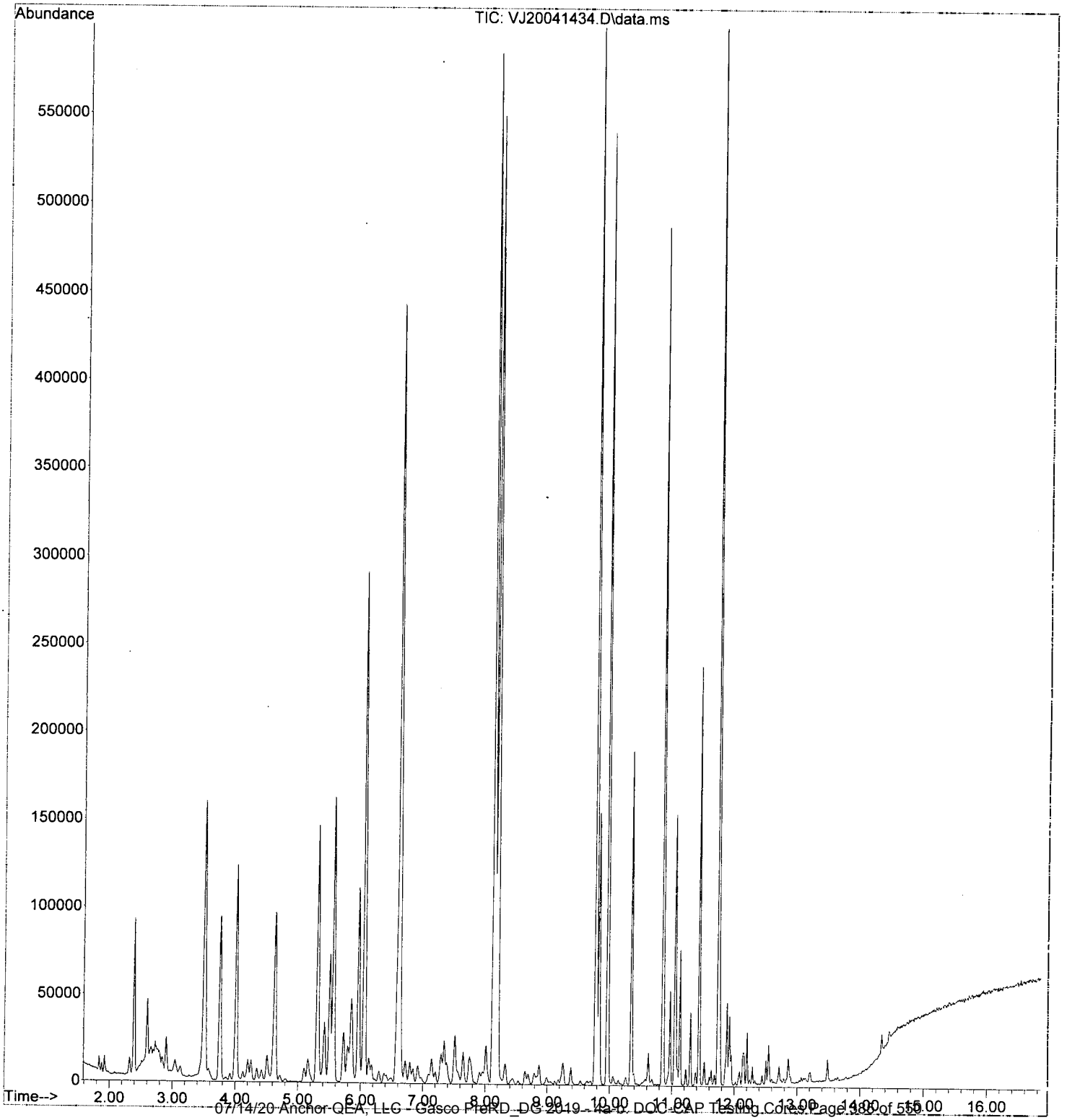
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.059	168	219526	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.619	114	395358	49.51	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	113612	49.07	ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	464701	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	337274	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	230859	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	5153695m	506.72	ug/L	
5) TPHg (C5-C9)	9.780	TIC	6469416m	499.54	ug/L	
6) TPHg (C6-C10)	9.780	TIC	5765608m	509.38	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	7788539m	502.44	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041434.D
Acq On : 15 Apr 2020 7:57
Operator : tb
Sample : 0D14058-ICV2
Misc : 1X 500ppb 5mL DI+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Apr 16 09:59:10 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041435.D
Acq On : 15 Apr 2020 8:24
Operator : tb
Sample : 0D14058-IBLA
Misc : 1X 5mL DI+MeOH
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Apr 16 09:59:12 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration

NR

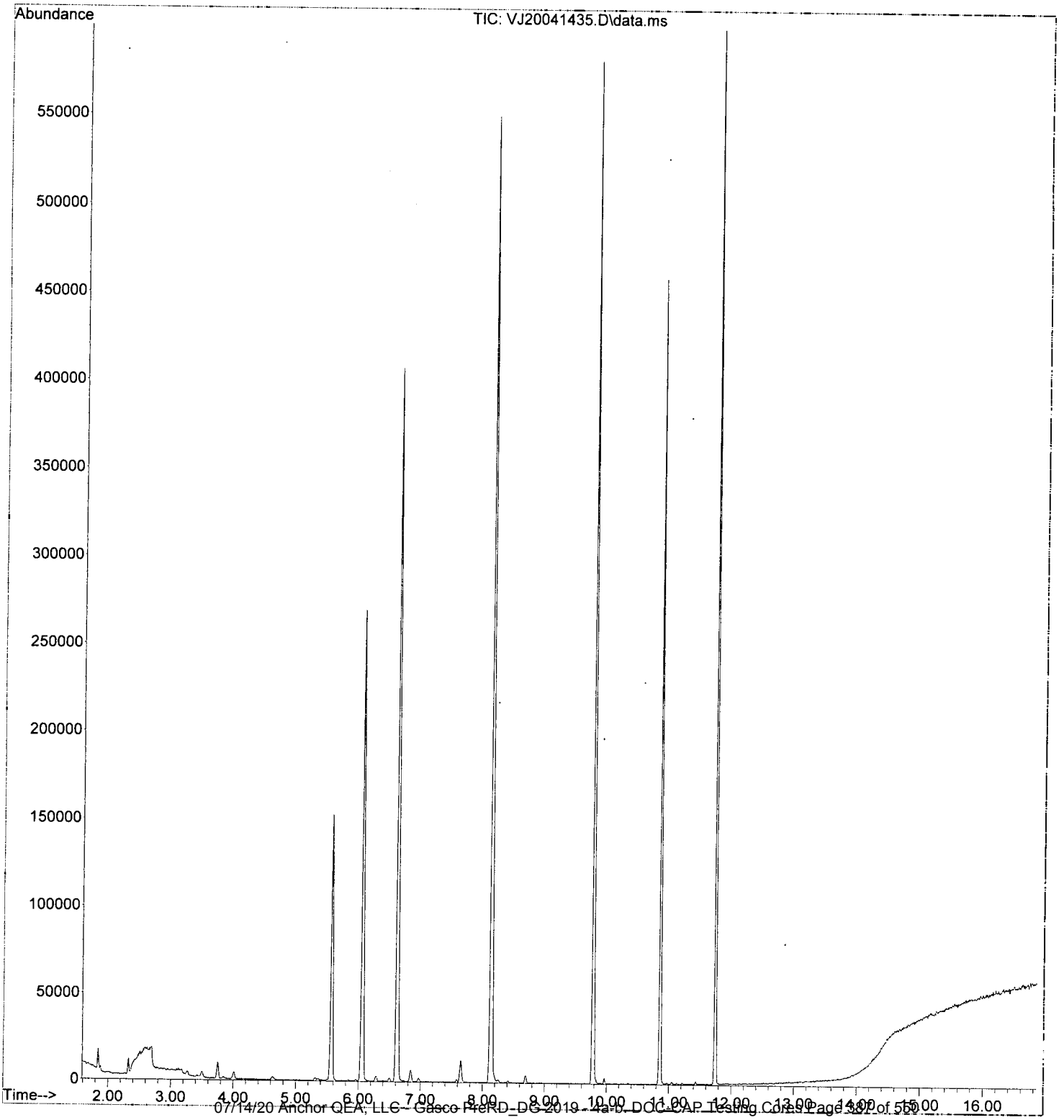
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.059	168	198474	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.618	114	360080	49.88	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.853	174	107608	51.41	ug/L	0.00
9) Toluene-d8 (NR)	8.133	98	425583	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.776	117	314147	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.741	150	222327	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.780	TIC	106807m	22.84	ug/L	
5) TPHg (C5-C9)	9.780	TIC	467710m	8.00	ug/L	
6) TPHg (C6-C10)	9.780	TIC	416535m	17.99	ug/L	
7) CA-LUFT (C5-C12)	9.780	TIC	475442m	12.82	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D14058\
Data File : VJ20041435.D
Acq On : 15 Apr 2020 8:24
Operator : tb
Sample : 0D14058-IBLA
Misc : 1X 5mL DI+MeOH
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Apr 16 09:59:12 2020
Quant Method : C:\msdchem\1\methods\VJ200414G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Wed Apr 15 18:44:39 2020
Response via : Initial Calibration



APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard OR 97223 phone 503-718-2323

Selected Volatile Organic Compounds by EPA 5035A/8260C
Calibration Data

Sequence 0D28059 (Cal ID A0D3007) VOA-GCMS7

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	0D28059	Instrument:	VOA-GCMS7
Date:	04/28/20 13:33	Calibration:	A0D3007

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0D28059-IBL1	Water	QC	QC			A20D005	
2	0D28059-IBL2	Water	QC	QC			A20D005	
3	0D28059-TUN1	Water	QC	QC			A20D005	
4	0D28059-ICB1	Water	QC	QC			A20D005	
5	0D28059-CAL1	Water	QC	QC			A20D005	A20D369
6	0D28059-CAL2	Water	QC	QC			A20D005	A20D370
7	0D28059-CAL3	Water	QC	QC			A20D005	A20D371
8	0D28059-CAL4	Water	QC	QC			A20D005	A20D372
9	0D28059-CAL5	Water	QC	QC			A20D005	A20D373
10	0D28059-CAL6	Water	QC	QC			A20D005	A20D374
11	0D28059-CAL7	Water	QC	QC			A20D005	A20D375
12	0D28059-CAL8	Water	QC	QC			A20D005	A20D376
13	0D28059-CAL9	Water	QC	QC			A20D005	A20D377
14	0D28059-IBL3	Water	QC	QC			A20D005	
15	0D28059-CALA	Water	QC	QC			A20C050	A20D378
16	0D28059-IBL4	Water	QC	QC			A20D005	
17	0D28059-CALB	Water	QC	QC			A20D005	A20D379
18	0D28059-IBL5	Water	QC	QC			A20D005	
19	0D28059-IBL6	Water	QC	QC			A20D005	
20	0D28059-ICV1	Water	QC	QC			A20D005	A20D380
21	0D28059-IBL7	Water	QC	QC			A20D005	

Data Entered By: BS 5/2/20

Comments: C-13 DCP ↑ MDL MRL to 1/2 ppb

Data Reviewed By: MM 5/4/20

Calibration Status Report VOA-GCMS7

Method Path : C:\msdchem\1\methods\
Method File : VG200429W.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Wed Apr 29 15:17:10 2020
Response Via : Initial Calibration

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3	3	0	50	C:\msdchem\1\data\2020-04\0D28059\VG20042807.D
4	4	1	50	C:\msdchem\1\data\2020-04\0D28059\VG20042808.D
5	5	2	50	C:\msdchem\1\data\2020-04\0D28059\VG20042809.D
6	6	5	50	C:\msdchem\1\data\2020-04\0D28059\VG20042810.D
7	7	10	50	C:\msdchem\1\data\2020-04\0D28059\VG20042811.D
8	8	20	50	C:\msdchem\1\data\2020-04\0D28059\VG20042812.D
9	9	50	50	C:\msdchem\1\data\2020-04\0D28059\VG20042813.D
10	10	100	50	C:\msdchem\1\data\2020-04\0D28059\VG20042815.D
11	1a	200	50	C:\msdchem\1\data\2020-04\0D28059\VG20042817.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Apr 29 15:17 2020	Apr 29 14:35 2020	28 Apr 2020 3:49 pm
2	2	Apr 29 15:17 2020	Apr 29 14:38 2020	28 Apr 2020 4:16 pm
3	3	Apr 29 15:17 2020	Apr 29 14:40 2020	28 Apr 2020 4:43 pm
4	4	Apr 29 15:17 2020	Apr 29 14:44 2020	28 Apr 2020 5:10 pm
5	5	Apr 29 15:17 2020	Apr 29 14:27 2020	28 Apr 2020 5:37 pm
6	6	Apr 29 15:17 2020	Apr 29 14:27 2020	28 Apr 2020 6:04 pm
7	7	Apr 29 15:17 2020	Apr 29 14:27 2020	28 Apr 2020 6:31 pm
8	8	Apr 29 15:17 2020	Apr 29 14:27 2020	28 Apr 2020 6:58 pm
9	9	Apr 29 15:17 2020	Apr 29 14:27 2020	28 Apr 2020 7:25 pm
10	10	Apr 29 15:17 2020	Apr 29 14:27 2020	28 Apr 2020 8:19 pm
11	1a	Apr 29 15:17 2020	Apr 29 15:14 2020	28 Apr 2020 9:14 pm

4/30/20 JM

VG200429W.M Thu Apr 30 09:39:27 2020

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0D28059

Analysis Included
8260D Oxygenates
QC - 624x/8260x All Cpds for Studies

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
0D28059-TUN1	MS Tune	Water		A20D005	4/28/2020 2:55:00PM
0D28059-ICB1	Initial Cal Blank	Water		A20D005	4/28/2020 3:22:00PM
0D28059-CAL1	Cal Standard	Water	A20D369	"	4/28/2020 3:49:00PM
0D28059-CAL2	Cal Standard	Water	A20D370	"	4/28/2020 4:16:00PM
0D28059-CAL3	Cal Standard	Water	A20D371	"	4/28/2020 4:43:00PM
0D28059-CAL4	Cal Standard	Water	A20D372	"	4/28/2020 5:10:00PM
0D28059-CAL5	Cal Standard	Water	A20D373	"	4/28/2020 5:37:00PM
0D28059-CAL6	Cal Standard	Water	A20D374	"	4/28/2020 6:04:00PM
0D28059-CAL7	Cal Standard	Water	A20D375	"	4/28/2020 6:31:00PM
0D28059-CAL8	Cal Standard	Water	A20D376	"	4/28/2020 6:58:00PM
0D28059-CAL9	Cal Standard	Water	A20D377	"	4/28/2020 7:25:00PM
0D28059-CALA	Cal Standard	Water	A20D378	"	4/28/2020 8:19:00PM
0D28059-CALB	Cal Standard	Water	A20D379	"	4/28/2020 9:14:00PM
0D28059-ICV1	Initial Cal Check	Water	A20D380	"	4/28/2020 10:35:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A0D3007** Instrument: **VOA-GCMS7**

8260D Oxygenates Sequence: **0D28059** Matrix: **Water**

0D28059-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D28059-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D28059-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D28059-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D28059-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D28059-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D28059-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D28059-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D28059-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D28059-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0D28059-CALB	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0D28059

Compounds listed above have recalculated recoveries outside 70-130% of the true values, and the calibration levels are above the reporting level. If no compounds are listed, all are OK. Please see the next section for quadatic fit compounds.

Analytes With Quadratic Curve Fits

Qualifier	iMDL	iMRL	Spike Amt	%Difference	OK?	Raise MRL to ?
				———	☐	☐ ———

Analytes listed above have quadratic curve fits. If they are using a weighting otpion, they must be checked against the requanted curve points to determine if the recalculated results are within limits (70-130 or as specified).

ICV RECOVERIES

Calibration: **A0D3007** Instrument: **VOA-GCMS7**

QC - 624x/8260x All Cpds for Sequence: **0D28059** Matrix: **Water**

0D28059-ICV1	**Inst. MRL**	**ICV Level**	**Result**	**%Rec.**	**Qual**

Compounds listed above have Initial Calibration Verification standard recoveries outside 70-130% of the true values. If no compounds are listed, all have passing recoveries.

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042820.D
Acq On : 28 Apr 2020 10:35 pm
Operator : PS
Sample : 0D28059-ICV1
Misc : 1X 5mL 20-40PPB VOCRO (A19L196+A20C151+A19L249)
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 30 09:38:33 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

4/30/2020

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene (I)	50.000	50.000	0.0	110	0.00
2		Dichlorodifluoromethane	20.000	18.504	7.5	107	0.00
3	P	Chloromethane	20.000	18.340	8.3	106	0.00
4	C	Vinyl Chloride	20.000	19.493	2.5	110	0.00
5		Bromomethane	20.000	17.822	10.9	95	0.00
6		Chloroethane	20.000	14.757	26.2#	87	-0.02
7		Trichlorofluoromethane	20.000	19.723	1.4	113	-0.02
8		Ethanol	1250.000	1263.279	-1.1	110	0.00
9	C	1,1-Dichloroethene	20.000	17.041	14.8	92	0.00
10		Carbon Disulfide	20.000	17.463	12.7	90	0.00
11		Freon 113	20.000	17.668	11.7	97	-0.02
12		Iodomethane	20.000	21.574	-7.9	151	0.00
13		Acrolein	20.000	20.795	-4.0	112	0.00
14		Methylene Chloride	20.000	19.501	2.5	107	0.00
15		Acetone	40.000	39.624	0.9	109	-0.01
16		t-1,2-Dichloroethene	20.000	19.300	3.5	105	0.00
17		n-Hexane	20.000	18.672	6.6	101	0.00
18		Methyl-tert-butyl-ether	20.000	21.575	-7.9	106	0.00
19		tert-Butanol (TBA)	1250.000	1500.934	-20.1#	114	0.00
20		Diisopropyl ether (DIPE)	5.000	5.695	-13.9	115	0.00
21	P	1,1-Dichloroethane	20.000	20.127	-0.6	107	0.00
22		Acrylonitrile	20.000	20.813	-4.1	104	0.00
23		Vinyl Acetate	20.000	17.408	13.0	116	0.00
24		Ethyl-tert-butyl ether (ETB	5.000	5.744	-14.9	115	0.00
25		c-1,2-Dichloroethene	20.000	20.917	-4.6	107	0.00
26		2,2-Dichloropropane	20.000	18.186	9.1	95	-0.02
27		Bromochloromethane	20.000	18.887	5.6	104	-0.01
28	C	Chloroform	20.000	20.115	-0.6	109	0.00
29		Carbon Tetrachloride	20.000	21.601	-8.0	107	-0.01
30		Tetrahydrofuran	20.000	21.782	-8.9	113	0.00
31		1,1,1-Trichloroethane	20.000	20.202	-1.0	107	0.00
32	S	Dibromofluoromethane (S)	50.000	48.965	2.1	109	0.00
33		1,1-Dichloropropene	20.000	22.133	-10.7	109	-0.01
34		2-Butanone (MEK)	40.000	42.530	-6.3	106	0.00
35		Benzene	20.000	21.063	-5.3	108	-0.01
36		tert-Amyl methyl ether (TAM	5.000	5.177	-3.5	110	0.04
37		1,2-Dichloroethane (EDC)	20.000	20.314	-1.6	109	0.00
38		iso-Butyl Alcohol	500.000	517.932	-3.6	111	-0.01
39	S	1,4-Difluorobenzene (S)	50.000	49.148	1.7	110	0.00
40		Trichloroethene (TCE)	20.000	20.191	-1.0	111	-0.01
41		tert-Amyl ethyl ether (TAEE	5.000	5.754	-15.1	116	0.00
42		Dibromomethane	20.000	19.967	0.2	107	0.01
43	C	1,2-Dichloropropane	20.000	20.841	-4.2	110	-0.01
44		Bromodichloromethane	20.000	21.748	-8.7	110	0.00
45		Chlorobenzene-d5 (I)	50.000	50.000	0.0	110	0.00
46		2-Chloroethyl Vinyl Ether	20.000	19.387	3.1	108	0.00
47		c-1,3-Dichloropropene	20.000	19.401	3.0	108	-0.01
48	S	Toluene-d8 (S)	50.000	49.727	0.5	110	0.00
49	C	Toluene	20.000	20.024	-0.1	110	0.00
50		Tetrachloroethene (PCE)	20.000	21.392	-7.0	111	0.00
51		4-Methyl-2-Pentanone (MIBK)	40.000	41.079	-2.7	105	0.03

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042820.D
Acq On : 28 Apr 2020 10:35 pm
Operator : PS
Sample : 0D28059-ICV1
Misc : 1X 5mL 20-40PPB VOCRO (A19L196+A20C151+A19L249)
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 30 09:38:33 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52		t-1,3-Dichloropropene	20.000	19.596	2.0	108	-0.02
53		1,1,2-Trichloroethane	20.000	21.106	-5.5	111	-0.02
54		Dibromochloromethane	20.000	20.363	-1.8	113	0.00
55		1,3-Dichloropropane	20.000	21.675	-8.4	111	0.00
56		1,2-Dibromoethane (EDB)	20.000	22.396	-12.0	110	0.00
57		2-Hexanone	40.000	40.500	-1.3	105	-0.03
58	P	Chlorobenzene	20.000	20.650	-3.2	112	0.00
59	C	Ethylbenzene	20.000	21.775	-8.9	112	-0.01
60		1,1,1,2-Tetrachloroethane	20.000	21.609	-8.0	110	0.00
61		m,p-Xylenes (2)	40.000	42.080	-5.2	112	0.00
62		o-Xylene	20.000	20.873	-4.4	113	0.00
63		Styrene	20.000	21.254	-6.3	113	-0.02
64	P	Bromoform	20.000	19.954	0.2	116	0.00
65		Isopropylbenzene	20.000	21.225	-6.1	114	0.00
66	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	111	0.00
67	S	4-Bromofluorobenzene (S)	50.000	48.872	2.3	111	0.00
68		Bromobenzene	20.000	20.754	-3.8	113	0.00
69		n-Propylbenzene	20.000	21.936	-9.7	113	0.00
70	P	1,1,2,2-Tetrachloroethane	20.000	21.008	-5.0	116	-0.02
71		2-Chlorotoluene	20.000	22.013	-10.1	115	-0.01
72		1,3,5-Trimethylbenzene	20.000	23.221	-16.1	115	0.00
73		1,2,3-Trichloropropane	20.000	21.436	-7.2	114	0.00
74		t-1,4-Dichloro-2-butene	20.000	16.088	19.6	94	0.00
75		4-Chlorotoluene	20.000	22.659	-13.3	113	0.00
76		tert-Butylbenzene	20.000	23.439	-17.2	117	0.00
77		1,2,4-Trimethylbenzene	20.000	22.968	-14.8	114	0.00
78		sec-Butylbenzene	20.000	23.116	-15.6	117	0.00
79		4-Isopropyltoluene	20.000	22.000	-10.0	118	0.00
80		1,3-Dichlorobenzene	20.000	22.912	-14.6	118	0.00
81		1,4-Dichlorobenzene	20.000	20.904	-4.5	118	0.00
82		n-Butylbenzene	20.000	23.263	-16.3	117	0.00
83		1,2-Dichlorobenzene	20.000	23.492	-17.5	119	0.00
84		1,2-Dibromo-3-Chloropropane	20.000	20.694	-3.5	115	0.00
85		Hexachlorobutadiene	20.000	23.931	-19.7	122	0.00
86		1,2,4-Trichlorobenzene	20.000	23.716	-18.6	122	-0.02
87		Naphthalene	20.000	23.159	-15.8	123	-0.01
88		1,2,3-Trichlorobenzene	20.000	25.846	-29.2#	124	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

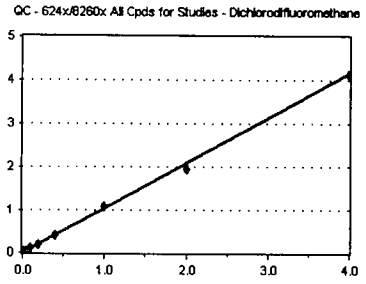
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Dichlorodifluoromethane

Curve Fit: **AVERAGE RF**

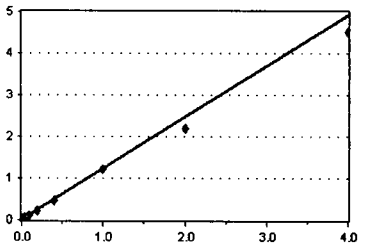


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	304	1.339	1.72
0D28059-CAL2	0.2	527	1.047	1.72
0D28059-CAL3	0.4	1133	1.088	1.72
0D28059-CAL4	1	2775	0.996	1.72
0D28059-CAL5	2	5002	0.982	1.72
0D28059-CAL6	5	13847	0.970	1.72
0D28059-CAL7	10	26239	0.941	1.72
0D28059-CAL8	20	57105	0.983	1.72
0D28059-CAL9	50	168157	1.078	1.72
0D28059-CALA	100	315312	0.975	1.72
0D28059-CALB	200	721756	1.032	1.72

AVE RF **1.039** RF RSD **10.57** AVE RT **1.72**

Chloromethane

Curve Fit: **AVERAGE RF**

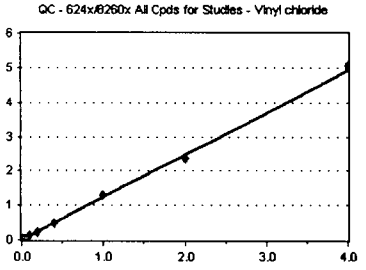


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~466~~	~~2.052~~	~~1.98~~
0D28059-CAL2	0.2	787	1.563	1.98
0D28059-CAL3	0.4	1524	1.464	1.98
0D28059-CAL4	1	3403	1.222	1.98
0D28059-CAL5	2	6051	1.188	1.98
0D28059-CAL6	5	16598	1.162	1.98
0D28059-CAL7	10	31411	1.126	1.98
0D28059-CAL8	20	68020	1.171	1.98
0D28059-CAL9	50	188663	1.210	1.98
0D28059-CALA	100	352785	1.091	1.98
0D28059-CALB	200	787402	1.126	1.98

AVE RF **1.232** RF RSD **12.60** AVE RT **1.98**

Vinyl chloride

Curve Fit: **AVERAGE RF**

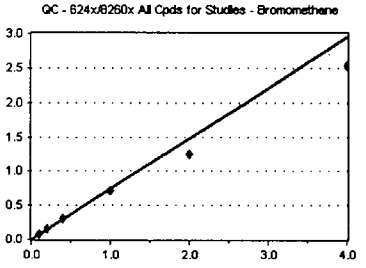


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	315	1.387	2.10
0D28059-CAL2	0.2	651	1.293	2.09
0D28059-CAL3	0.4	1260	1.211	2.10
0D28059-CAL4	1	3373	1.211	2.10
0D28059-CAL5	2	5945	1.168	2.10
0D28059-CAL6	5	16642	1.165	2.10
0D28059-CAL7	10	32203	1.155	2.10
0D28059-CAL8	20	69809	1.202	2.10
0D28059-CAL9	50	203097	1.302	2.10
0D28059-CALA	100	384111	1.188	2.10
0D28059-CALB	200	883409	1.263	2.09

AVE RF **1.231** RF RSD **5.86** AVE RT **2.10**

Bromomethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~385~~	~~1.696~~	~~2.53~~
~~0D28059-CAL2~~	~~0.2~~	~~645~~	~~1.281~~	~~2.53~~
~~0D28059-CAL3~~	~~0.4~~	~~1137~~	~~1.092~~	~~2.53~~
~~0D28059-CAL4~~	~~1~~	~~2726~~	~~0.979~~	~~2.53~~
~~0D28059-CAL5~~	~~2~~	~~4637~~	~~0.911~~	~~2.53~~
0D28059-CAL6	5	12504	0.876	2.53
0D28059-CAL7	10	22785	0.817	2.53
0D28059-CAL8	20	44234	0.762	2.53
0D28059-CAL9	50	110130	0.706	2.53
0D28059-CALA	100	201722	0.624	2.53
0D28059-CALB	200	441017	0.630	2.53

AVE RF **0.736** RF RSD **13.77** AVE RT **2.53**

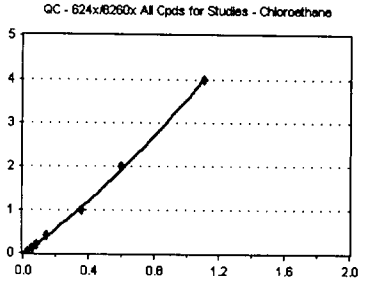
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Chloroethane

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

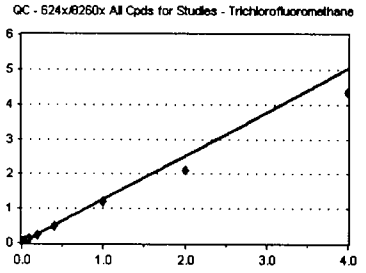


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~290~~	~~1.277~~	~~2.72~~
~~0D28059-CAL2~~	~~0.2~~	~~472~~	~~0.938~~	~~2.72~~
~~0D28059-CAL3~~	~~0.4~~	~~872~~	~~0.838~~	~~2.71~~
~~0D28059-CAL4~~	~~1~~	~~1901~~	~~0.683~~	~~2.72~~
0D28059-CAL5	2	3098	0.608	2.72
0D28059-CAL6	5	8320	0.583	2.71
0D28059-CAL7	10	11336	0.407	2.71
0D28059-CAL8	20	21007	0.362	2.70
0D28059-CAL9	50	56347	0.361	2.71
0D28059-CALA	100	97391	0.301	2.70
0D28059-CALB	200	193450	0.277	2.70

AVE RF **0.414** RF RSD **31.70** AVE RT **2.71**

Trichlorofluoromethane

Curve Fit: **AVERAGE RF**

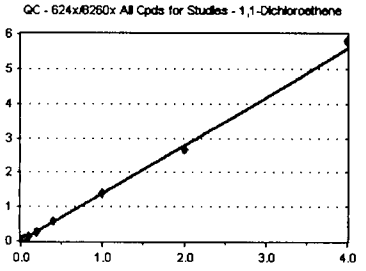


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	352	1.550	2.92
0D28059-CAL2	0.2	715	1.420	2.91
0D28059-CAL3	0.4	1409	1.354	2.91
0D28059-CAL4	1	3593	1.290	2.91
0D28059-CAL5	2	6259	1.229	2.91
0D28059-CAL6	5	17523	1.227	2.91
0D28059-CAL7	10	32312	1.159	2.91
0D28059-CAL8	20	70026	1.206	2.90
0D28059-CAL9	50	188165	1.207	2.91
0D28059-CALA	100	341980	1.058	2.90
0D28059-CALB	200	760605	1.087	2.89

AVE RF **1.253** RF RSD **11.51** AVE RT **2.91**

1,1-Dichloroethene

Curve Fit: **AVERAGE RF**

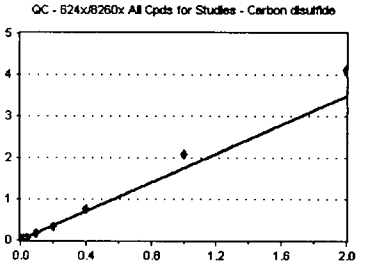


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	356	1.568	3.56
0D28059-CAL2	0.2	711	1.412	3.56
0D28059-CAL3	0.4	1450	1.393	3.57
0D28059-CAL4	1	3806	1.367	3.56
0D28059-CAL5	2	6691	1.314	3.57
0D28059-CAL6	5	18814	1.317	3.56
0D28059-CAL7	10	37076	1.330	3.56
0D28059-CAL8	20	82498	1.421	3.56
0D28059-CAL9	50	219956	1.410	3.56
0D28059-CALA	100	431318	1.334	3.56
0D28059-CALB	200	1013280	1.449	3.56

AVE RF **1.392** RF RSD **5.34** AVE RT **3.56**

Carbon disulfide

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~488~~	~~2.149~~	~~3.57~~
0D28059-CAL2	0.2	850	1.688	3.56
0D28059-CAL3	0.4	1760	1.691	3.57
0D28059-CAL4	1	4285	1.539	3.57
0D28059-CAL5	2	7686	1.509	3.57
0D28059-CAL6	5	22924	1.605	3.56
0D28059-CAL7	10	45558	1.634	3.56
0D28059-CAL8	20	107913	1.858	3.56
0D28059-CAL9	50	325731	2.089	3.56
0D28059-CALA	100	664668	2.056	3.56
~~0D28059-CALB~~	~~200~~	~~1647933~~	~~2.356~~	~~3.56~~

AVE RF **1.741** RF RSD **12.24** AVE RT **3.57**

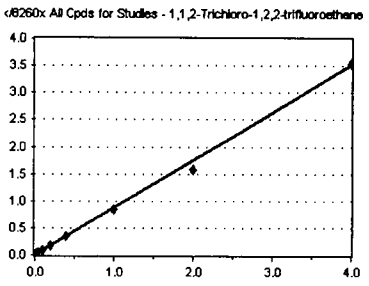
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

1,1,2-Trichloro-1,2,2-trifluoroetha

Curve Fit: **AVERAGE RF**

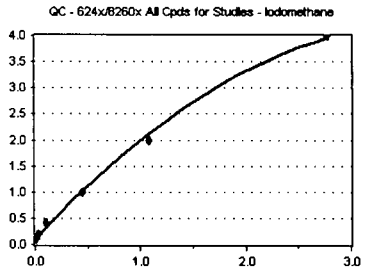


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	229	1.009	3.66
0D28059-CAL2	0.2	435	0.864	3.65
0D28059-CAL3	0.4	969	0.931	3.64
0D28059-CAL4	1	2465	0.885	3.64
0D28059-CAL5	2	4428	0.870	3.64
0D28059-CAL6	5	12599	0.882	3.64
0D28059-CAL7	10	23367	0.838	3.64
0D28059-CAL8	20	50999	0.878	3.64
0D28059-CAL9	50	132348	0.849	3.64
0D28059-CALA	100	253439	0.784	3.64
0D28059-CALB	200	619841	0.886	3.63

AVE RF **0.880** RF RSD **6.38** AVE RT **3.64**

Iodomethane

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

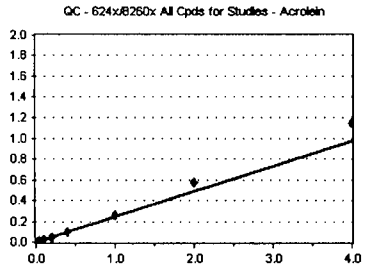


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL4~~	~~1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL5~~	~~2~~	~~271~~	~~5.322~~	~~3.74~~
0D28059-CAL6	5	1498	0.105	3.73
0D28059-CAL7	10	4602	0.165	3.73
0D28059-CAL8	20	15447	0.266	3.73
0D28059-CAL9	50	70400	0.451	3.73
0D28059-CALA	100	174901	0.541	3.72
0D28059-CALB	200	484444	0.693	3.72

AVE RF **0.370** RF RSD **61.96** AVE RT **3.73**

Acrolein

Curve Fit: **AVERAGE RF**

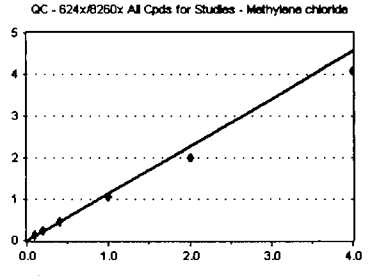


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL3~~	~~0.4~~	~~172~~	~~0.165~~	~~4.01~~
0D28059-CAL4	1	625	0.224	4.01
0D28059-CAL5	2	1033	0.203	4.01
0D28059-CAL6	5	3041	0.213	4.01
0D28059-CAL7	10	6310	0.226	4.01
0D28059-CAL8	20	14426	0.248	4.01
0D28059-CAL9	50	40730	0.261	4.01
0D28059-CALA	100	92724	0.287	4.01
0D28059-CALB	200	200485	0.287	4.01

AVE RF **0.244** RF RSD **13.26** AVE RT **4.01**

Methylene chloride

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~3714~~	~~16.357~~	~~4.30~~
~~0D28059-CAL2~~	~~0.2~~	~~5057~~	~~10.045~~	~~4.30~~
~~0D28059-CAL3~~	~~0.4~~	~~4387~~	~~4.215~~	~~4.30~~
~~0D28059-CAL4~~	~~1~~	~~8586~~	~~3.083~~	~~4.30~~
~~0D28059-CAL5~~	~~2~~	~~10556~~	~~2.073~~	~~4.30~~
0D28059-CAL6	5	19953	1.397	4.30
0D28059-CAL7	10	33896	1.216	4.30
0D28059-CAL8	20	66422	1.144	4.30
0D28059-CAL9	50	166231	1.066	4.30
0D28059-CALA	100	321685	0.995	4.30
0D28059-CALB	200	711544	1.017	4.30

AVE RF **1.139** RF RSD **13.22** AVE RT **4.30**

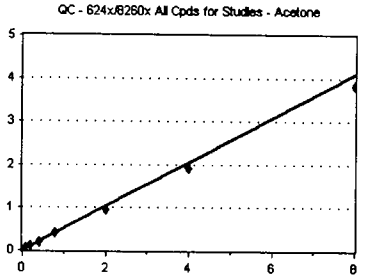
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Acetone

Curve Fit: **AVERAGE RF**

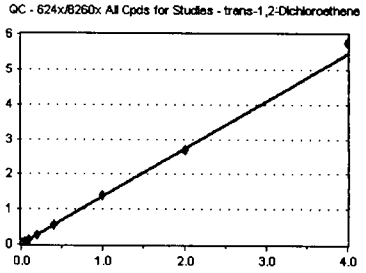


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.2~~	~~1500~~	~~3.303~~	~~4.39~~
~~0D28059-CAL2~~	~~0.4~~	~~1950~~	~~1.937~~	~~4.39~~
~~0D28059-CAL3~~	~~0.8~~	~~2217~~	~~1.065~~	~~4.39~~
~~0D28059-CAL4~~	~~2~~	~~3885~~	~~0.698~~	~~4.39~~
0D28059-CAL5	4	6410	0.629	4.38
0D28059-CAL6	10	14762	0.517	4.38
0D28059-CAL7	20	28163	0.505	4.38
0D28059-CAL8	40	59628	0.513	4.38
0D28059-CAL9	100	147679	0.474	4.37
0D28059-CALA	200	308105	0.476	4.37
0D28059-CALB	400	670089	0.479	4.38

AVE RF **0.513** RF RSD **10.58** AVE RT **4.38**

trans-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**

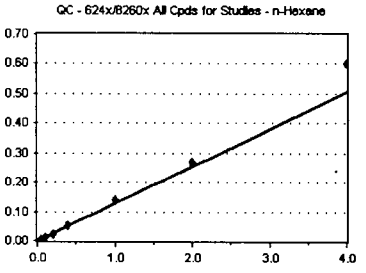


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	387	1.704	4.49
0D28059-CAL2	0.2	652	1.295	4.49
0D28059-CAL3	0.4	1351	1.298	4.49
0D28059-CAL4	1	3488	1.253	4.49
0D28059-CAL5	2	6491	1.275	4.48
0D28059-CAL6	5	18330	1.284	4.48
0D28059-CAL7	10	36259	1.300	4.48
0D28059-CAL8	20	80067	1.379	4.48
0D28059-CAL9	50	216769	1.390	4.48
0D28059-CALA	100	433938	1.342	4.48
0D28059-CALB	200	1007829	1.441	4.48

AVE RF **1.360** RF RSD **9.39** AVE RT **4.49**

n-Hexane

Curve Fit: **AVERAGE RF**

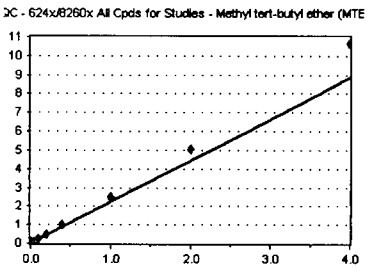


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~27~~	~~5.363~~	~~4.59~~
~~0D28059-CAL3~~	~~0.4~~	~~75~~	~~7.205~~	~~4.58~~
~~0D28059-CAL4~~	~~1~~	~~247~~	~~8.870~~	~~4.58~~
0D28059-CAL5	2	496	9.741	4.59
0D28059-CAL6	5	1711	0.120	4.59
0D28059-CAL7	10	3233	0.116	4.58
0D28059-CAL8	20	7464	0.129	4.58
0D28059-CAL9	50	21842	0.140	4.58
0D28059-CALA	100	43493	0.135	4.58
0D28059-CALB	200	105147	0.150	4.58

AVE RF **0.127** RF RSD **13.76** AVE RT **4.58**

Methyl tert-butyl ether (MTBE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~537~~	~~2.365~~	~~4.64~~
0D28059-CAL2	0.2	917	1.822	4.64
0D28059-CAL3	0.4	2007	1.928	4.65
0D28059-CAL4	1	5292	1.900	4.64
0D28059-CAL5	2	9858	1.936	4.64
0D28059-CAL6	5	30062	2.105	4.64
0D28059-CAL7	10	62513	2.242	4.64
0D28059-CAL8	20	143781	2.476	4.64
0D28059-CAL9	50	389222	2.496	4.64
0D28059-CALA	100	812679	2.513	4.64
0D28059-CALB	200	1858846	2.657	4.64

AVE RF **2.208** RF RSD **13.99** AVE RT **4.64**

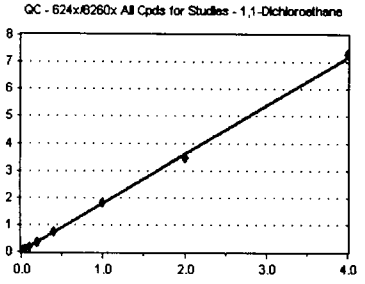
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

1,1-Dichloroethane

Curve Fit: **AVERAGE RF**

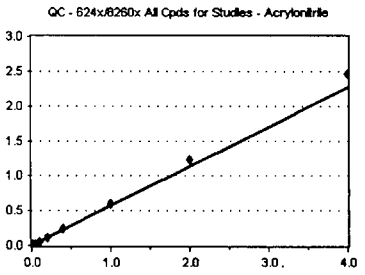


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	440	1.938	5.20
0D28059-CAL2	0.2	879	1.746	5.19
0D28059-CAL3	0.4	1856	1.783	5.19
0D28059-CAL4	1	5006	1.798	5.19
0D28059-CAL5	2	8898	1.748	5.19
0D28059-CAL6	5	24878	1.742	5.19
0D28059-CAL7	10	49091	1.761	5.19
0D28059-CAL8	20	107573	1.853	5.19
0D28059-CAL9	50	283431	1.818	5.19
0D28059-CALA	100	559811	1.731	5.19
0D28059-CALB	200	1278947	1.828	5.19

AVE RF **1.795** RF RSD **3.44** AVE RT **5.19**

Acrylonitrile

Curve Fit: **AVERAGE RF**

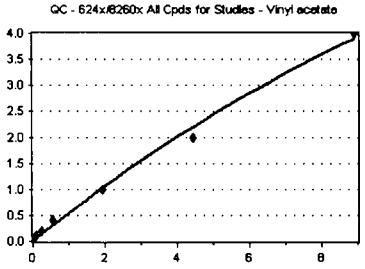


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
0D28059-CAL4	1	1352	0.485	5.28
0D28059-CAL5	2	2442	0.480	5.27
0D28059-CAL6	5	7632	0.534	5.26
0D28059-CAL7	10	16003	0.574	5.26
0D28059-CAL8	20	36134	0.622	5.26
0D28059-CAL9	50	93340	0.599	5.26
0D28059-CALA	100	199568	0.617	5.26
0D28059-CALB	200	430086	0.615	5.26

AVE RF **0.566** RF RSD **10.40** AVE RT **5.26**

Vinyl acetate

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

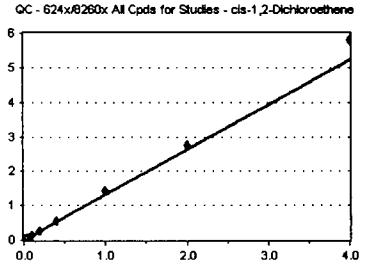


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
0D28059-CAL4	1	2053	0.737	5.52
0D28059-CAL5	2	4151	0.815	5.51
0D28059-CAL6	5	14594	1.022	5.51
0D28059-CAL7	10	33186	1.190	5.51
0D28059-CAL8	20	83858	1.444	5.50
0D28059-CAL9	50	304318	1.951	5.50
0D28059-CALA	100	716527	2.216	5.50
0D28059-CALB	200	1558199	2.228	5.50

AVE RF **1.450** RF RSD **42.06** AVE RT **5.51**

cis-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	306	1.348	5.80
0D28059-CAL2	0.2	606	1.204	5.81
0D28059-CAL3	0.4	1211	1.163	5.80
0D28059-CAL4	1	3375	1.212	5.80
0D28059-CAL5	2	6218	1.221	5.80
0D28059-CAL6	5	18232	1.277	5.80
0D28059-CAL7	10	36783	1.319	5.80
0D28059-CAL8	20	81309	1.400	5.80
0D28059-CAL9	50	221030	1.417	5.79
0D28059-CALA	100	444480	1.375	5.80
0D28059-CALB	200	1012684	1.448	5.79

AVE RF **1.308** RF RSD **7.48** AVE RT **5.80**

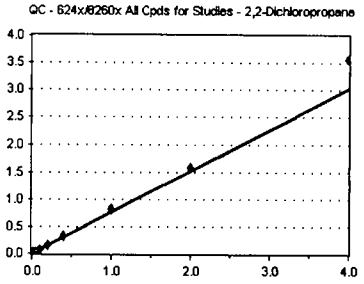
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

2,2-Dichloropropane

Curve Fit: **AVERAGE RF**

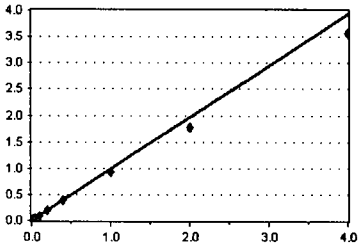


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	151	0.665	5.92
0D28059-CAL2	0.2	410	0.814	5.91
0D28059-CAL3	0.4	753	0.723	5.90
0D28059-CAL4	1	1967	0.706	5.90
0D28059-CAL5	2	3460	0.680	5.91
0D28059-CAL6	5	10290	0.721	5.90
0D28059-CAL7	10	19999	0.717	5.91
0D28059-CAL8	20	46097	0.794	5.90
0D28059-CAL9	50	127143	0.815	5.91
0D28059-CALA	100	256825	0.794	5.90
0D28059-CALB	200	622935	0.891	5.90

AVE RF **0.756** RF RSD **9.19** AVE RT **5.91**

Bromochloromethane

Curve Fit: **AVERAGE RF**

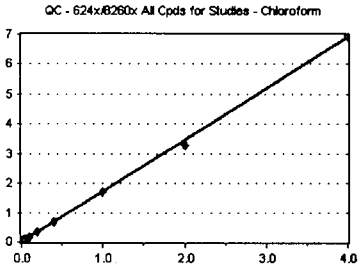


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	271	1.194	6.02
0D28059-CAL2	0.2	526	1.045	6.01
0D28059-CAL3	0.4	1078	1.036	6.01
0D28059-CAL4	1	2726	0.979	6.01
0D28059-CAL5	2	4897	0.962	6.01
0D28059-CAL6	5	13719	0.961	6.01
0D28059-CAL7	10	26657	0.956	6.01
0D28059-CAL8	20	56728	0.977	6.01
0D28059-CAL9	50	145300	0.932	6.01
0D28059-CALA	100	287820	0.890	6.01
0D28059-CALB	200	622772	0.890	6.01

AVE RF **0.984** RF RSD **8.65** AVE RT **6.01**

Chloroform

Curve Fit: **AVERAGE RF**

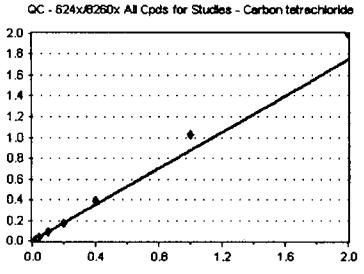


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	470	2.070	6.11
0D28059-CAL2	0.2	849	1.686	6.11
0D28059-CAL3	0.4	1724	1.656	6.11
0D28059-CAL4	1	4654	1.671	6.11
0D28059-CAL5	2	8523	1.674	6.11
0D28059-CAL6	5	24289	1.701	6.11
0D28059-CAL7	10	47467	1.702	6.11
0D28059-CAL8	20	101369	1.746	6.11
0D28059-CAL9	50	267420	1.715	6.11
0D28059-CALA	100	532744	1.648	6.11
0D28059-CALB	200	1216725	1.739	6.11

AVE RF **1.728** RF RSD **6.81** AVE RT **6.11**

Carbon tetrachloride

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~41~~	~~0.181~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~279~~	~~0.554~~	~~6.23~~
~~0D28059-CAL3~~	~~0.4~~	~~619~~	~~0.595~~	~~6.24~~
0D28059-CAL4	1	1929	0.693	6.23
0D28059-CAL5	2	3781	0.743	6.23
0D28059-CAL6	5	11732	0.821	6.23
0D28059-CAL7	10	24278	0.871	6.23
0D28059-CAL8	20	56466	0.972	6.23
0D28059-CAL9	50	159439	1.022	6.23
0D28059-CALA	100	323005	0.999	6.23
~~0D28059-CALB~~	~~200~~	~~809357~~	~~1.157~~	~~6.23~~

AVE RF **0.874** RF RSD **14.78** AVE RT **6.23**

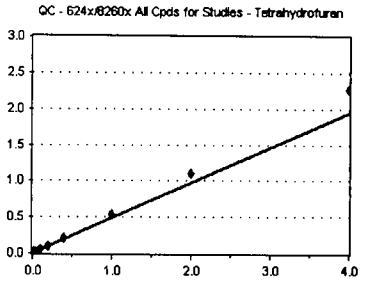
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Tetrahydrofuran

Curve Fit: **AVERAGE RF**

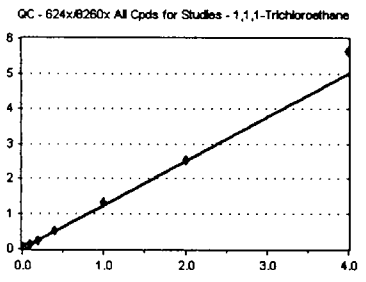


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~176~~	~~0.350~~	~~6.30~~
~~0D28059-CAL3~~	~~0.4~~	~~390~~	~~0.375~~	~~6.30~~
0D28059-CAL4	1	1160	0.417	6.29
0D28059-CAL5	2	2041	0.401	6.29
0D28059-CAL6	5	6128	0.429	6.28
0D28059-CAL7	10	13399	0.481	6.28
0D28059-CAL8	20	29915	0.515	6.28
0D28059-CAL9	50	82643	0.530	6.28
0D28059-CALA	100	179471	0.555	6.28
0D28059-CALB	200	398049	0.569	6.28

AVE RF **0.487** RF RSD **13.39** AVE RT **6.28**

1,1,1-Trichloroethane

Curve Fit: **AVERAGE RF**

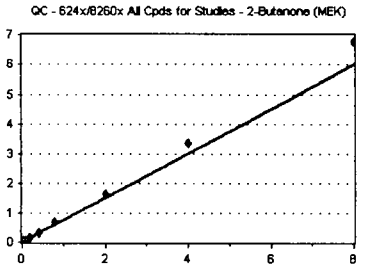


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	352	1.550	6.32
0D28059-CAL2	0.2	542	1.077	6.31
0D28059-CAL3	0.4	1239	1.190	6.31
0D28059-CAL4	1	3173	1.139	6.31
0D28059-CAL5	2	5630	1.106	6.31
0D28059-CAL6	5	17241	1.207	6.31
0D28059-CAL7	10	33372	1.197	6.31
0D28059-CAL8	20	75474	1.300	6.31
0D28059-CAL9	50	205435	1.317	6.31
0D28059-CALA	100	407916	1.262	6.31
0D28059-CALB	200	987730	1.412	6.31

AVE RF **1.251** RF RSD **11.16** AVE RT **6.31**

2-Butanone (MEK)

Curve Fit: **AVERAGE RF**

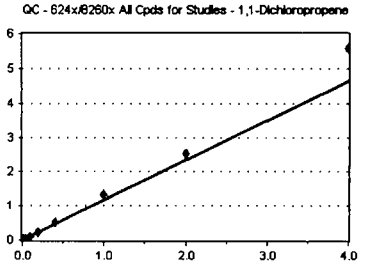


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL3~~	~~0.8~~	~~1046~~	~~0.502~~	~~6.49~~
0D28059-CAL4	2	3339	0.600	6.47
0D28059-CAL5	4	6424	0.631	6.46
0D28059-CAL6	10	19945	0.698	6.45
0D28059-CAL7	20	41809	0.750	6.45
0D28059-CAL8	40	96125	0.828	6.45
0D28059-CAL9	100	254544	0.816	6.45
0D28059-CALA	200	545218	0.843	6.45
0D28059-CALB	400	1181311	0.844	6.45

AVE RF **0.751** RF RSD **13.07** AVE RT **6.45**

1,1-Dichloropropene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	257	1.132	6.47
0D28059-CAL2	0.2	553	1.098	6.45
0D28059-CAL3	0.4	1041	1.000	6.46
0D28059-CAL4	1	2829	1.016	6.45
0D28059-CAL5	2	4996	0.981	6.46
0D28059-CAL6	5	16001	1.120	6.45
0D28059-CAL7	10	32463	1.164	6.45
0D28059-CAL8	20	75641	1.303	6.45
0D28059-CAL9	50	206166	1.322	6.45
0D28059-CALA	100	407326	1.260	6.45
0D28059-CALB	200	975429	1.394	6.45

AVE RF **1.163** RF RSD **12.04** AVE RT **6.46**

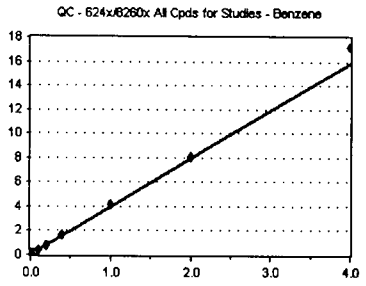
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Benzene

Curve Fit: **AVERAGE RF**

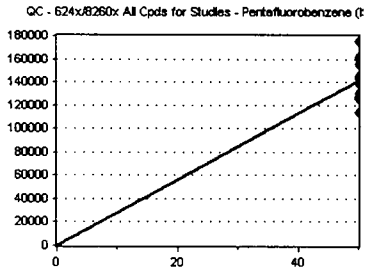


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	1003	4.417	6.73
0D28059-CAL2	0.2	1916	3.806	6.73
0D28059-CAL3	0.4	3614	3.472	6.73
0D28059-CAL4	1	10086	3.622	6.73
0D28059-CAL5	2	18474	3.628	6.73
0D28059-CAL6	5	55897	3.914	6.73
0D28059-CAL7	10	111329	3.992	6.73
0D28059-CAL8	20	246984	4.253	6.73
0D28059-CAL9	50	657475	4.216	6.73
0D28059-CALA	100	1302053	4.027	6.72
0D28059-CALB	200	3008884	4.301	6.72

AVE RF **3.968** RF RSD **7.85** AVE RT **6.73**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

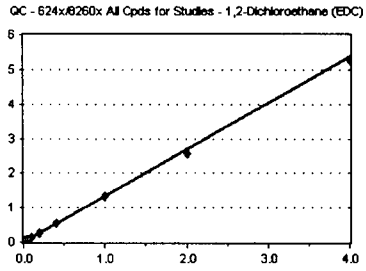


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	50	113531	2270.620	6.84
0D28059-CAL2	50	125854	2517.080	6.84
0D28059-CAL3	50	130111	2602.220	6.84
0D28059-CAL4	50	139239	2784.780	6.84
0D28059-CAL5	50	127296	2545.920	6.84
0D28059-CAL6	50	142812	2856.240	6.84
0D28059-CAL7	50	139423	2788.460	6.84
0D28059-CAL8	50	145168	2903.360	6.84
0D28059-CAL9	50	155943	3118.860	6.84
0D28059-CALA	50	161668	3233.360	6.83
0D28059-CALB	50	174876	3497.520	6.84

AVE RF **2828.947** RF RSD **12.47** AVE RT **6.84**

1,2-Dichloroethane (EDC)

Curve Fit: **AVERAGE RF**

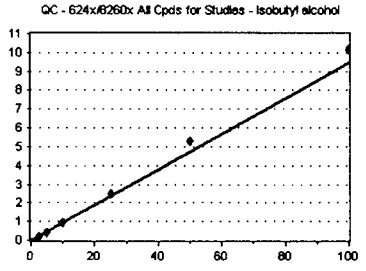


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	343	1.511	6.96
0D28059-CAL2	0.2	715	1.420	6.97
0D28059-CAL3	0.4	1349	1.296	6.96
0D28059-CAL4	1	3642	1.308	6.96
0D28059-CAL5	2	6699	1.316	6.96
0D28059-CAL6	5	19078	1.336	6.96
0D28059-CAL7	10	37364	1.340	6.96
0D28059-CAL8	20	80002	1.378	6.96
0D28059-CAL9	50	207503	1.331	6.95
0D28059-CALA	100	415815	1.286	6.95
0D28059-CALB	200	923686	1.320	6.95

AVE RF **1.349** RF RSD **4.86** AVE RT **6.96**

Isobutyl alcohol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~2.5~~	~~384~~	~~6.765~~	~~7.03~~
~~0D28059-CAL2~~	~~5~~	~~824~~	~~6.547~~	~~7.04~~
~~0D28059-CAL3~~	~~10~~	~~1632~~	~~6.272~~	~~7.03~~
~~0D28059-CAL4~~	~~25~~	~~4875~~	~~7.002~~	~~7.02~~
~~0D28059-CAL5~~	~~50~~	~~9183~~	~~7.214~~	~~7.02~~
0D28059-CAL6	125	27429	7.683	7.01
0D28059-CAL7	250	59903	8.593	7.02
0D28059-CAL8	500	141129	9.722	7.01
0D28059-CAL9	1250	390505	0.100	7.01
0D28059-CALA	2500	851953	0.105	7.01
0D28059-CALB	5000	1783101	0.102	7.02

AVE RF **9.458** RF RSD **11.58** AVE RT **7.02**

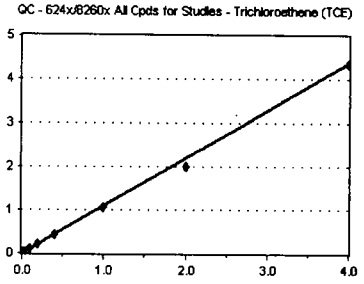
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Trichloroethene (TCE)

Curve Fit: **AVERAGE RF**

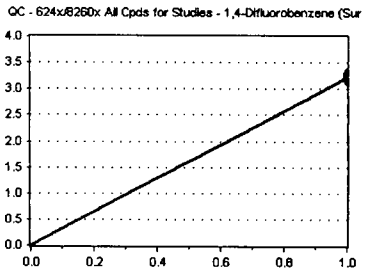


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	318	1.400	7.39
0D28059-CAL2	0.2	572	1.136	7.39
0D28059-CAL3	0.4	1209	1.162	7.39
0D28059-CAL4	1	2892	1.039	7.38
0D28059-CAL5	2	5135	1.008	7.38
0D28059-CAL6	5	15099	1.057	7.38
0D28059-CAL7	10	28530	1.023	7.38
0D28059-CAL8	20	63379	1.091	7.38
0D28059-CAL9	50	165009	1.058	7.38
0D28059-CALA	100	321823	0.995	7.38
0D28059-CALB	200	762043	1.089	7.38

AVE RF **1.096** RF RSD **10.32** AVE RT **7.38**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

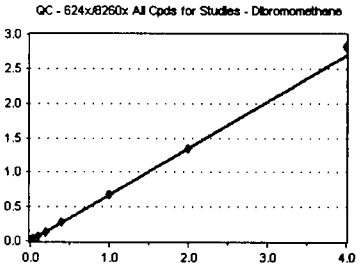


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	50	368655	3.247	7.42
0D28059-CAL2	50	415901	3.305	7.42
0D28059-CAL3	50	427126	3.283	7.42
0D28059-CAL4	50	455553	3.272	7.42
0D28059-CAL5	50	410702	3.226	7.42
0D28059-CAL6	50	454891	3.185	7.42
0D28059-CAL7	50	439924	3.155	7.42
0D28059-CAL8	50	457229	3.150	7.42
0D28059-CAL9	50	494278	3.170	7.42
0D28059-CALA	50	510262	3.156	7.42
0D28059-CALB	50	566135	3.237	7.42

AVE RF **3.217** RF RSD **1.75** AVE RT **7.42**

Dibromomethane

Curve Fit: **AVERAGE RF**

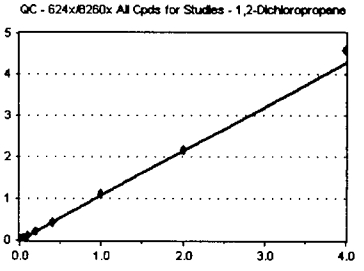


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	185	0.815	7.84
0D28059-CAL2	0.2	297	0.590	7.86
0D28059-CAL3	0.4	686	0.659	7.86
0D28059-CAL4	1	1817	0.652	7.86
0D28059-CAL5	2	3205	0.629	7.86
0D28059-CAL6	5	9153	0.641	7.86
0D28059-CAL7	10	18454	0.662	7.86
0D28059-CAL8	20	39871	0.687	7.86
0D28059-CAL9	50	106537	0.683	7.86
0D28059-CALA	100	217366	0.672	7.85
0D28059-CALB	200	492139	0.704	7.85

AVE RF **0.672** RF RSD **8.40** AVE RT **7.85**

1,2-Dichloropropane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	244	1.075	7.98
0D28059-CAL2	0.2	510	1.013	7.97
0D28059-CAL3	0.4	1082	1.039	7.97
0D28059-CAL4	1	2853	1.024	7.97
0D28059-CAL5	2	5295	1.040	7.97
0D28059-CAL6	5	14723	1.031	7.97
0D28059-CAL7	10	29839	1.070	7.97
0D28059-CAL8	20	64553	1.112	7.97
0D28059-CAL9	50	174417	1.118	7.97
0D28059-CALA	100	350668	1.085	7.97
0D28059-CALB	200	803265	1.148	7.97

AVE RF **1.068** RF RSD **4.09** AVE RT **7.97**

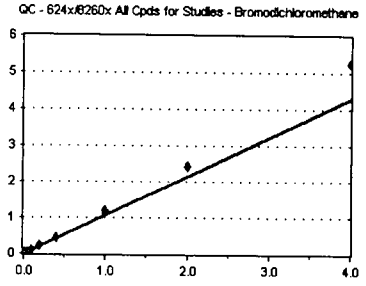
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Bromodichloromethane

Curve Fit: **AVERAGE RF**

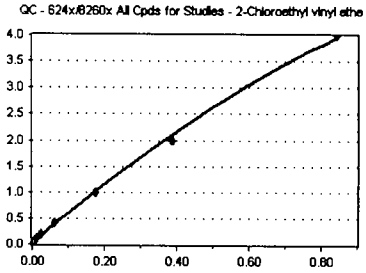


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	206	0.907	8.05
0D28059-CAL2	0.2	496	0.985	8.05
0D28059-CAL3	0.4	1003	0.964	8.05
0D28059-CAL4	1	2789	1.002	8.06
0D28059-CAL5	2	4745	0.932	8.05
0D28059-CAL6	5	14828	1.038	8.05
0D28059-CAL7	10	29724	1.066	8.05
0D28059-CAL8	20	68001	1.171	8.05
0D28059-CAL9	50	188929	1.212	8.05
0D28059-CALA	100	393467	1.217	8.04
0D28059-CALB	200	918596	1.313	8.04

AVE RF **1.073** RF RSD **12.52** AVE RT **8.05**

2-Chloroethyl vinyl ether

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

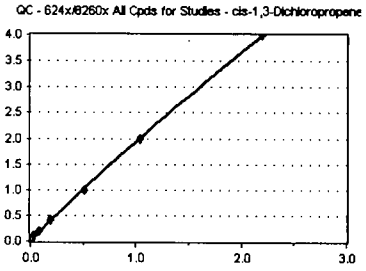


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL3~~	~~0.4~~	~~119~~	~~4.113~~	~~8.75~~
0D28059-CAL4	1	712	9.250	8.72
0D28059-CAL5	2	1396	9.991	8.72
0D28059-CAL6	5	4421	0.112	8.72
0D28059-CAL7	10	9597	0.125	8.72
0D28059-CAL8	20	25300	0.157	8.72
0D28059-CAL9	50	75399	0.174	8.71
0D28059-CALA	100	176791	0.193	8.71
0D28059-CALB	200	431655	0.211	8.71

AVE RF **0.146** RF RSD **30.64** AVE RT **8.71**

cis-1,3-Dichloropropene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

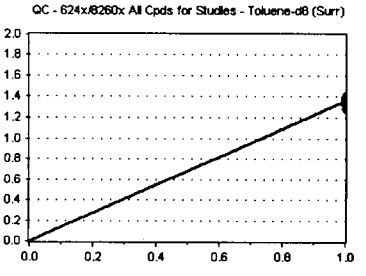


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~199~~	~~0.321~~	~~8.78~~
~~0D28059-CAL2~~	~~0.2~~	~~476~~	~~0.338~~	~~8.78~~
~~0D28059-CAL3~~	~~0.4~~	~~977~~	~~0.338~~	~~8.78~~
0D28059-CAL4	1	2416	0.314	8.78
0D28059-CAL5	2	4719	0.338	8.78
0D28059-CAL6	5	14490	0.366	8.77
0D28059-CAL7	10	31828	0.414	8.77
0D28059-CAL8	20	76593	0.476	8.77
0D28059-CAL9	50	224852	0.518	8.77
0D28059-CALA	100	477036	0.521	8.77
0D28059-CALB	200	1126694	0.550	8.77

AVE RF **0.437** RF RSD **20.91** AVE RT **8.77**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	50	437447	1.411	8.97
0D28059-CAL2	50	494085	1.407	8.97
0D28059-CAL3	50	501453	1.386	8.97
0D28059-CAL4	50	534043	1.388	8.97
0D28059-CAL5	50	486856	1.394	8.97
0D28059-CAL6	50	541718	1.370	8.97
0D28059-CAL7	50	522720	1.361	8.97
0D28059-CAL8	50	543124	1.350	8.97
0D28059-CAL9	50	579127	1.335	8.97
0D28059-CALA	50	605813	1.323	8.97
0D28059-CALB	50	661083	1.292	8.97

AVE RF **1.365** RF RSD **2.73** AVE RT **8.97**

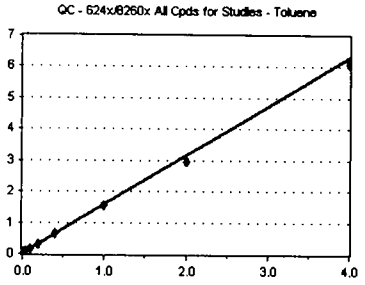
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Toluene

Curve Fit: **AVERAGE RF**

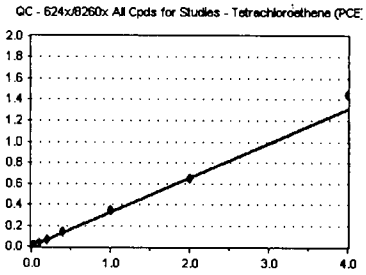


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	1265	2.040	9.03
0D28059-CAL2	0.2	2257	1.607	9.02
0D28059-CAL3	0.4	4633	1.601	9.02
0D28059-CAL4	1	11597	1.507	9.02
0D28059-CAL5	2	20457	1.464	9.02
0D28059-CAL6	5	60036	1.518	9.02
0D28059-CAL7	10	116159	1.513	9.02
0D28059-CAL8	20	254746	1.583	9.02
0D28059-CAL9	50	677362	1.561	9.02
0D28059-CALA	100	1349153	1.473	9.02
0D28059-CALB	200	3114208	1.521	9.02

AVE RF **1.581** RF RSD **10.10** AVE RT **9.02**

Tetrachloroethene (PCE)

Curve Fit: **AVERAGE RF**

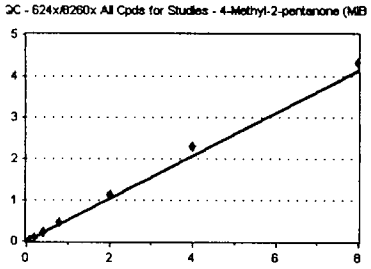


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	188	0.303	9.42
0D28059-CAL2	0.2	432	0.308	9.41
0D28059-CAL3	0.4	1014	0.350	9.42
0D28059-CAL4	1	2420	0.314	9.41
0D28059-CAL5	2	4099	0.293	9.41
0D28059-CAL6	5	13173	0.333	9.41
0D28059-CAL7	10	24546	0.320	9.41
0D28059-CAL8	20	55366	0.344	9.41
0D28059-CAL9	50	148064	0.341	9.41
0D28059-CALA	100	298184	0.326	9.41
0D28059-CALB	200	743359	0.363	9.41

AVE RF **0.327** RF RSD **6.62** AVE RT **9.41**

4-Methyl-2-pentanone (MiBK)

Curve Fit: **AVERAGE RF**

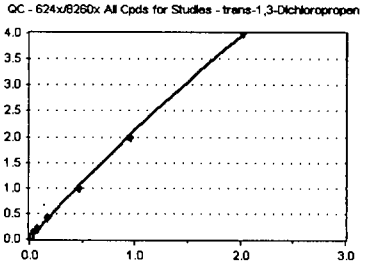


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.2~~	~~425~~	~~0.343~~	~~9.44~~
~~0D28059-CAL2~~	~~0.4~~	~~1009~~	~~0.359~~	~~9.43~~
~~0D28059-CAL3~~	~~0.8~~	~~2070~~	~~0.358~~	~~9.43~~
~~0D28059-CAL4~~	~~2~~	~~5821~~	~~0.378~~	~~9.42~~
0D28059-CAL5	4	11635	0.416	9.42
0D28059-CAL6	10	35418	0.448	9.42
0D28059-CAL7	20	78447	0.511	9.42
0D28059-CAL8	40	181192	0.563	9.41
0D28059-CAL9	100	494983	0.571	9.41
0D28059-CALA	200	1051104	0.574	9.41
0D28059-CALB	400	2206651	0.539	9.41

AVE RF **0.517** RF RSD **12.14** AVE RT **9.41**

trans-1,3-Dichloropropene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~132~~	~~0.213~~	~~9.47~~
~~0D28059-CAL2~~	~~0.2~~	~~262~~	~~0.187~~	~~9.46~~
0D28059-CAL3	0.4	712	0.246	9.46
0D28059-CAL4	1	2195	0.285	9.45
0D28059-CAL5	2	3895	0.279	9.45
0D28059-CAL6	5	13049	0.330	9.45
0D28059-CAL7	10	28464	0.371	9.45
0D28059-CAL8	20	69258	0.430	9.45
0D28059-CAL9	50	202313	0.466	9.45
0D28059-CALA	100	438237	0.478	9.45
0D28059-CALB	200	1034541	0.505	9.45

AVE RF **0.377** RF RSD **25.71** AVE RT **9.45**

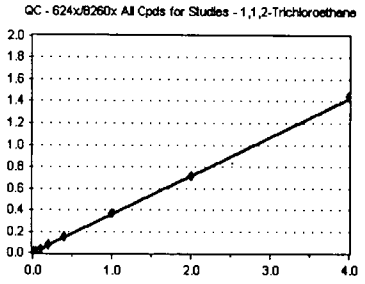
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

1,1,2-Trichloroethane

Curve Fit: **AVERAGE RF**

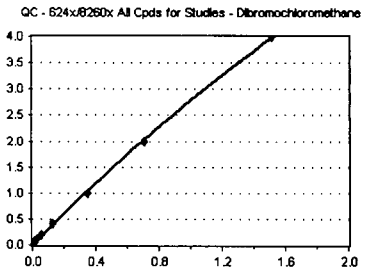


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	221	0.356	9.62
0D28059-CAL2	0.2	483	0.344	9.61
0D28059-CAL3	0.4	1003	0.347	9.61
0D28059-CAL4	1	2686	0.349	9.61
0D28059-CAL5	2	4815	0.345	9.61
0D28059-CAL6	5	14251	0.360	9.60
0D28059-CAL7	10	27495	0.358	9.60
0D28059-CAL8	20	59774	0.372	9.60
0D28059-CAL9	50	160242	0.369	9.60
0D28059-CALA	100	325366	0.355	9.60
0D28059-CALB	200	743055	0.363	9.60

AVE RF **0.356** RF RSD **2.67** AVE RT **9.60**

Dibromochloromethane

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

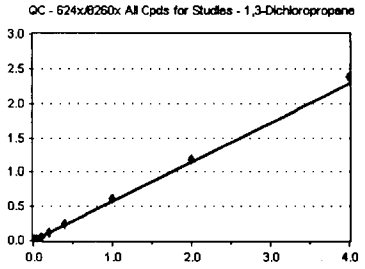


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~141~~	~~0.227~~	~~9.77~~
0D28059-CAL2	0.2	285	0.203	9.78
0D28059-CAL3	0.4	627	0.217	9.77
0D28059-CAL4	1	1804	0.234	9.77
0D28059-CAL5	2	3292	0.236	9.77
0D28059-CAL6	5	10229	0.259	9.76
0D28059-CAL7	10	21974	0.286	9.77
0D28059-CAL8	20	51693	0.321	9.77
0D28059-CAL9	50	151282	0.349	9.77
0D28059-CALA	100	324009	0.354	9.76
0D28059-CALB	200	775840	0.379	9.76

AVE RF **0.284** RF RSD **22.30** AVE RT **9.77**

1,3-Dichloropropane

Curve Fit: **AVERAGE RF**

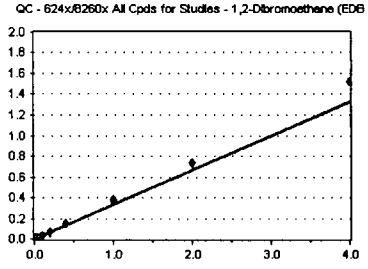


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	384	0.619	9.86
0D28059-CAL2	0.2	668	0.476	9.86
0D28059-CAL3	0.4	1557	0.538	9.86
0D28059-CAL4	1	4282	0.556	9.86
0D28059-CAL5	2	7446	0.533	9.86
0D28059-CAL6	5	22206	0.561	9.86
0D28059-CAL7	10	44749	0.583	9.86
0D28059-CAL8	20	97867	0.608	9.86
0D28059-CAL9	50	264551	0.610	9.86
0D28059-CALA	100	543367	0.593	9.86
0D28059-CALB	200	1220547	0.596	9.86

AVE RF **0.570** RF RSD **7.53** AVE RT **9.86**

1,2-Dibromoethane (EDB)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~135~~	~~0.218~~	~~0.00~~
0D28059-CAL2	0.2	377	0.268	9.98
0D28059-CAL3	0.4	856	0.296	9.99
0D28059-CAL4	1	2229	0.290	9.99
0D28059-CAL5	2	4307	0.308	9.98
0D28059-CAL6	5	12948	0.327	9.98
0D28059-CAL7	10	25910	0.337	9.98
0D28059-CAL8	20	59469	0.370	9.98
0D28059-CAL9	50	162144	0.374	9.98
0D28059-CALA	100	338306	0.369	9.98
0D28059-CALB	200	782130	0.382	9.98

AVE RF **0.332** RF RSD **12.22** AVE RT **9.98**

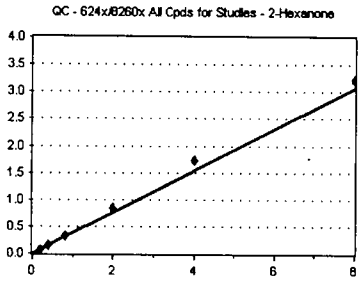
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

2-Hexanone

Curve Fit: **AVERAGE RF**

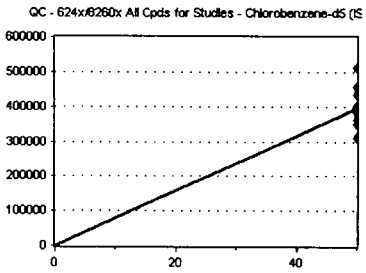


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.2~~	~~181~~	~~0.146~~	~~0.00~~
~~0D28059-CAL2~~	~~0.4~~	~~490~~	~~0.174~~	~~10.20~~
~~0D28059-CAL3~~	~~0.8~~	~~1203~~	~~0.208~~	~~10.20~~
~~0D28059-CAL4~~	~~2~~	~~3387~~	~~0.220~~	~~10.20~~
~~0D28059-CAL5~~	~~4~~	~~7344~~	~~0.263~~	~~10.19~~
0D28059-CAL6	10	22555	0.285	10.19
0D28059-CAL7	20	54460	0.355	10.19
0D28059-CAL8	40	131124	0.407	10.19
0D28059-CAL9	100	365112	0.421	10.18
0D28059-CALA	200	791292	0.432	10.18
0D28059-CALB	400	1645799	0.402	10.18

AVE RF **0.384** RF RSD **14.36** AVE RT **10.19**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

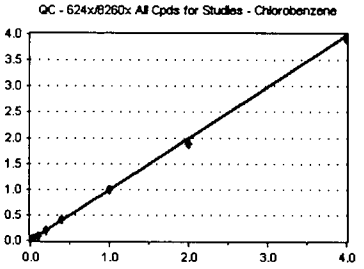


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	50	310108	6202.160	10.43
0D28059-CAL2	50	351200	7024.000	10.43
0D28059-CAL3	50	361683	7233.660	10.43
0D28059-CAL4	50	384850	7697.000	10.43
0D28059-CAL5	50	349304	6986.080	10.43
0D28059-CAL6	50	395555	7911.100	10.43
0D28059-CAL7	50	383963	7679.260	10.43
0D28059-CAL8	50	402229	8044.580	10.43
0D28059-CAL9	50	433790	8675.800	10.43
0D28059-CALA	50	457980	9159.600	10.43
0D28059-CALB	50	511754	10235.080	10.43

AVE RF **7895.302** RF RSD **14.26** AVE RT **10.43**

Chlorobenzene

Curve Fit: **AVERAGE RF**

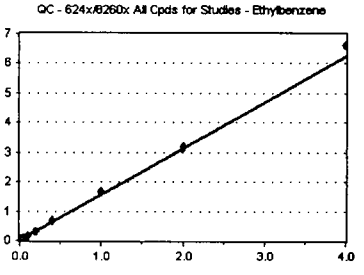


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	784	1.264	10.45
0D28059-CAL2	0.2	1372	0.977	10.44
0D28059-CAL3	0.4	2815	0.973	10.45
0D28059-CAL4	1	7377	0.958	10.45
0D28059-CAL5	2	13084	0.936	10.45
0D28059-CAL6	5	38442	0.972	10.45
0D28059-CAL7	10	73524	0.957	10.45
0D28059-CAL8	20	161648	1.005	10.45
0D28059-CAL9	50	430146	0.992	10.45
0D28059-CALA	100	866291	0.946	10.45
0D28059-CALB	200	2006540	0.980	10.45

AVE RF **0.996** RF RSD **9.13** AVE RT **10.45**

Ethylbenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	1080	1.741	10.48
0D28059-CAL2	0.2	1953	1.390	10.47
0D28059-CAL3	0.4	4039	1.396	10.47
0D28059-CAL4	1	11594	1.506	10.47
0D28059-CAL5	2	20551	1.471	10.47
0D28059-CAL6	5	60457	1.528	10.47
0D28059-CAL7	10	120072	1.564	10.47
0D28059-CAL8	20	267924	1.665	10.46
0D28059-CAL9	50	723698	1.668	10.46
0D28059-CALA	100	1452579	1.586	10.46
0D28059-CALB	200	3390116	1.656	10.46

AVE RF **1.561** RF RSD **7.89** AVE RT **10.47**

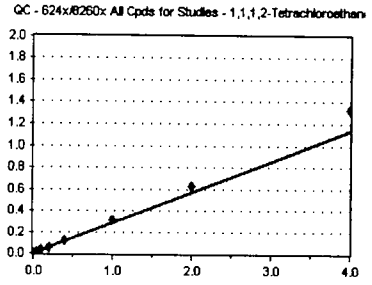
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

1,1,1,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**

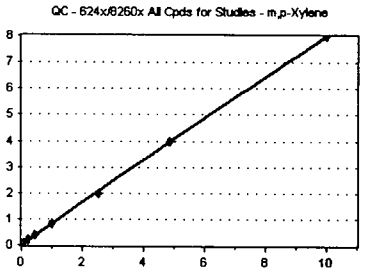


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~140~~	~~0.226~~	~~0.00~~
0D28059-CAL2	0.2	402	0.286	10.50
0D28059-CAL3	0.4	700	0.242	10.50
0D28059-CAL4	1	1901	0.247	10.50
0D28059-CAL5	2	3453	0.247	10.50
0D28059-CAL6	5	10701	0.271	10.50
0D28059-CAL7	10	21231	0.276	10.50
0D28059-CAL8	20	48948	0.304	10.50
0D28059-CAL9	50	135859	0.313	10.50
0D28059-CALA	100	285345	0.312	10.50
0D28059-CALB	200	678121	0.331	10.50

AVE RF **0.283** RF RSD **11.17** AVE RT **10.50**

m,p-Xylene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

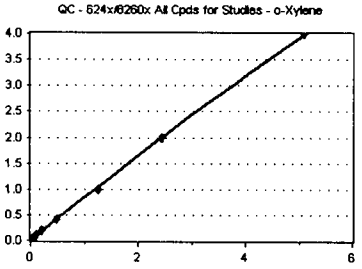


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.2	1169	0.942	10.60
0D28059-CAL2	0.4	2530	0.900	10.59
0D28059-CAL3	0.8	4861	0.840	10.60
0D28059-CAL4	2	14033	0.912	10.59
0D28059-CAL5	4	25600	0.916	10.59
0D28059-CAL6	10	82936	1.048	10.59
0D28059-CAL7	20	172596	1.124	10.59
0D28059-CAL8	40	395642	1.230	10.59
0D28059-CAL9	100	1089425	1.256	10.59
0D28059-CALA	200	2216310	1.210	10.59
0D28059-CALB	400	5118451	1.250	10.59

AVE RF **1.057** RF RSD **15.26** AVE RT **10.59**

o-Xylene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

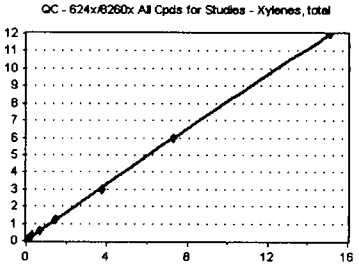


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	660	1.064	10.95
0D28059-CAL2	0.2	1046	0.745	10.95
0D28059-CAL3	0.4	2184	0.755	10.95
0D28059-CAL4	1	6116	0.795	10.95
0D28059-CAL5	2	11482	0.822	10.95
0D28059-CAL6	5	37475	0.947	10.95
0D28059-CAL7	10	80619	1.050	10.95
0D28059-CAL8	20	192167	1.194	10.95
0D28059-CAL9	50	545910	1.258	10.95
0D28059-CALA	100	1120662	1.223	10.95
0D28059-CALB	200	2610008	1.275	10.95

AVE RF **1.012** RF RSD **20.67** AVE RT **10.95**

Xylenes, total

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.3	1829	0.983	10.95
0D28059-CAL2	0.6	3576	0.849	10.95
0D28059-CAL3	1.2	7045	0.812	10.95
0D28059-CAL4	3	20149	0.873	10.95
0D28059-CAL5	6	37082	0.885	10.95
0D28059-CAL6	15	120411	1.015	10.95
0D28059-CAL7	30	253215	1.099	10.95
0D28059-CAL8	60	587809	1.218	10.95
0D28059-CAL9	150	1635335	1.257	10.95
0D28059-CALA	300	3336972	1.214	10.95
0D28059-CALB	600	7728459	1.258	10.95

AVE RF **1.042** RF RSD **16.78** AVE RT **10.95**

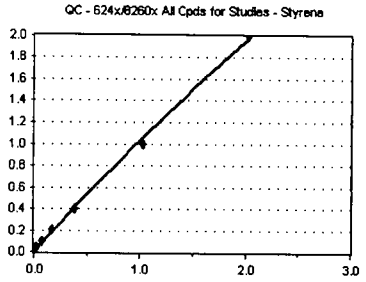
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Styrene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

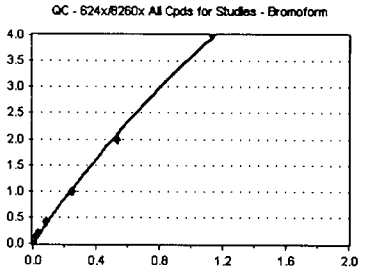


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~277~~	~~0.447~~	~~11.01~~
0D28059-CAL2	0.2	645	0.459	11.01
0D28059-CAL3	0.4	1543	0.533	11.00
0D28059-CAL4	1	4390	0.570	11.00
0D28059-CAL5	2	8265	0.592	11.00
0D28059-CAL6	5	29377	0.743	11.00
0D28059-CAL7	10	65789	0.857	11.00
0D28059-CAL8	20	155824	0.969	10.99
0D28059-CAL9	50	443946	1.023	10.99
0D28059-CALA	100	925198	1.010	10.99
~~0D28059-CALB~~	~~200~~	~~2122456~~	~~1.037~~	~~10.99~~

AVE RF **0.751** RF RSD **29.43** AVE RT **11.00**

Bromoform

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

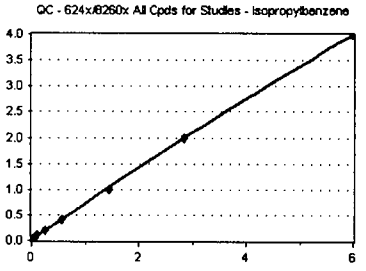


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~71~~	~~0.114~~	~~11.02~~
0D28059-CAL2	0.2	181	0.129	11.03
0D28059-CAL3	0.4	411	0.142	11.02
0D28059-CAL4	1	1185	0.154	11.02
0D28059-CAL5	2	2032	0.145	11.02
0D28059-CAL6	5	6855	0.173	11.02
0D28059-CAL7	10	14508	0.189	11.02
0D28059-CAL8	20	35427	0.220	11.02
0D28059-CAL9	50	109913	0.253	11.02
0D28059-CALA	100	245900	0.268	11.02
0D28059-CALB	200	580388	0.284	11.02

AVE RF **0.196** RF RSD **29.04** AVE RT **11.02**

Isopropylbenzene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

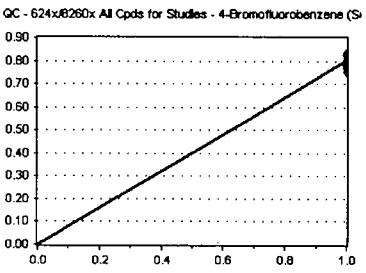


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~595~~	~~0.959~~	~~11.20~~
0D28059-CAL2	0.2	1157	0.824	11.21
0D28059-CAL3	0.4	2263	0.782	11.20
0D28059-CAL4	1	7045	0.915	11.20
0D28059-CAL5	2	12996	0.930	11.20
0D28059-CAL6	5	43279	1.094	11.20
0D28059-CAL7	10	93386	1.216	11.20
0D28059-CAL8	20	224839	1.397	11.20
0D28059-CAL9	50	634097	1.462	11.20
0D28059-CALA	100	1303456	1.423	11.20
0D28059-CALB	200	3059960	1.495	11.20

AVE RF **1.154** RF RSD **24.25** AVE RT **11.20**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	50	107903	0.833	11.43
0D28059-CAL2	50	122178	0.826	11.43
0D28059-CAL3	50	126405	0.830	11.43
0D28059-CAL4	50	138403	0.824	11.43
0D28059-CAL5	50	124756	0.823	11.43
0D28059-CAL6	50	144745	0.804	11.43
0D28059-CAL7	50	142580	0.799	11.43
0D28059-CAL8	50	151710	0.781	11.43
0D28059-CAL9	50	167491	0.768	11.43
0D28059-CALA	50	176212	0.755	11.43
0D28059-CALB	50	191987	0.780	11.43

AVE RF **0.802** RF RSD **3.41** AVE RT **11.43**

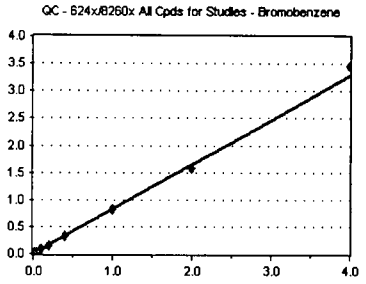
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Bromobenzene

Curve Fit: **AVERAGE RF**

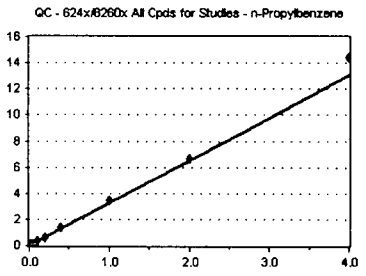


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	220	0.849	11.51
0D28059-CAL2	0.2	477	0.807	11.51
0D28059-CAL3	0.4	1011	0.830	11.51
0D28059-CAL4	1	2856	0.850	11.51
0D28059-CAL5	2	4698	0.775	11.51
0D28059-CAL6	5	14510	0.806	11.51
0D28059-CAL7	10	28215	0.790	11.51
0D28059-CAL8	20	64696	0.833	11.51
0D28059-CAL9	50	178576	0.819	11.51
0D28059-CALA	100	369547	0.792	11.51
0D28059-CALB	200	850318	0.864	11.51

AVE RF **0.819** RF RSD **3.46** AVE RT **11.51**

n-Propylbenzene

Curve Fit: **AVERAGE RF**

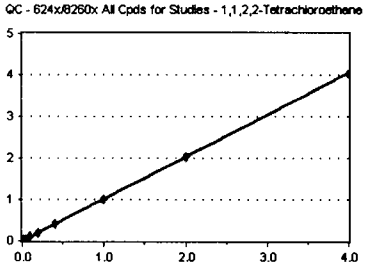


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	972	3.750	11.53
0D28059-CAL2	0.2	1758	2.973	11.53
0D28059-CAL3	0.4	3735	3.065	11.53
0D28059-CAL4	1	9809	2.921	11.53
0D28059-CAL5	2	17637	2.908	11.53
0D28059-CAL6	5	55551	3.087	11.53
0D28059-CAL7	10	115790	3.242	11.53
0D28059-CAL8	20	270477	3.483	11.52
0D28059-CAL9	50	753971	3.458	11.52
0D28059-CALA	100	1547444	3.317	11.52
0D28059-CALB	200	3545698	3.601	11.52

AVE RF **3.255** RF RSD **8.90** AVE RT **11.52**

1,1,2,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**

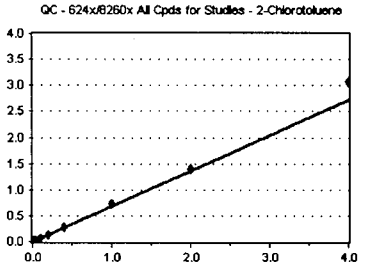


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	312	1.204	11.60
0D28059-CAL2	0.2	560	0.947	11.59
0D28059-CAL3	0.4	1213	0.995	11.59
0D28059-CAL4	1	3424	1.019	11.59
0D28059-CAL5	2	5938	0.979	11.58
0D28059-CAL6	5	17506	0.973	11.59
0D28059-CAL7	10	35152	0.984	11.59
0D28059-CAL8	20	78508	1.011	11.59
0D28059-CAL9	50	218708	1.003	11.58
0D28059-CALA	100	473849	1.016	11.58
0D28059-CALB	200	994174	1.010	11.58

AVE RF **1.013** RF RSD **6.61** AVE RT **11.58**

2-Chlorotoluene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	191	0.737	11.66
0D28059-CAL2	0.2	365	0.617	11.65
0D28059-CAL3	0.4	753	0.618	11.65
0D28059-CAL4	1	2065	0.615	11.65
0D28059-CAL5	2	3818	0.629	11.65
0D28059-CAL6	5	11788	0.655	11.65
0D28059-CAL7	10	24180	0.677	11.65
0D28059-CAL8	20	56094	0.722	11.65
0D28059-CAL9	50	158246	0.726	11.65
0D28059-CALA	100	327467	0.702	11.65
0D28059-CALB	200	757592	0.769	11.65

AVE RF **0.679** RF RSD **8.18** AVE RT **11.65**

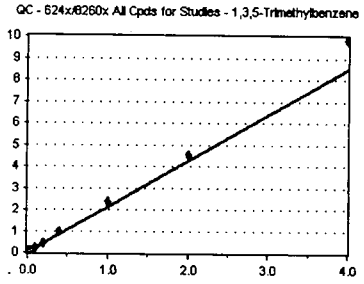
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

1,3,5-Trimethylbenzene

Curve Fit: **AVERAGE RF**

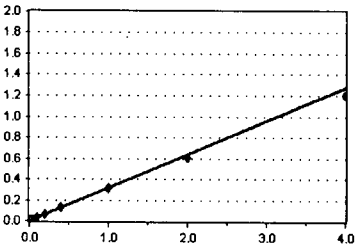


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~506~~	~~1.952~~	~~11.68~~
~~0D28059-CAL2~~	~~0.2~~	~~801~~	~~1.524~~	~~11.67~~
~~0D28059-CAL3~~	~~0.4~~	~~2046~~	~~1.679~~	~~11.67~~
0D28059-CAL4	1	5426	1.616	11.67
0D28059-CAL5	2	10389	1.713	11.67
0D28059-CAL6	5	35877	1.994	11.67
0D28059-CAL7	10	77814	2.179	11.67
0D28059-CAL8	20	183706	2.366	11.67
0D28059-CAL9	50	514083	2.358	11.67
0D28059-CALA	100	1065161	2.283	11.67
0D28059-CALB	200	2427844	2.466	11.67

AVE RF **2.122** RF RSD **14.93** AVE RT **11.67**

1,2,3-Trichloropropane

Curve Fit: **AVERAGE RF**

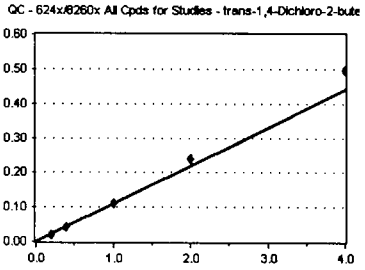


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~68~~	~~0.262~~	~~11.70~~
0D28059-CAL2	0.2	184	0.311	11.70
0D28059-CAL3	0.4	379	0.311	11.69
0D28059-CAL4	1	1181	0.352	11.69
0D28059-CAL5	2	1959	0.323	11.69
0D28059-CAL6	5	5738	0.319	11.69
0D28059-CAL7	10	11646	0.326	11.69
0D28059-CAL8	20	25712	0.331	11.69
0D28059-CAL9	50	67976	0.312	11.69
0D28059-CALA	100	141478	0.303	11.69
0D28059-CALB	200	296100	0.301	11.69

AVE RF **0.319** RF RSD **4.72** AVE RT **11.69**

trans-1,4-Dichloro-2-butene

Curve Fit: **AVERAGE RF**

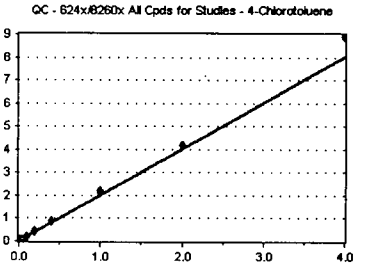


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL4~~	~~1~~	~~228~~	~~6.789~~	~~11.72~~
~~0D28059-CAL5~~	~~2~~	~~427~~	~~7.040~~	~~11.72~~
~~0D28059-CAL6~~	~~5~~	~~1351~~	~~7.508~~	~~11.72~~
0D28059-CAL7	10	3230	9.045	11.72
0D28059-CAL8	20	8122	0.105	11.72
0D28059-CAL9	50	24353	0.112	11.72
0D28059-CALA	100	55724	0.119	11.71
0D28059-CALB	200	122105	0.124	11.71

AVE RF **0.110** RF RSD **12.02** AVE RT **11.72**

4-Chlorotoluene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	557	2.149	11.78
0D28059-CAL2	0.2	1076	1.820	11.79
0D28059-CAL3	0.4	2118	1.738	11.78
0D28059-CAL4	1	5937	1.768	11.78
0D28059-CAL5	2	11046	1.821	11.78
0D28059-CAL6	5	34971	1.943	11.78
0D28059-CAL7	10	74114	2.075	11.78
0D28059-CAL8	20	171897	2.214	11.78
0D28059-CAL9	50	475089	2.179	11.78
0D28059-CALA	100	977949	2.096	11.78
0D28059-CALB	200	2189587	2.224	11.78

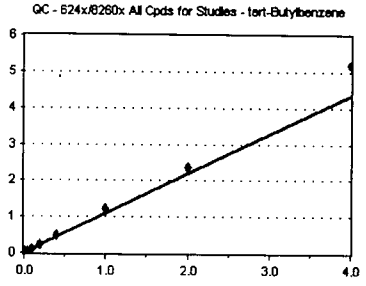
AVE RF **2.002** RF RSD **9.41** AVE RT **11.78**

Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

tert-Butylbenzene

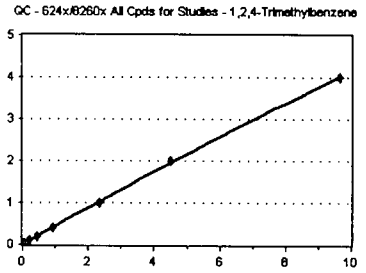


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~367~~	~~1.377~~	~~11.92~~
0D28059-CAL2	0.2	592	1.001	11.92
0D28059-CAL3	0.4	1103	0.905	11.91
0D28059-CAL4	1	3171	0.944	11.92
0D28059-CAL5	2	5969	0.984	11.92
0D28059-CAL6	5	18795	1.044	11.92
0D28059-CAL7	10	39548	1.107	11.92
0D28059-CAL8	20	93619	1.206	11.91
0D28059-CAL9	50	266112	1.220	11.91
0D28059-CALA	100	553693	1.187	11.91
0D28059-CALB	200	1274708	1.295	11.91

AVE RF **1.089** RF RSD **12.18** AVE RT **11.91**

1,2,4-Trimethylbenzene

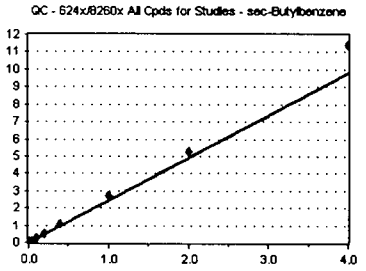


Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~468~~	~~1.806~~	~~11.97~~
~~0D28059-CAL2~~	~~0.2~~	~~860~~	~~1.454~~	~~11.97~~
0D28059-CAL3	0.4	1738	1.426	11.97
0D28059-CAL4	1	5139	1.530	11.97
0D28059-CAL5	2	9775	1.612	11.96
0D28059-CAL6	5	35221	1.957	11.96
0D28059-CAL7	10	77201	2.162	11.96
0D28059-CAL8	20	181278	2.334	11.96
0D28059-CAL9	50	509496	2.336	11.96
0D28059-CALA	100	1047842	2.246	11.96
0D28059-CALB	200	2375385	2.412	11.96

AVE RF **2.002** RF RSD **19.22** AVE RT **11.97**

sec-Butylbenzene

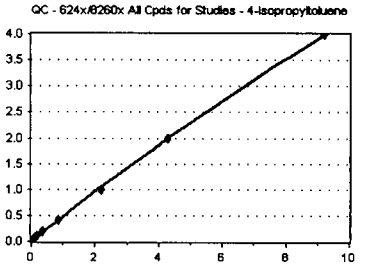


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~570~~	~~2.199~~	~~12.04~~
~~0D28059-CAL2~~	~~0.2~~	~~1055~~	~~1.784~~	~~12.05~~
~~0D28059-CAL3~~	~~0.4~~	~~2369~~	~~1.944~~	~~12.05~~
0D28059-CAL4	1	6597	1.964	12.05
0D28059-CAL5	2	12245	2.019	12.04
0D28059-CAL6	5	41621	2.313	12.04
0D28059-CAL7	10	88075	2.466	12.04
0D28059-CAL8	20	208931	2.690	12.04
0D28059-CAL9	50	590118	2.706	12.04
0D28059-CALA	100	1227821	2.632	12.04
0D28059-CALB	200	2807398	2.851	12.04

AVE RF **2.455** RF RSD **13.40** AVE RT **12.04**

4-Isopropyltoluene



Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~409~~	~~1.578~~	~~12.15~~
0D28059-CAL2	0.2	770	1.302	12.15
0D28059-CAL3	0.4	1664	1.365	12.15
0D28059-CAL4	1	4567	1.360	12.15
0D28059-CAL5	2	8900	1.467	12.15
0D28059-CAL6	5	30863	1.715	12.15
0D28059-CAL7	10	66417	1.860	12.15
0D28059-CAL8	20	162974	2.099	12.15
0D28059-CAL9	50	475738	2.182	12.15
0D28059-CALA	100	998151	2.139	12.15
0D28059-CALB	200	2273833	2.309	12.15

AVE RF **1.780** RF RSD **21.82** AVE RT **12.15**

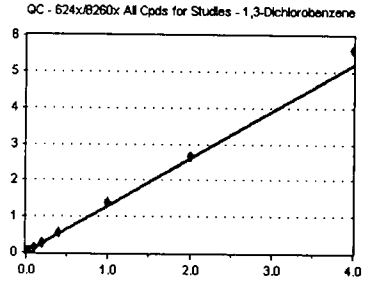
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

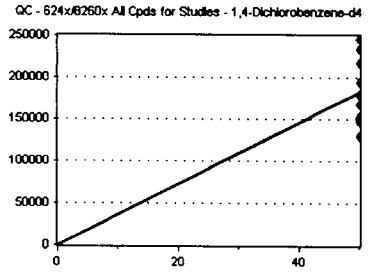


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	351	1.354	12.23
0D28059-CAL2	0.2	720	1.218	12.23
0D28059-CAL3	0.4	1456	1.195	12.23
0D28059-CAL4	1	4061	1.209	12.22
0D28059-CAL5	2	7077	1.167	12.22
0D28059-CAL6	5	23270	1.293	12.22
0D28059-CAL7	10	47228	1.323	12.22
0D28059-CAL8	20	108348	1.395	12.22
0D28059-CAL9	50	304760	1.398	12.22
0D28059-CALA	100	624132	1.338	12.22
0D28059-CALB	200	1380557	1.402	12.22

AVE RF **1.299** RF RSD **6.79** AVE RT **12.22**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

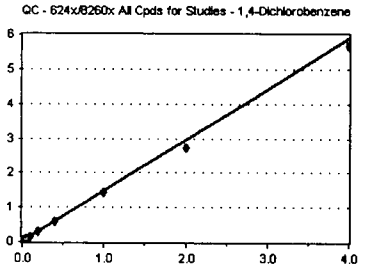


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	50	129589	2591.780	12.28
0D28059-CAL2	50	147833	2956.660	12.28
0D28059-CAL3	50	152333	3046.660	12.28
0D28059-CAL4	50	167927	3358.540	12.28
0D28059-CAL5	50	151641	3032.820	12.28
0D28059-CAL6	50	179946	3598.920	12.28
0D28059-CAL7	50	178553	3571.060	12.28
0D28059-CAL8	50	194144	3882.880	12.28
0D28059-CAL9	50	218062	4361.240	12.28
0D28059-CALA	50	233282	4665.640	12.28
0D28059-CALB	50	246154	4923.080	12.28

AVE RF **3635.389** RF RSD **20.68** AVE RT **12.28**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

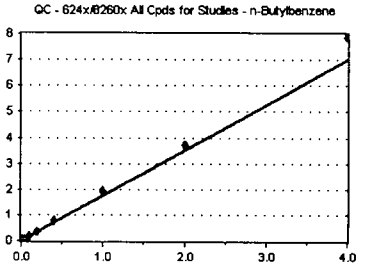


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	460	1.775	12.28
0D28059-CAL2	0.2	974	1.647	12.29
0D28059-CAL3	0.4	1856	1.523	12.29
0D28059-CAL4	1	4946	1.473	12.29
0D28059-CAL5	2	8207	1.353	12.29
0D28059-CAL6	5	25459	1.415	12.29
0D28059-CAL7	10	50096	1.403	12.29
0D28059-CAL8	20	112685	1.451	12.29
0D28059-CAL9	50	311097	1.427	12.29
0D28059-CALA	100	635898	1.363	12.29
0D28059-CALB	200	1398040	1.420	12.29

AVE RF **1.477** RF RSD **8.67** AVE RT **12.29**

n-Butylbenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~402~~	~~1.551~~	~~12.48~~
~~0D28059-CAL2~~	~~0.2~~	~~781~~	~~1.321~~	~~12.48~~
~~0D28059-CAL3~~	~~0.4~~	~~1571~~	~~1.289~~	~~12.47~~
0D28059-CAL4	1	4814	1.433	12.47
0D28059-CAL5	2	8803	1.451	12.47
0D28059-CAL6	5	29620	1.646	12.47
0D28059-CAL7	10	63004	1.764	12.47
0D28059-CAL8	20	150042	1.932	12.47
0D28059-CAL9	50	421761	1.934	12.46
0D28059-CALA	100	868364	1.861	12.46
0D28059-CALB	200	1938953	1.969	12.46

AVE RF **1.748** RF RSD **12.38** AVE RT **12.47**

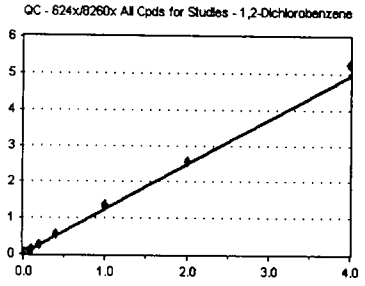
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

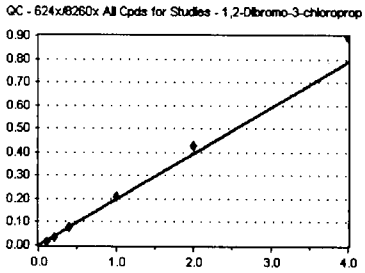


Standard	Concentration	Response	Response Factor	RT
0D28059-CAL1	0.1	327	1.262	12.62
0D28059-CAL2	0.2	615	1.040	12.62
0D28059-CAL3	0.4	1407	1.155	12.62
0D28059-CAL4	1	3752	1.117	12.62
0D28059-CAL5	2	7179	1.184	12.62
0D28059-CAL6	5	22390	1.244	12.62
0D28059-CAL7	10	45442	1.273	12.62
0D28059-CAL8	20	105171	1.354	12.61
0D28059-CAL9	50	294861	1.352	12.61
0D28059-CALA	100	599072	1.284	12.61
0D28059-CALB	200	1294660	1.315	12.61

AVE RF **1.234** RF RSD **8.10** AVE RT **12.61**

1,2-Dibromo-3-chloropropane

Curve Fit: **AVERAGE RF**

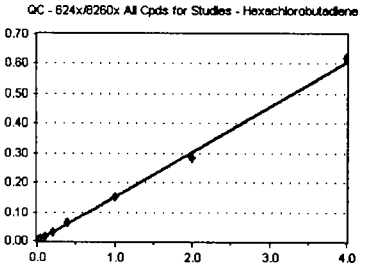


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~62~~	~~0.105~~	~~13.27~~
~~0D28059-CAL3~~	~~0.4~~	~~156~~	~~0.128~~	~~13.26~~
~~0D28059-CAL4~~	~~1~~	~~408~~	~~0.121~~	~~13.27~~
~~0D28059-CAL5~~	~~2~~	~~865~~	~~0.141~~	~~13.26~~
0D28059-CAL6	5	2995	0.166	13.26
0D28059-CAL7	10	6172	0.173	13.26
0D28059-CAL8	20	15323	0.197	13.26
0D28059-CAL9	50	45658	0.209	13.26
0D28059-CALA	100	100386	0.215	13.26
0D28059-CALB	200	220807	0.224	13.26

AVE RF **0.198** RF RSD **11.85** AVE RT **13.26**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

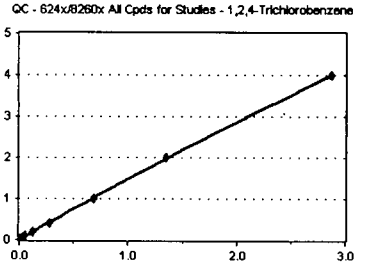


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~70~~	~~0.118~~	~~13.81~~
0D28059-CAL3	0.4	185	0.152	13.81
0D28059-CAL4	1	477	0.142	13.81
0D28059-CAL5	2	894	0.147	13.81
0D28059-CAL6	5	2853	0.159	13.81
0D28059-CAL7	10	5547	0.155	13.81
0D28059-CAL8	20	12746	0.164	13.81
0D28059-CAL9	50	32798	0.150	13.81
0D28059-CALA	100	65865	0.141	13.81
0D28059-CALB	200	152484	0.155	13.81

AVE RF **0.152** RF RSD **4.94** AVE RT **13.81**

1,2,4-Trichlorobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~99~~	~~0.382~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~239~~	~~0.404~~	~~13.86~~
0D28059-CAL3	0.4	554	0.455	13.86
0D28059-CAL4	1	1599	0.476	13.86
0D28059-CAL5	2	2821	0.465	13.86
0D28059-CAL6	5	9612	0.534	13.85
0D28059-CAL7	10	21662	0.607	13.85
0D28059-CAL8	20	54807	0.706	13.85
0D28059-CAL9	50	150152	0.689	13.85
0D28059-CALA	100	314733	0.675	13.85
0D28059-CALB	200	708955	0.720	13.85

AVE RF **0.592** RF RSD **18.65** AVE RT **13.86**

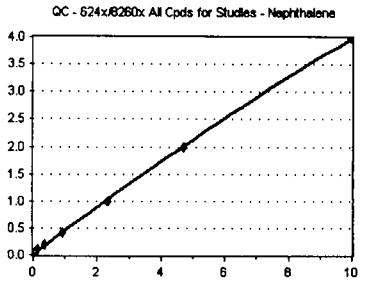
Element Calibration Review Sheet

Calibration ID: **A0D3007** Instrument: **VOA-GCMS7** Calibration Date: **04/30/2020**

Analysis: **QC - 624x/8260x All Cpds fo** Instrument Cal ID: **VG200429W VG200429G**

Naphthalene

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

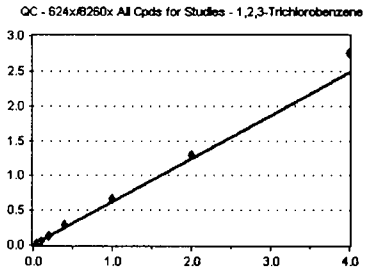


Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~291~~	~~1.123~~	~~14.19~~
~~0D28059-CAL2~~	~~0.2~~	~~494~~	~~0.835~~	~~14.19~~
~~0D28059-CAL3~~	~~0.4~~	~~1138~~	~~0.934~~	~~14.19~~
0D28059-CAL4	1	3600	1.072	14.18
0D28059-CAL5	2	6717	1.107	14.18
0D28059-CAL6	5	23409	1.301	14.18
0D28059-CAL7	10	61073	1.710	14.18
0D28059-CAL8	20	176300	2.270	14.18
0D28059-CAL9	50	510381	2.341	14.18
0D28059-CALA	100	1104031	2.366	14.18
0D28059-CALB	200	2456596	2.495	14.18

AVE RF **1.833** RF RSD **33.09** AVE RT **14.18**

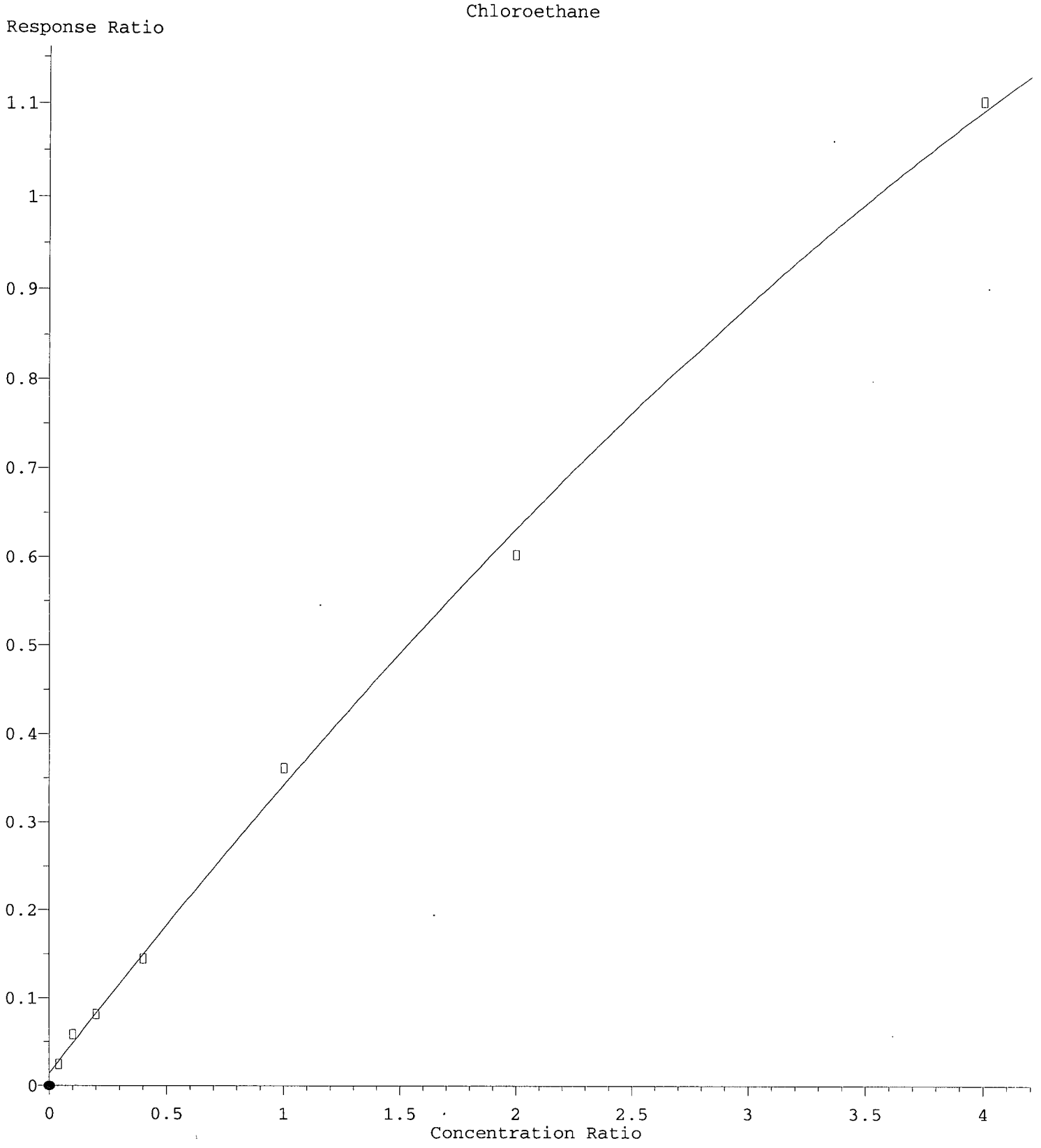
1,2,3-Trichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0D28059-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0D28059-CAL2~~	~~0.2~~	~~236~~	~~0.399~~	~~14.37~~
~~0D28059-CAL3~~	~~0.4~~	~~532~~	~~0.437~~	~~14.38~~
~~0D28059-CAL4~~	~~1~~	~~1517~~	~~0.452~~	~~14.38~~
0D28059-CAL5	2	2840	0.468	14.37
0D28059-CAL6	5	9690	0.538	14.37
0D28059-CAL7	10	22187	0.621	14.37
0D28059-CAL8	20	55471	0.714	14.37
0D28059-CAL9	50	144488	0.663	14.37
0D28059-CALA	100	301675	0.647	14.37
0D28059-CALB	200	678103	0.689	14.37

AVE RF **0.620** RF RSD **14.09** AVE RT **14.37**



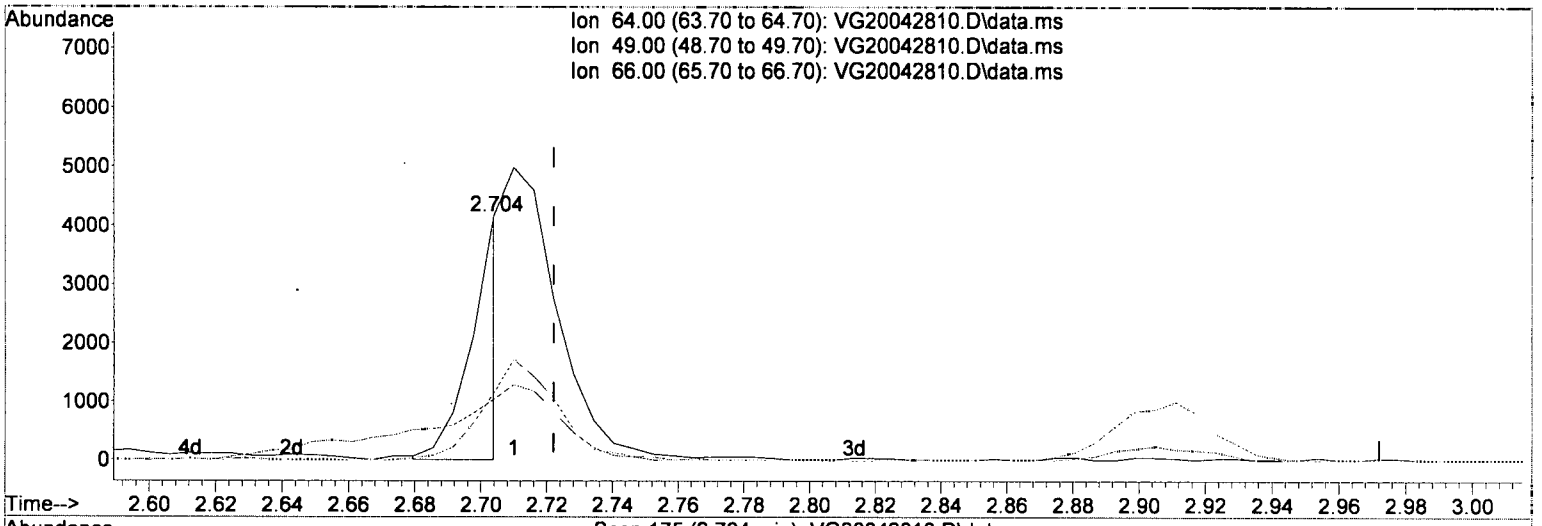
Intercept < MDL
4/30/2021

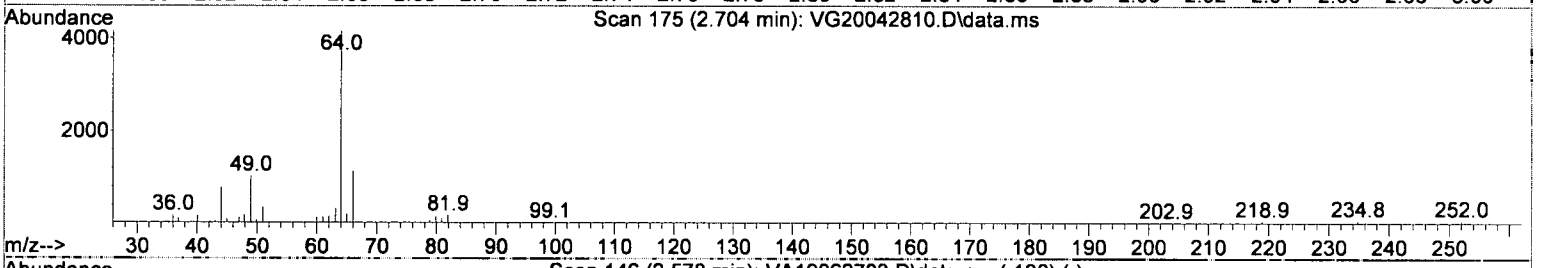
R = -1.92e-002 A*A + 3.47e-001 A + 1.39e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Thu Apr 30 09:25:52 2020

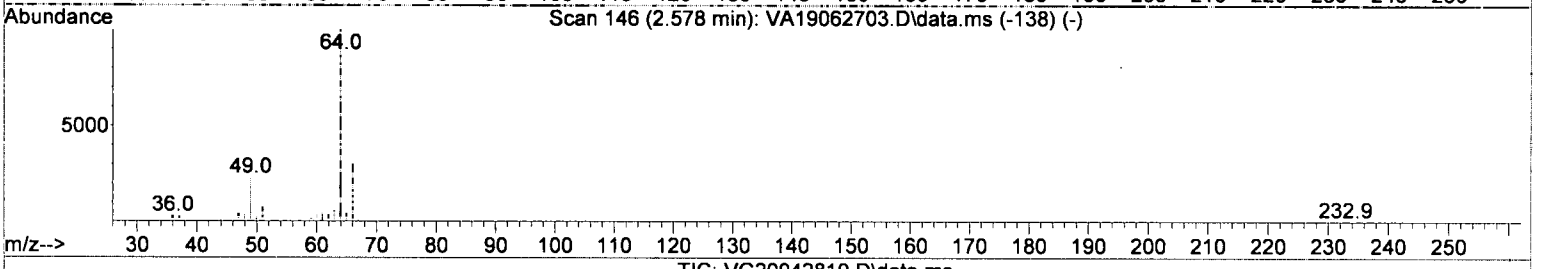
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042810.D
Acq On : 28 Apr 2020 6:04 pm
Operator : PS
Sample : 0D28059-CAL6
Misc : 1X 5mL 5 PPB VOCRO
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 30 09:26:42 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







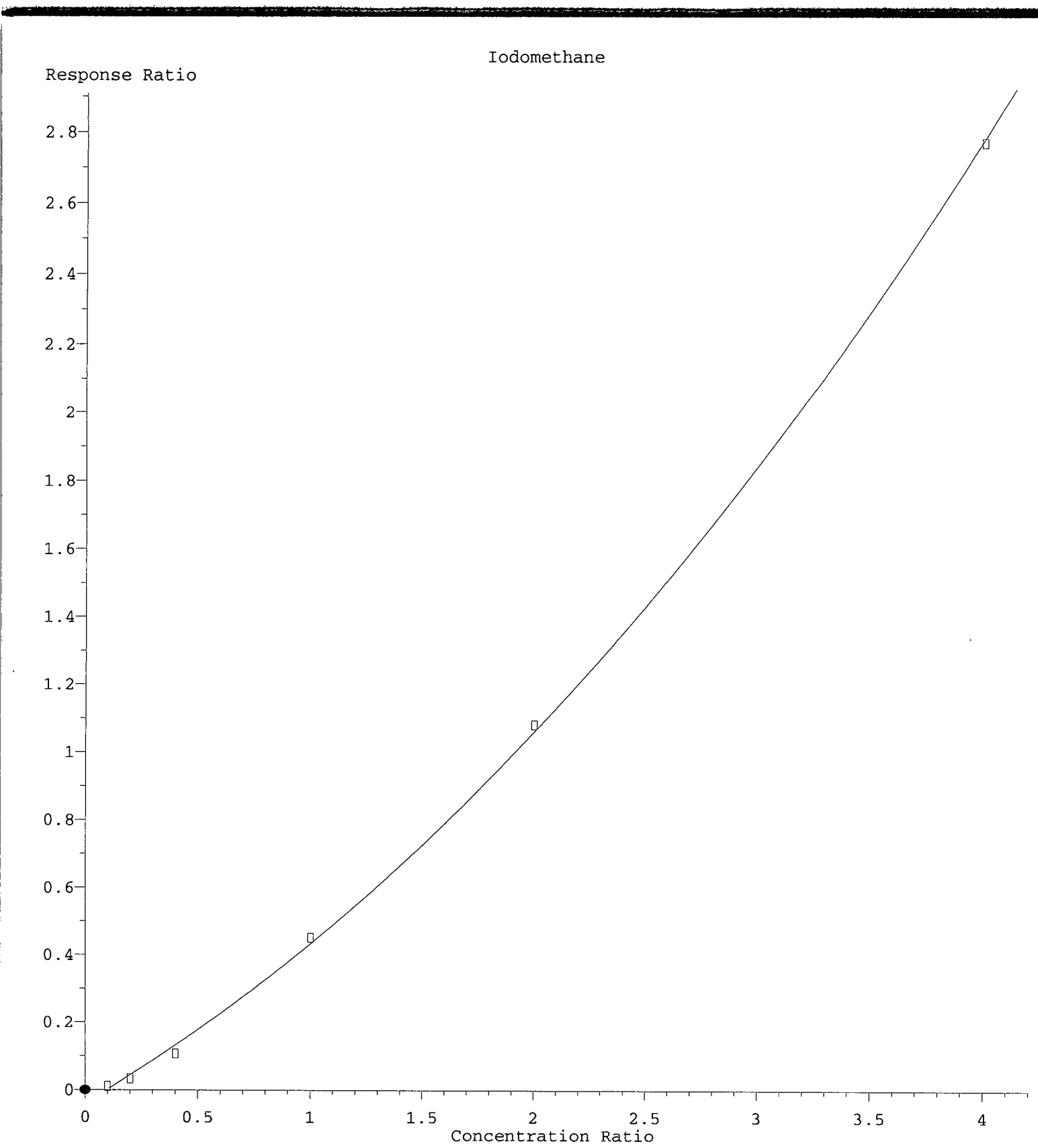
TIC: VG20042810.D\data.ms

(6) Chloroethane

2.704min (-0.018) 0.69 ug/L m

response 2666

Ion	Exp%	Act%
64.00	100.00	100.00
49.00	24.30	24.78
66.00	31.30	27.23
0.00	0.00	0.00



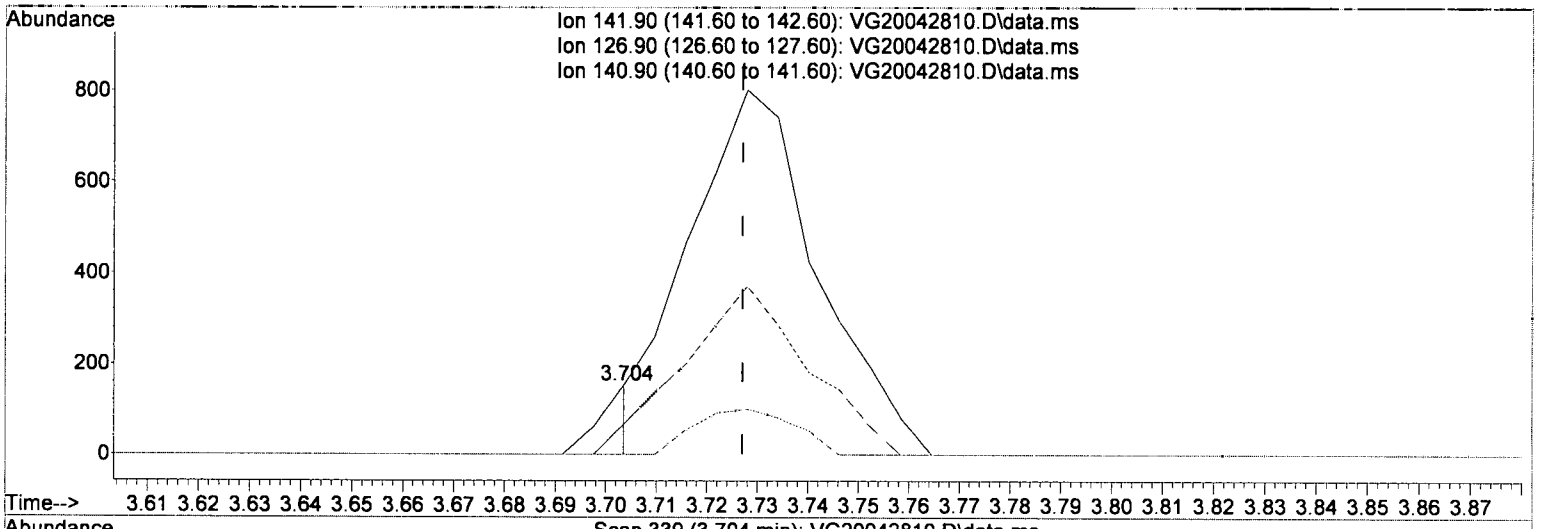
Intercept LMR
4/30/2021

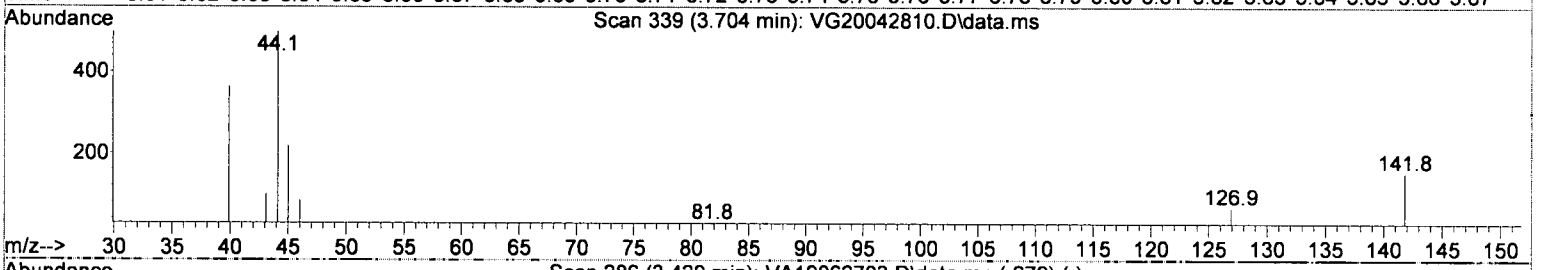
R = 7.77e-002 A*A +0.0[illegible] A +1.25e-001 Area: 0.[illegible]
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 15:24:07 2020

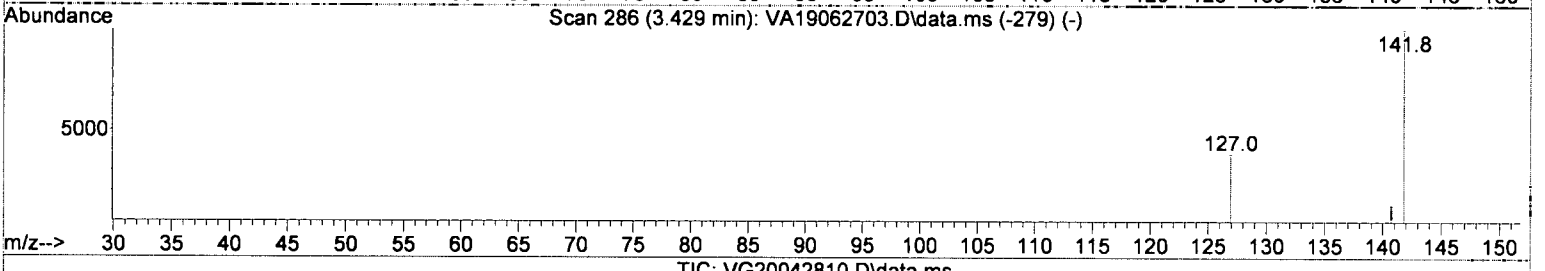
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042810.D
Acq On : 28 Apr 2020 6:04 pm
Operator : PS
Sample : 0D28059-CAL6
Misc : 1X 5mL 5 PPB VOCRO
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 30 09:26:42 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







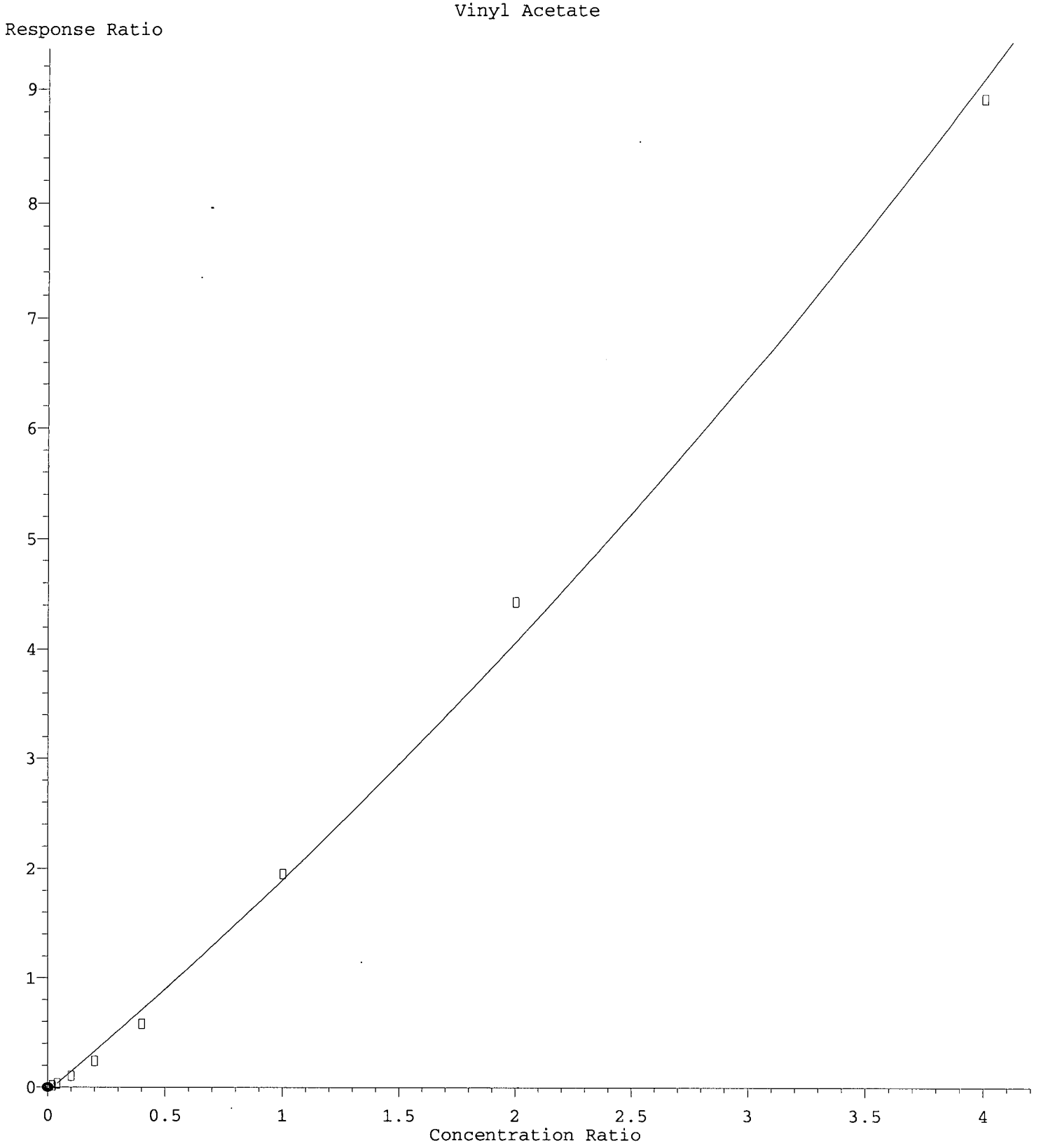
TIC: VG20042810.D\data.ms

(12) Iodomethane

3.704min (-0.023) 4.88 ug/L m

response 78

Ion	Exp%	Act%
141.90	100.00	100.00
126.90	34.80	43.79
140.90	15.30	0.00
0.00	0.00	0.00



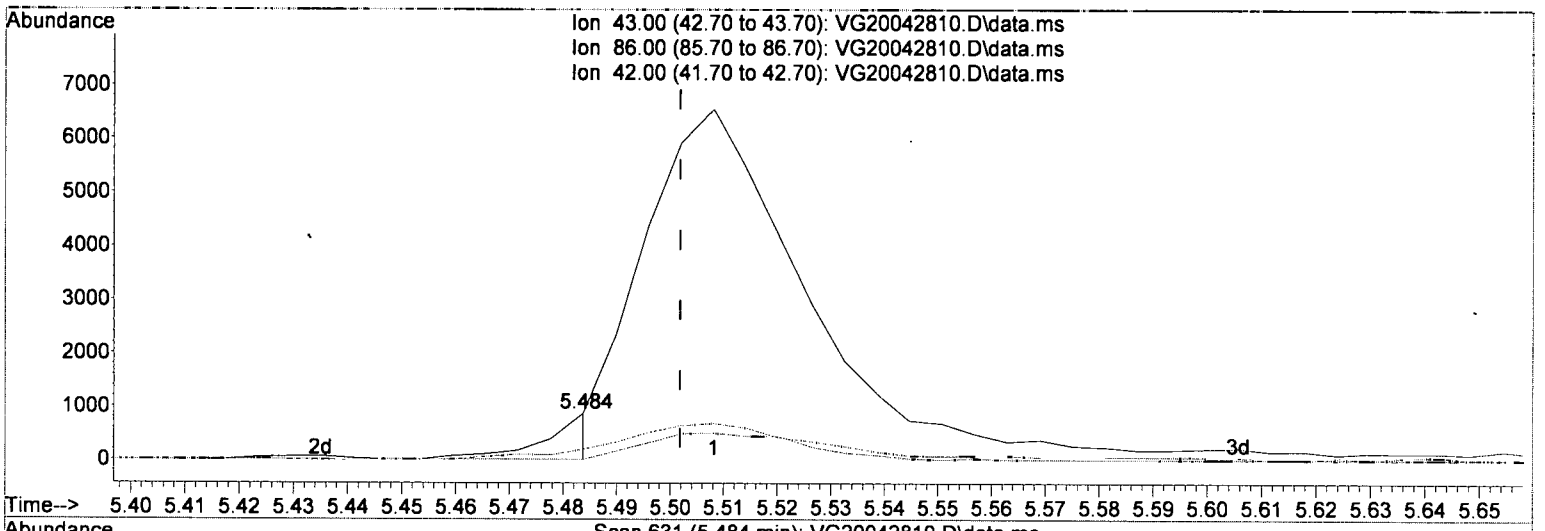
Intercept CMDL
4/30/2021

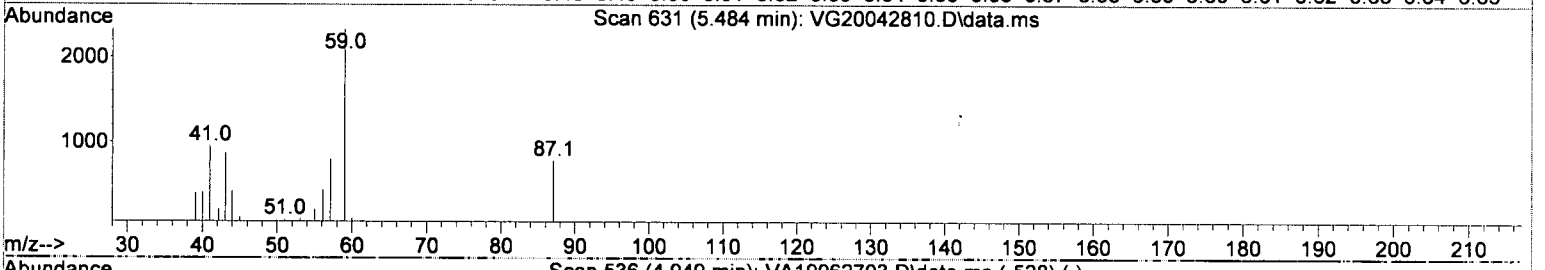
R = 1.14e-001 A*A +07/14/2021 Amendment A, LLC - Case 1:21-cv-00... Document 1-3 Filed 07/14/21 Page 420 of 550 PageID #: 1762
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 15:27:34 2020

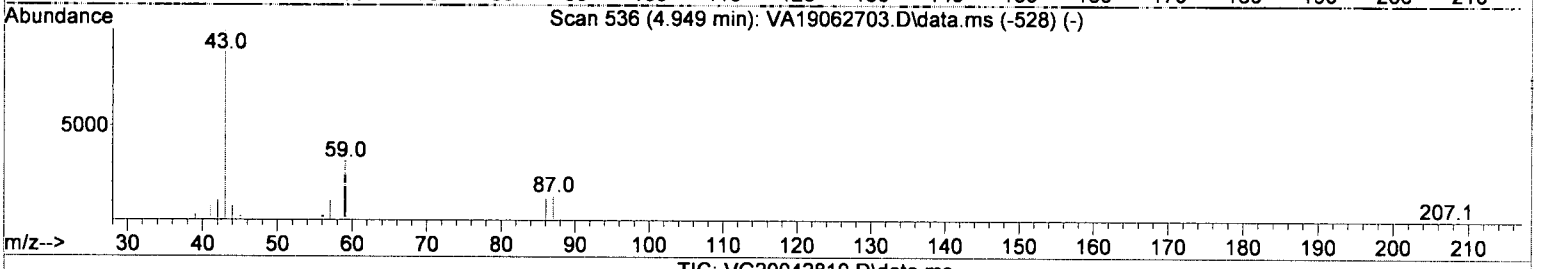
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042810.D
Acq On : 28 Apr 2020 6:04 pm
Operator : PS
Sample : 0D28059-CAL6
Misc : 1X 5mL 5 PPB VOCRO
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 30 09:26:42 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







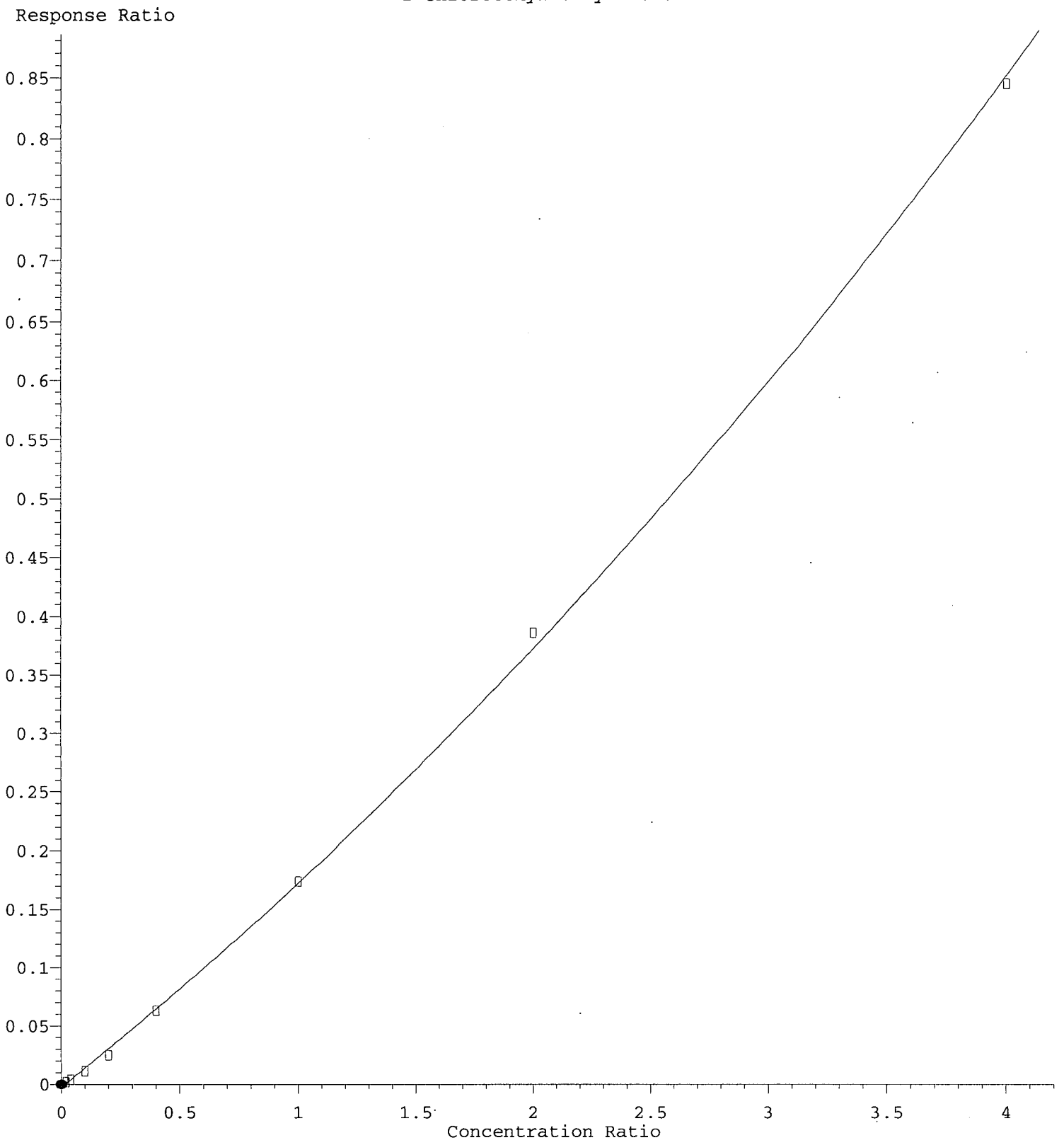
TIC: VG20042810.D\data.ms

(23) Vinyl Acetate

5.484min (-0.018) 1.24 ug/L m

response 585

Ion	Exp%	Act%
43.00	100.00	100.00
86.00	10.60	0.00
42.00	8.70	22.41
0.00	0.00	0.00



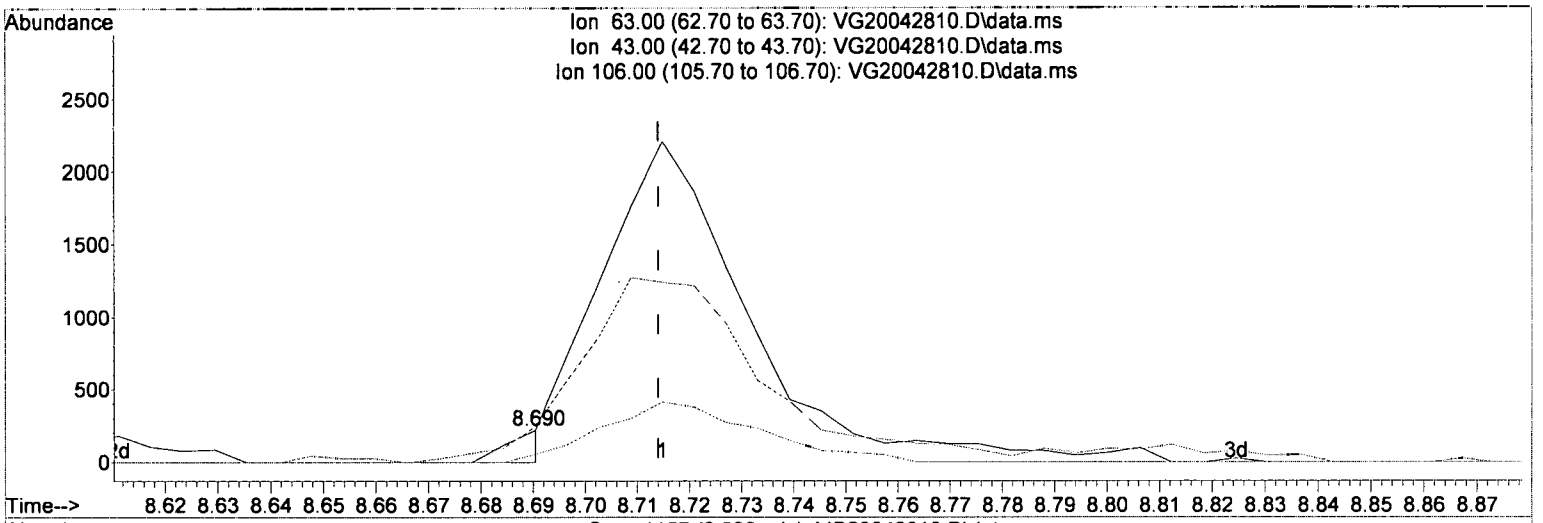
Intercept LMDR
4/30/2021

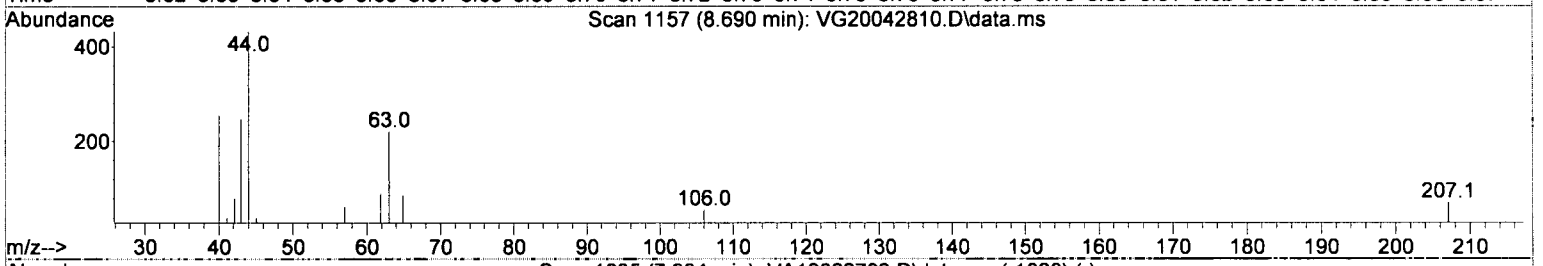
R = 1.29e-002 A*A + 1.62e-001 A - 2.45e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 15:44:50 2020

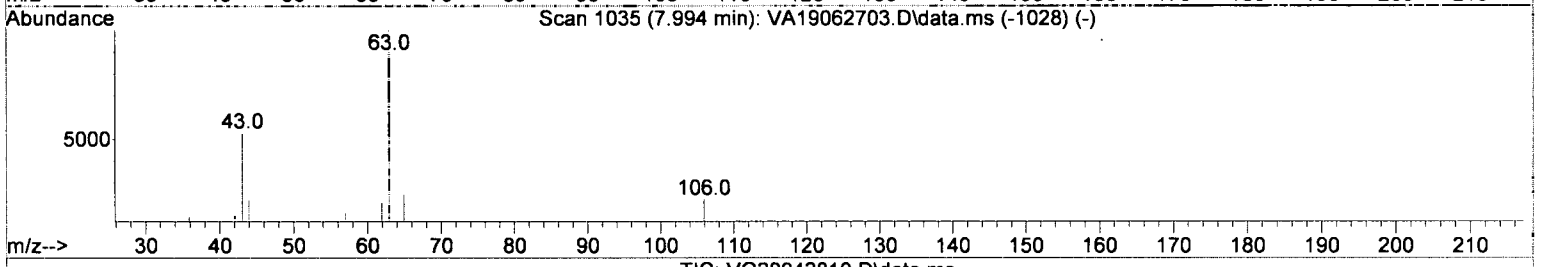
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042810.D
Acq On : 28 Apr 2020 6:04 pm
Operator : PS
Sample : 0D28059-CAL6
Misc : 1X 5mL 5 PPB VOCRO
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 30 09:26:42 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







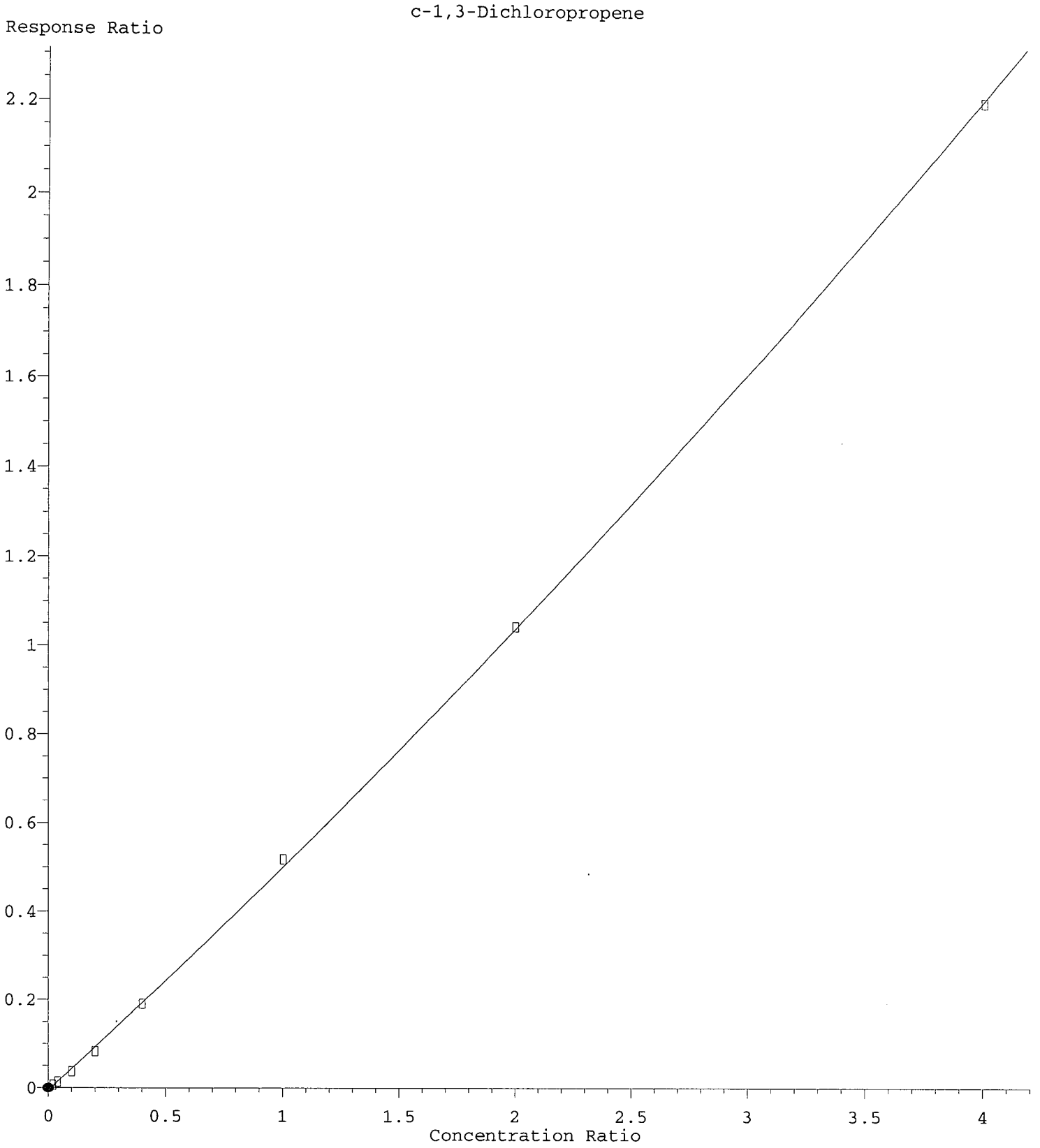
TIC: VG20042810.D\data.ms

(46) 2-Chloroethyl Vinyl Ether

8.690min (-0.024) 0.85 ug/L m

response 124

Ion	Exp%	Act%
63.00	100.00	100.00
43.00	282.80	112.22#
106.00	0.00	25.34
0.00	0.00	0.00



Intercept > MDL

MDL ↑ MRL ↑

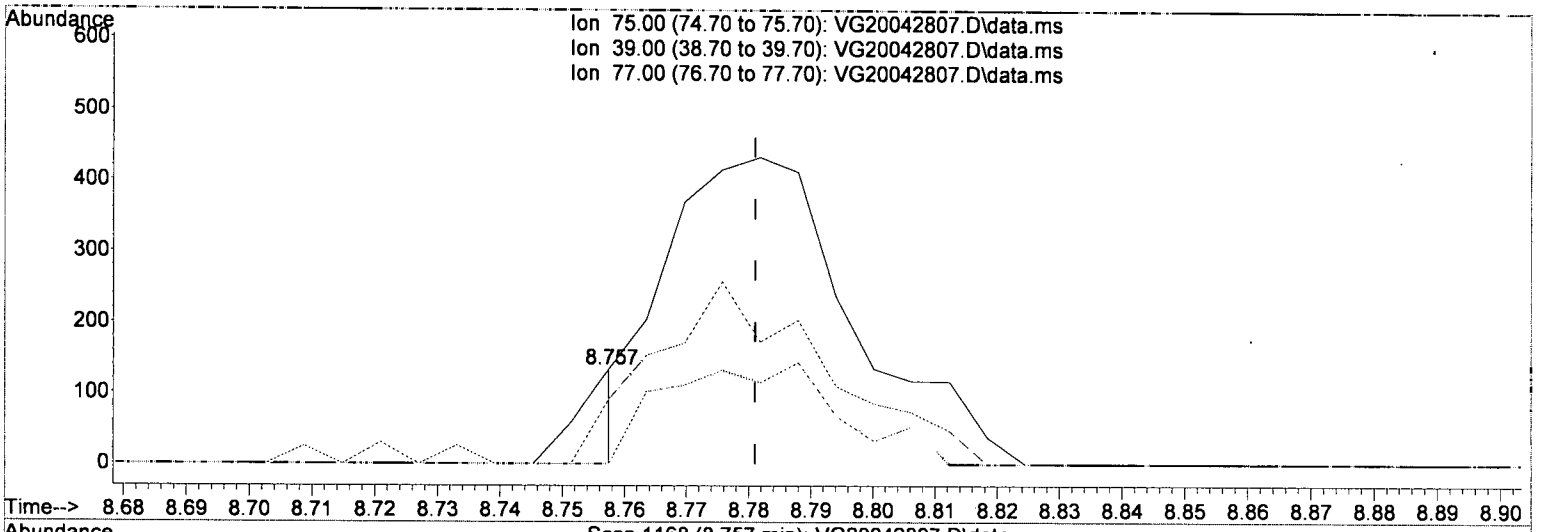
1ppb/2ppb

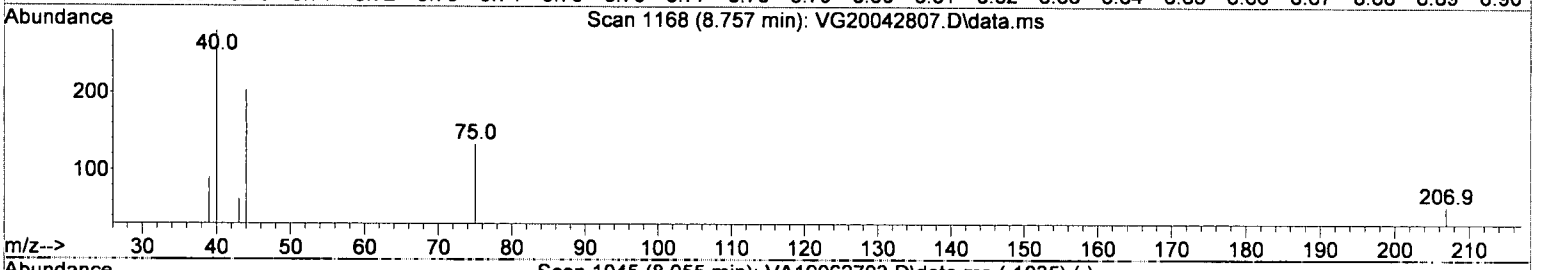
R = 1.59e-002 A*A + 4.20e-001 A + 5.66e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 15:49:14 2020

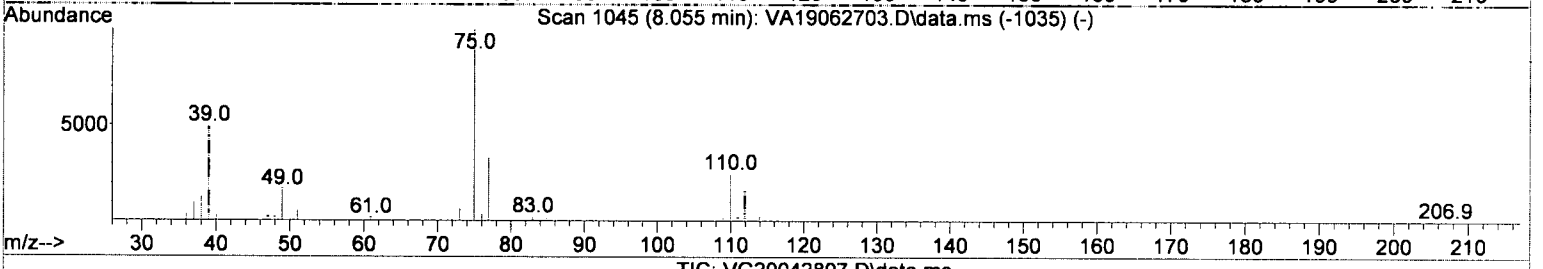
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 30 09:15:46 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







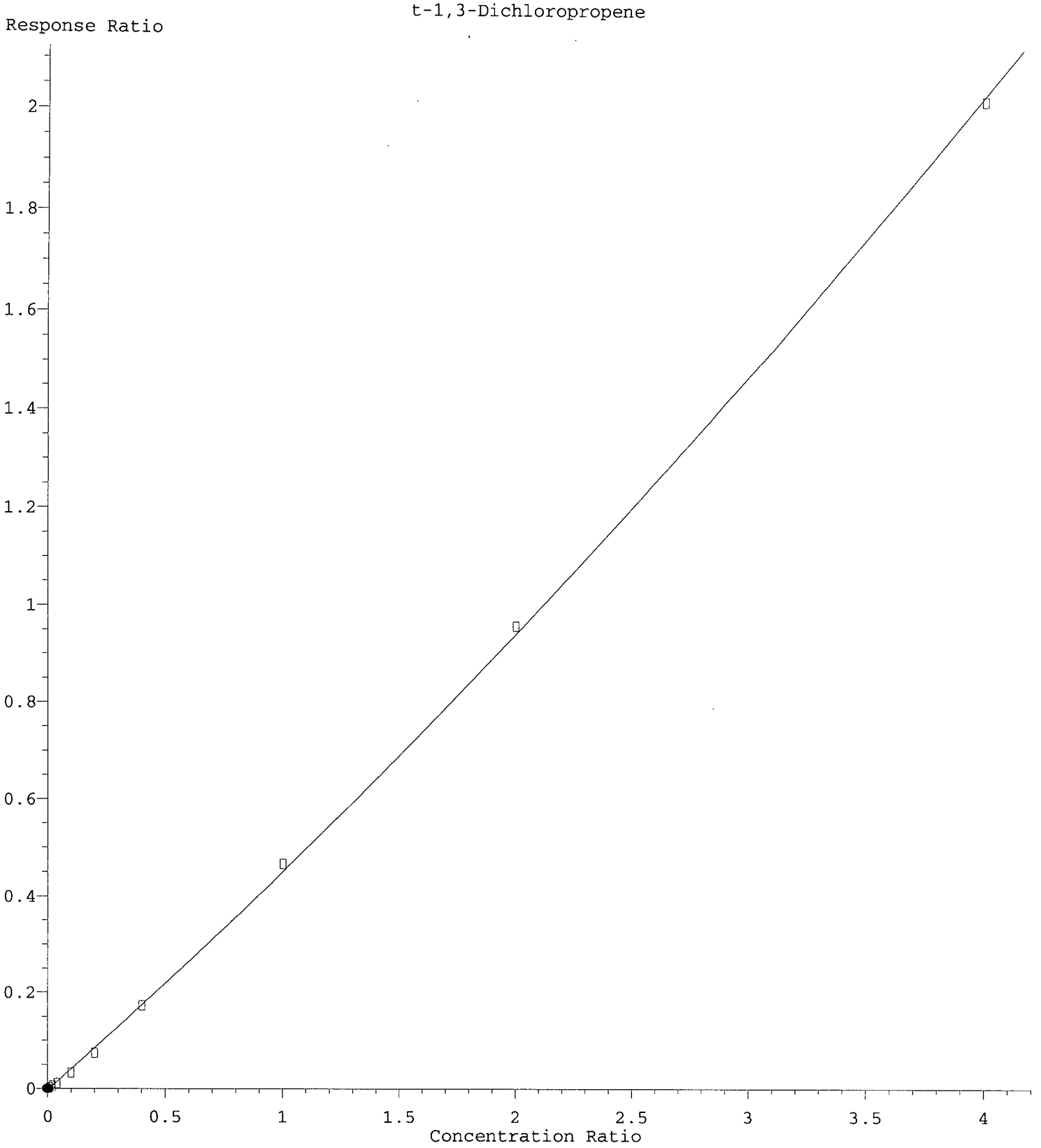
TIC: VG20042807.D\data.ms

(47) c-1,3-Dichloropropene

8.757min (-0.024) 0.61 ug/L m

response 70

Ion	Exp%	Act%
75.00	100.00	100.00
39.00	50.30	67.91
77.00	31.90	0.00#
0.00	0.00	0.00



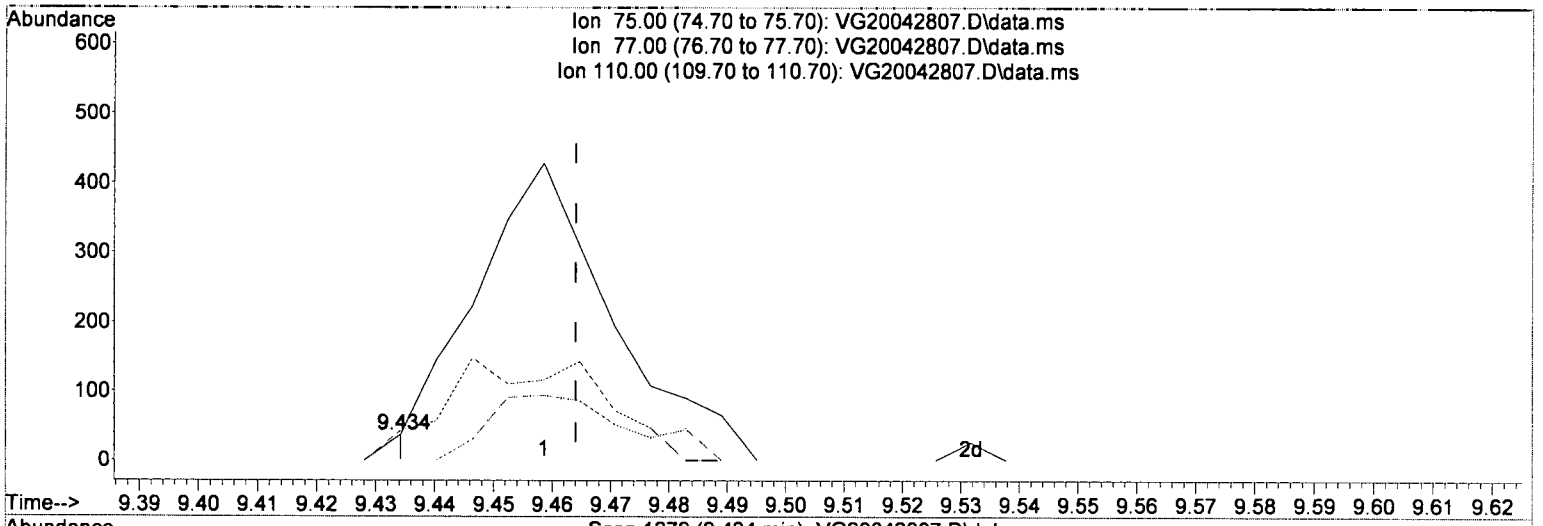
Intercept ZERO
4/30/2020

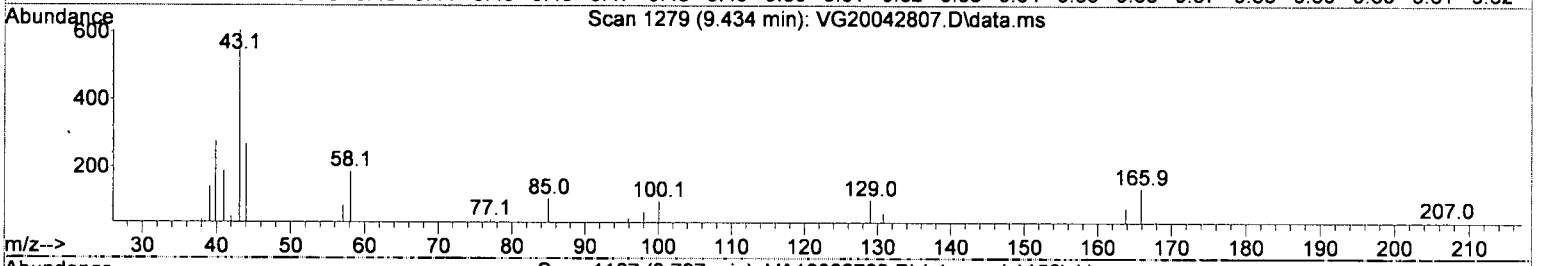
R = 1.86e-002 A*A + 4.34e-001 A - 3.68e-005
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 15:51:43 2020

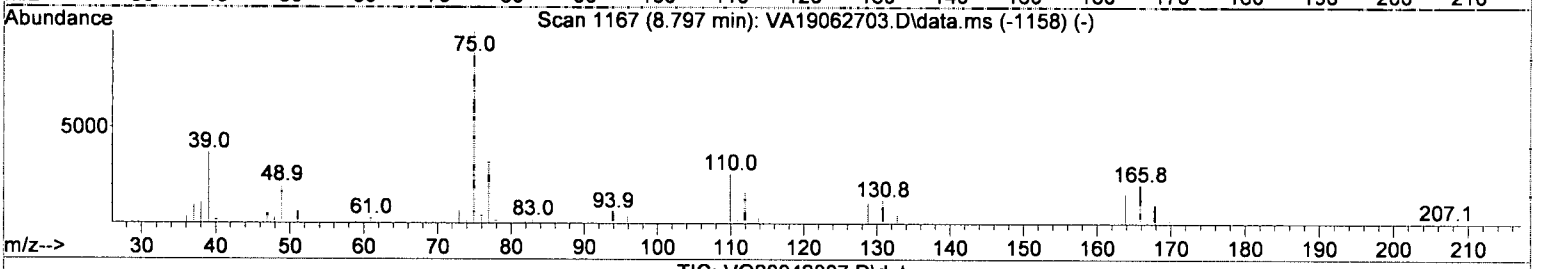
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 30 09:15:46 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







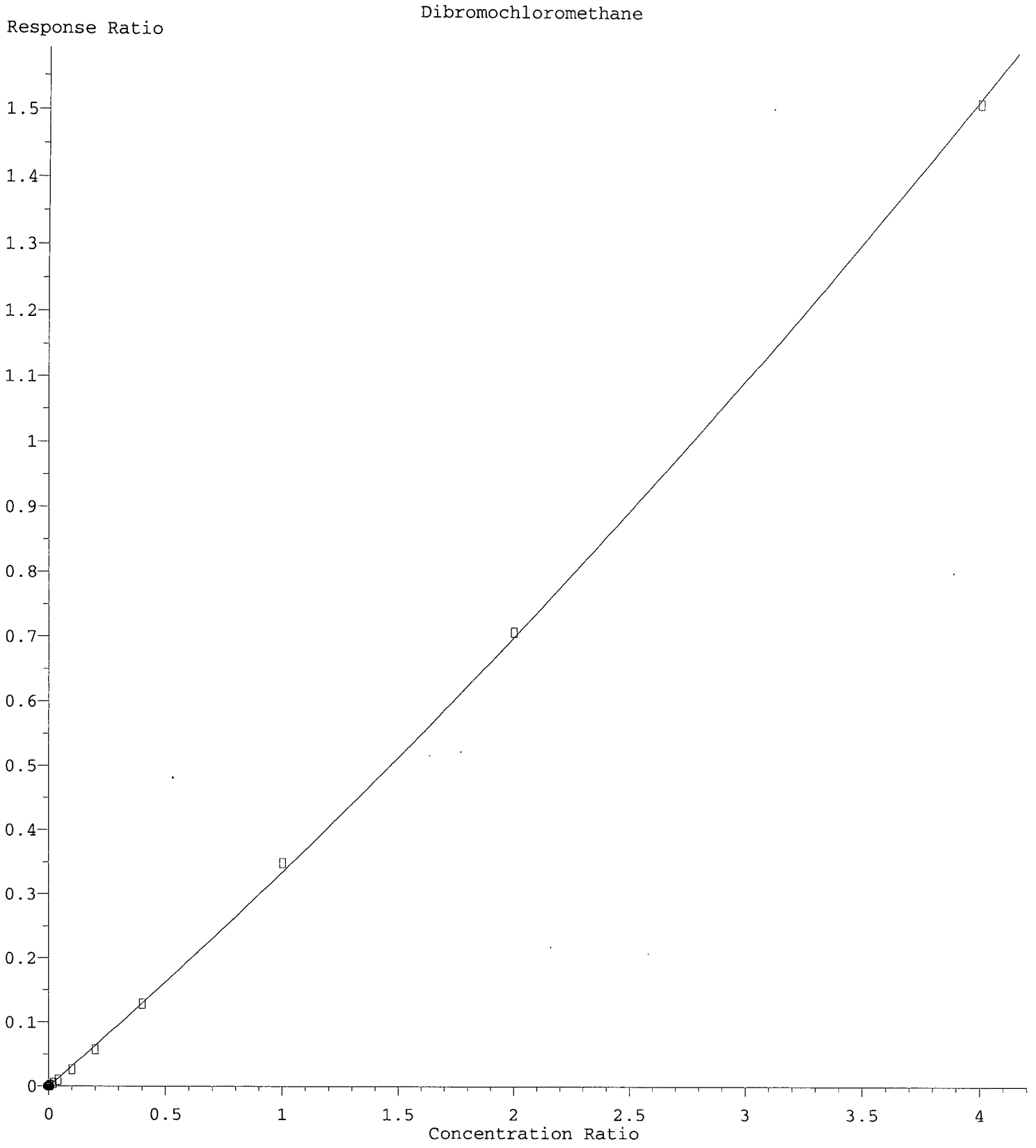
TIC: VG20042807.D\data.ms

(52) t-1,3-Dichloropropene

9.434min (-0.030) 0.35 ug/L m

response 14

Ion	Exp%	Act%
75.00	100.00	100.00
77.00	33.20	116.22#
110.00	25.60	0.00
0.00	0.00	0.00



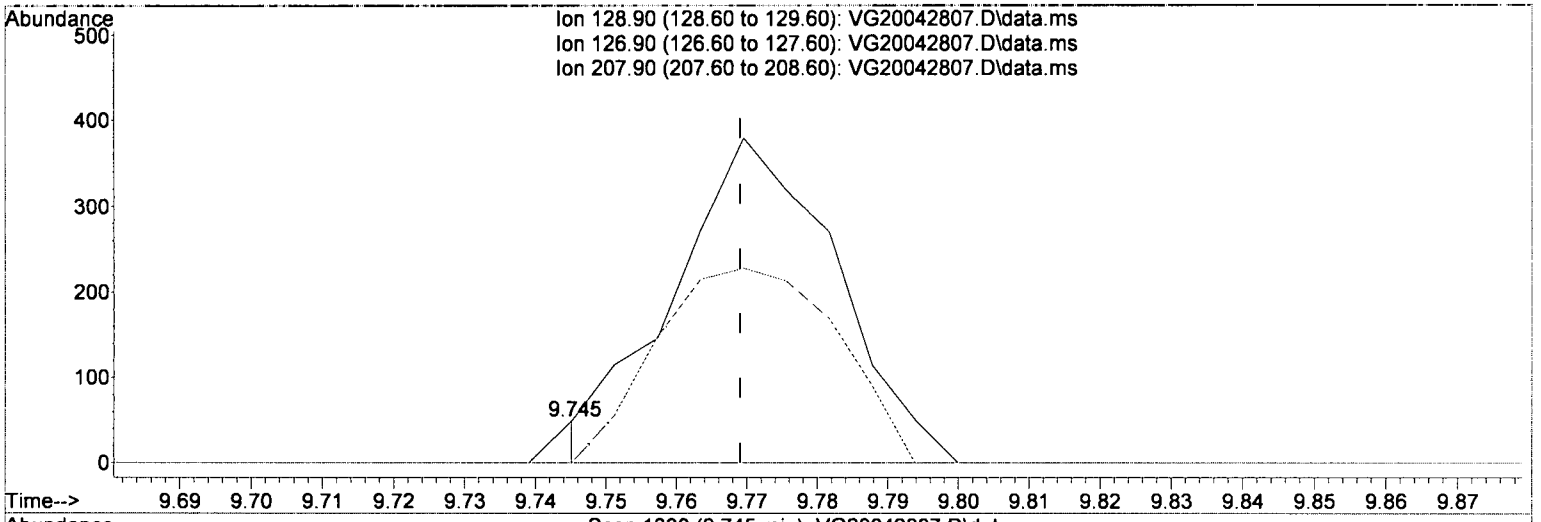
Intercept CMDN
4/30/2021

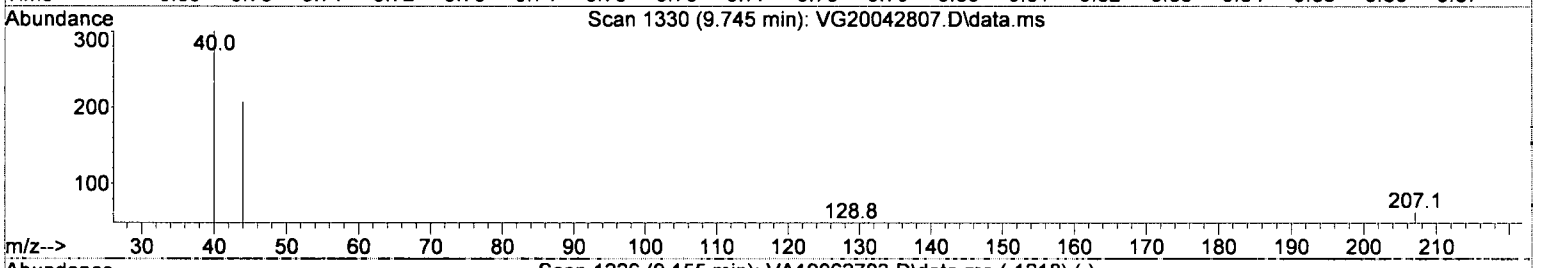
R = 1.52e-002 A*A + 3.20e-001 A 1.93e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 15:54:09 2020

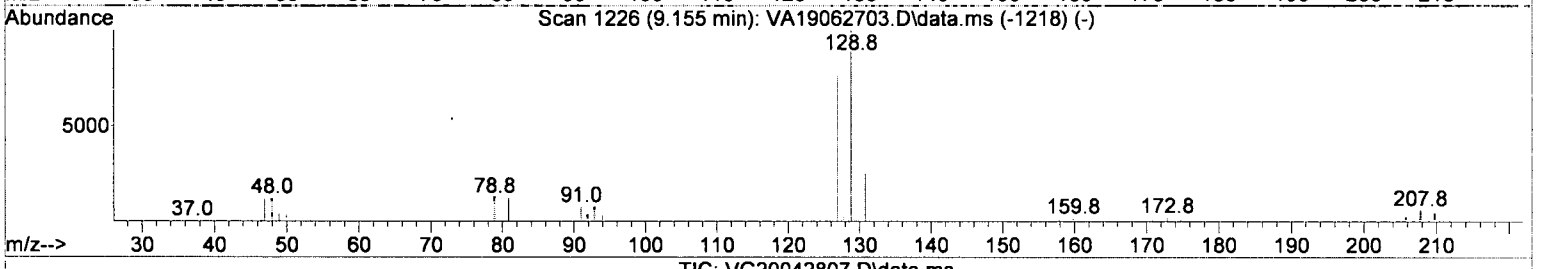
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 30 09:15:46 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







TIC: VG20042807.D\data.ms

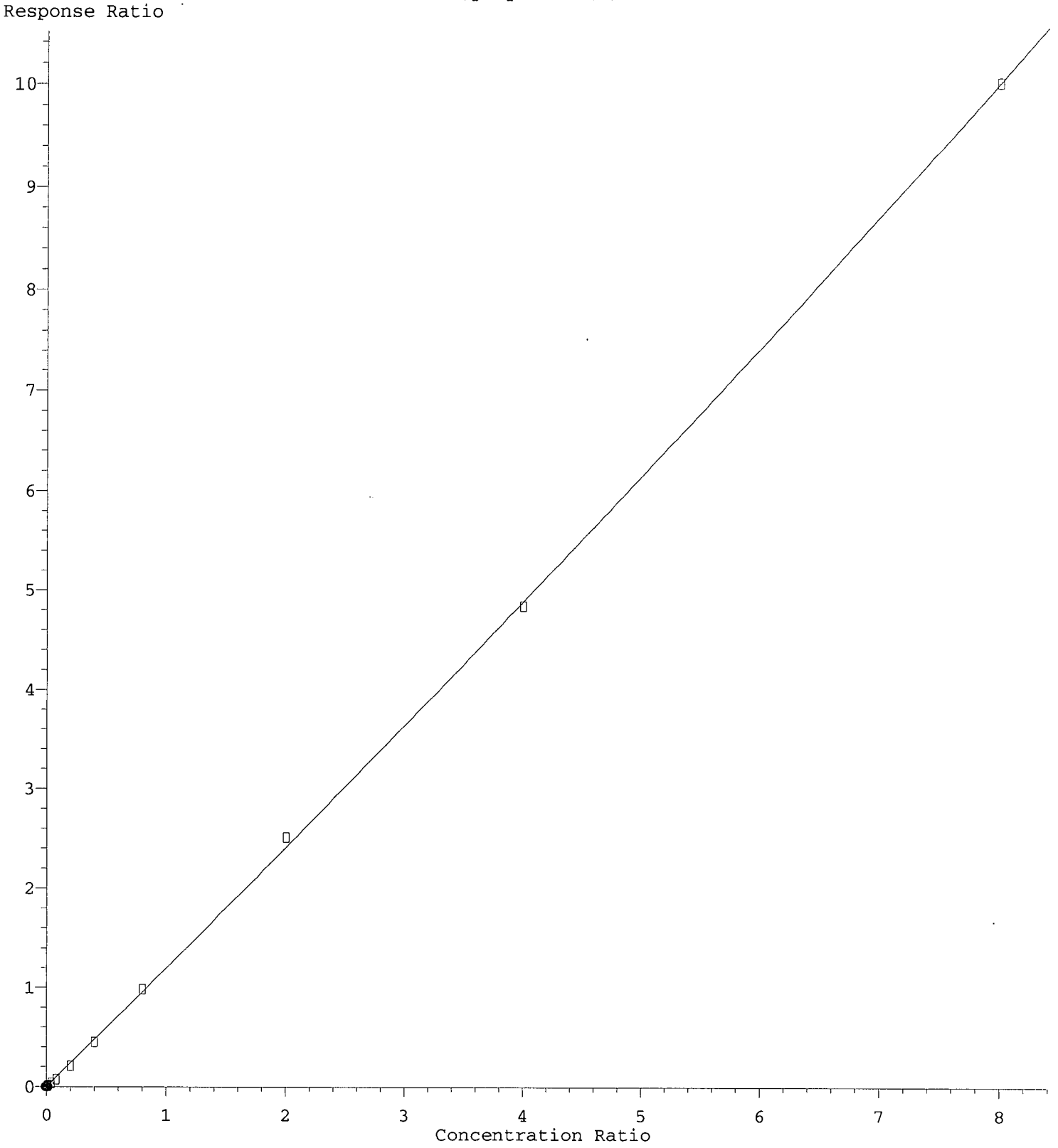
(54) Dibromochloromethane

9.745min (-0.024) 0.17 ug/L m

response 18

Ion	Exp%	Act%
128.90	100.00	100.00
126.90	77.40	0.00#
207.90	7.30	0.00
0.00	0.00	0.00

m,p-Xylenes (2)



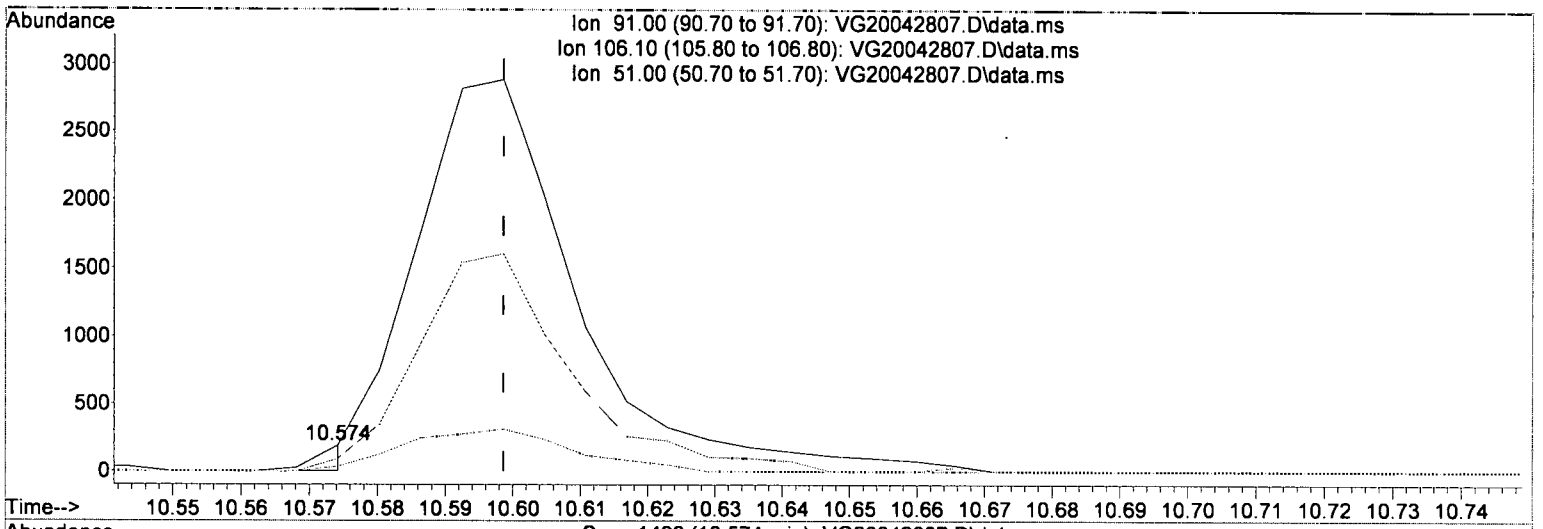
Intercept 4/MDL
4/30/2020

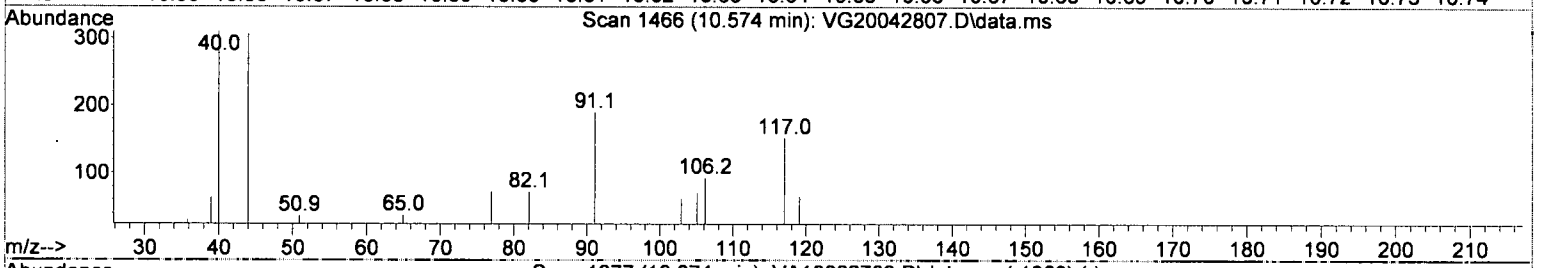
R = 7.15e-003 A*A + 1.19e+000 A - 3.95e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 16:04:43 2020

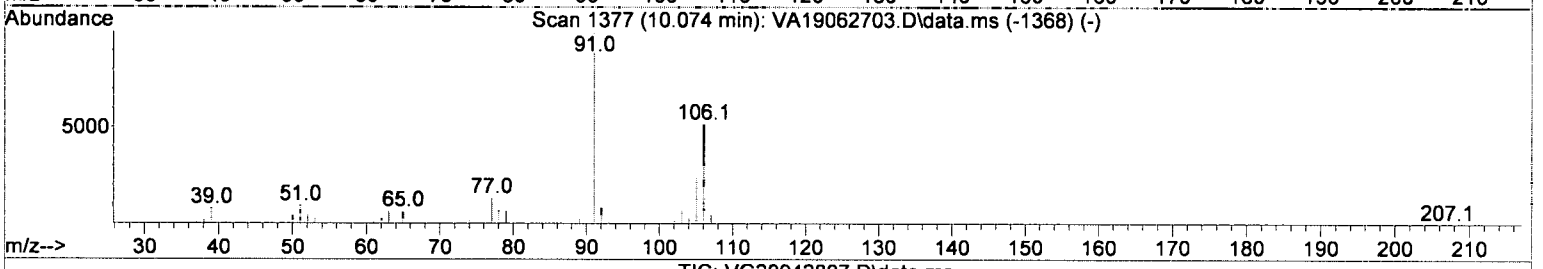
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 30 09:15:46 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







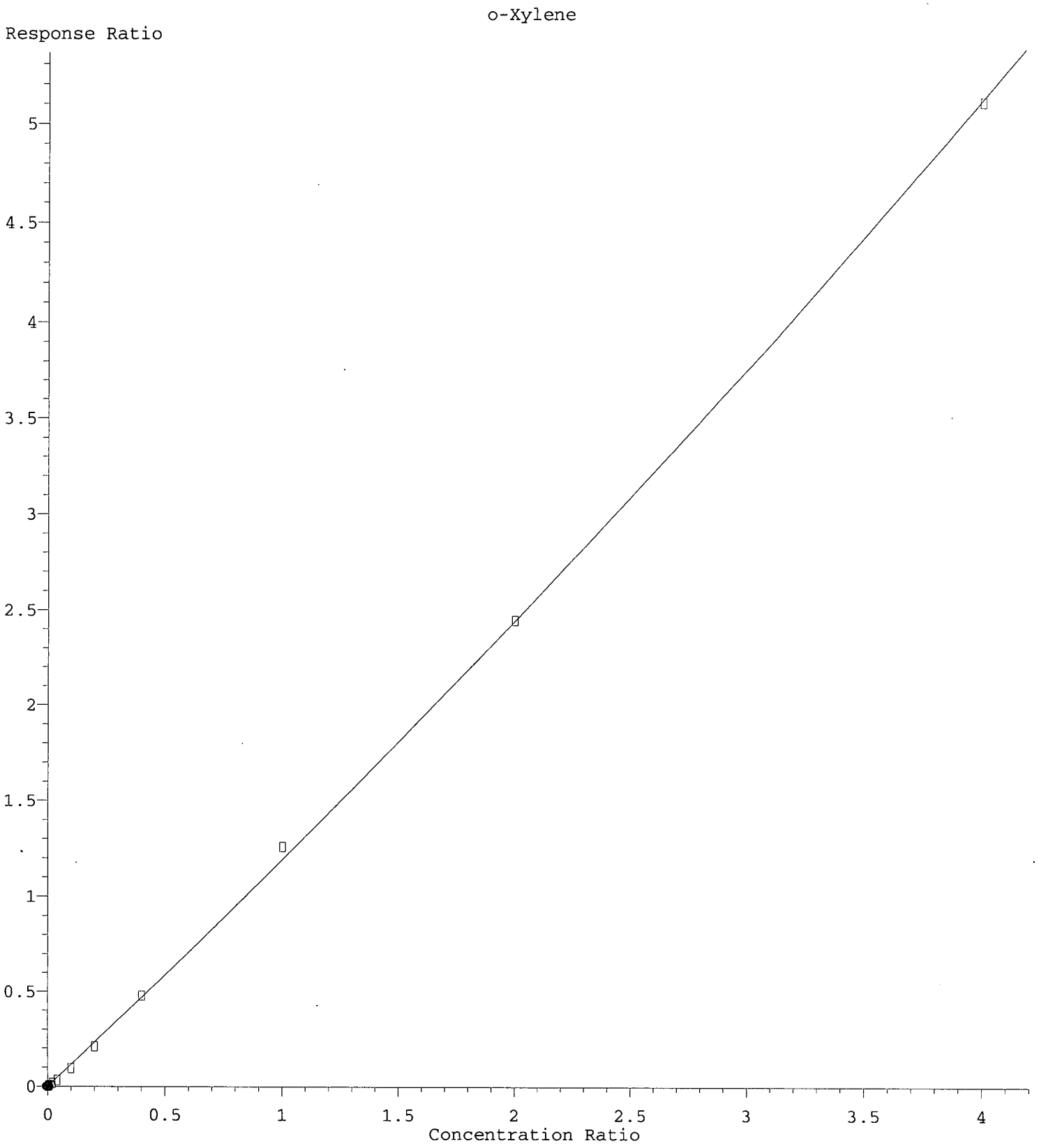
TIC: VG20042807.D\data.ms

(61) m,p-Xylenes (2)

10.574min (-0.024) 0.15 ug/L m

response 79

Ion	Exp%	Act%
91.00	100.00	100.00
106.10	51.80	48.95
51.00	9.80	18.95
0.00	0.00	0.00



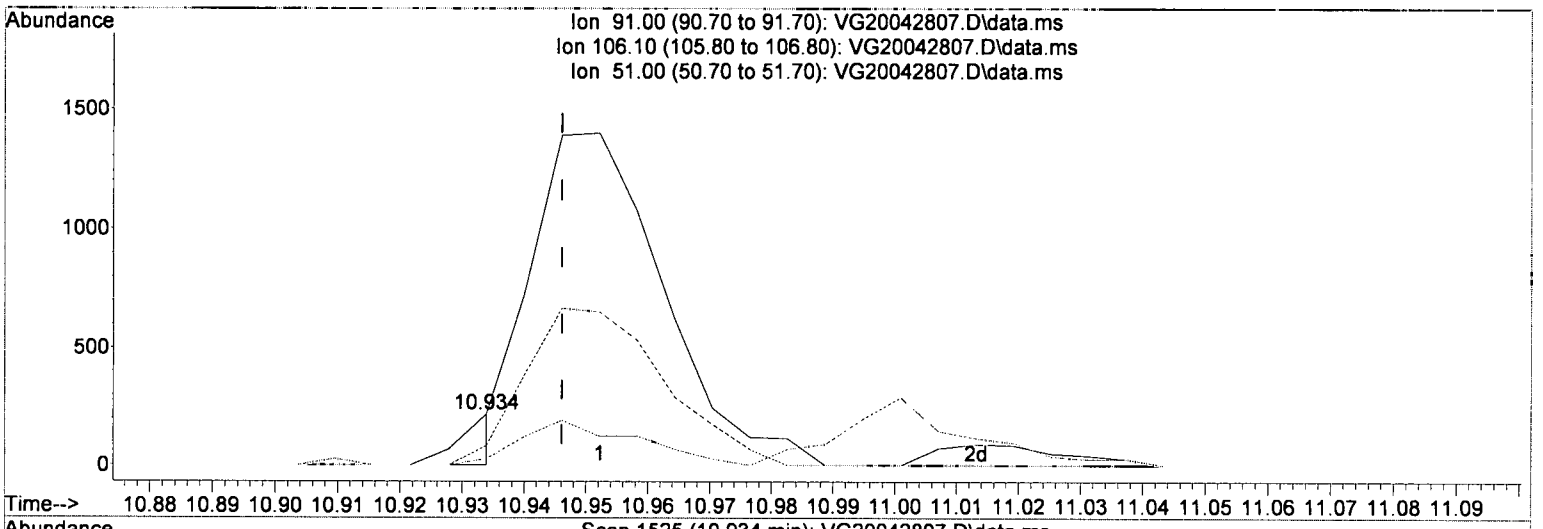
Intercept ≤ MDL
4/30/2020

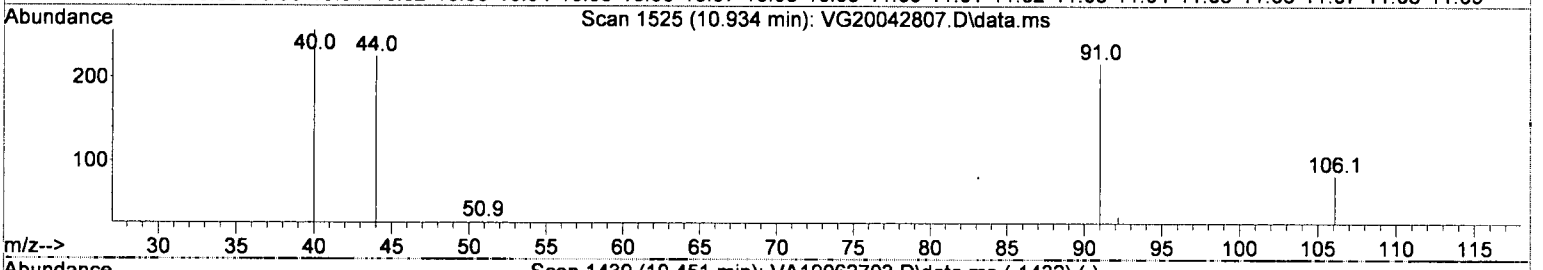
R = 2.81e-002 A*A +07.14.27 Amount EA, LC1 Case PCRD_DG 2019 - 4a-b. DOC-CAP Testing Cores Page 432 of 550
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 16:04:43 2020

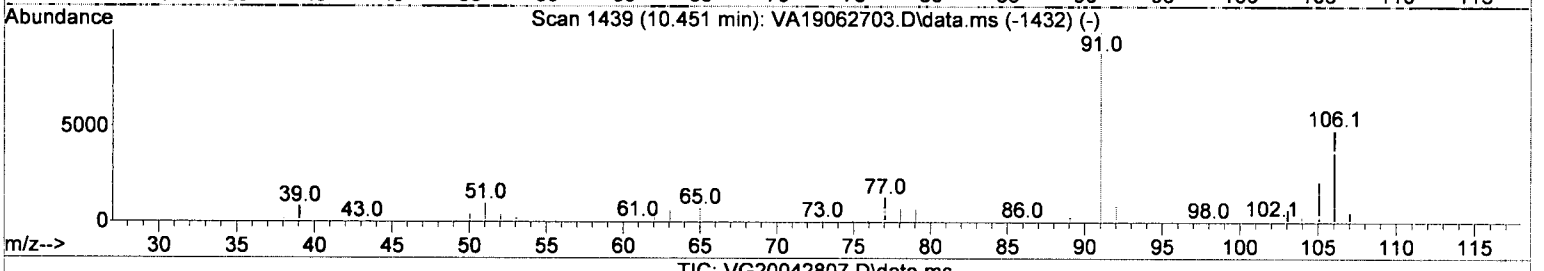
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 30 09:15:46 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







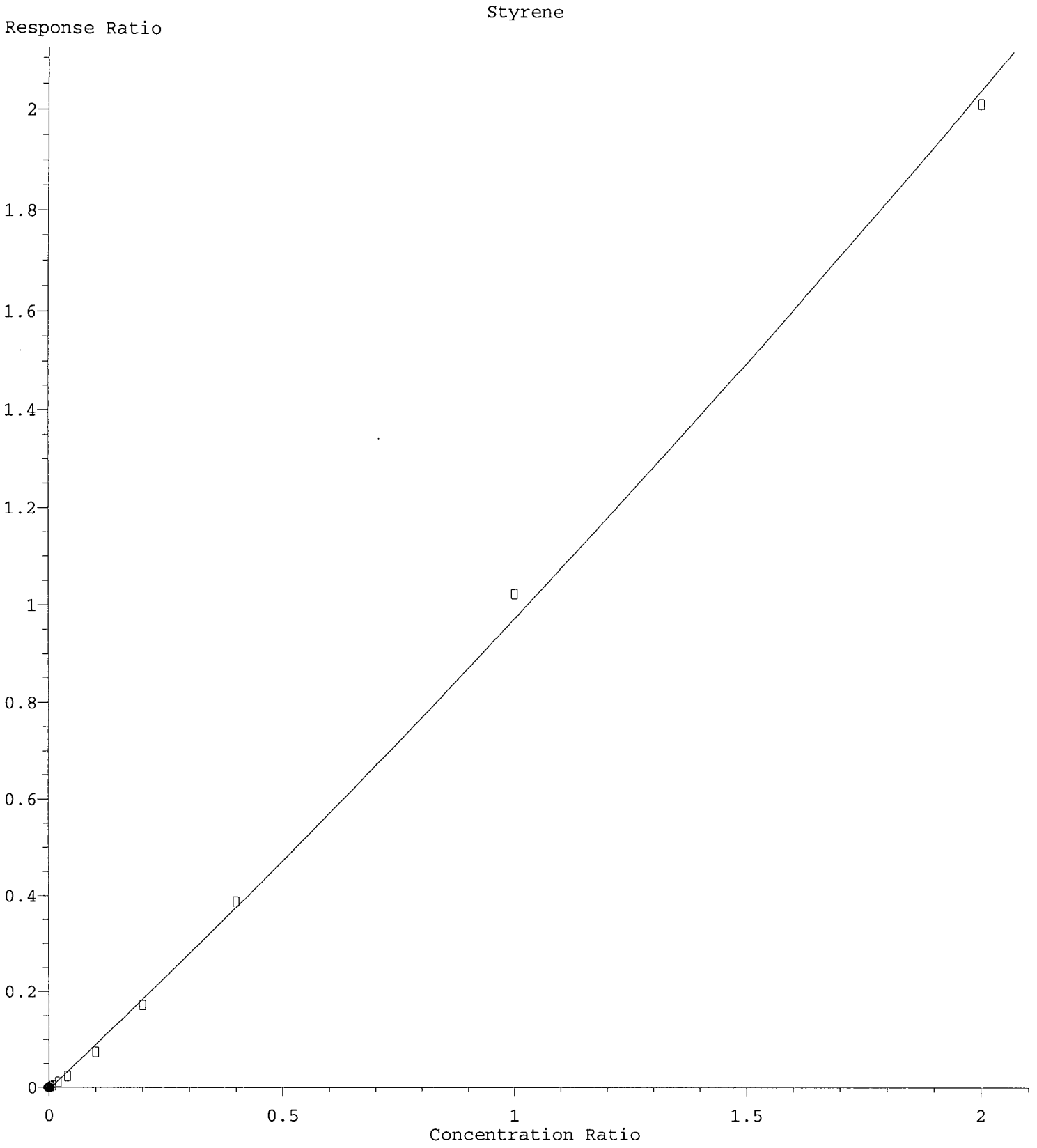
TIC: VG20042807.D\data.ms

(62) o-Xylene

10.934min (-0.012) 0.10 ug/L m

response 105

Ion	Exp%	Act%
91.00	100.00	100.00
106.10	49.80	38.07
51.00	9.70	12.84
0.00	0.00	0.00



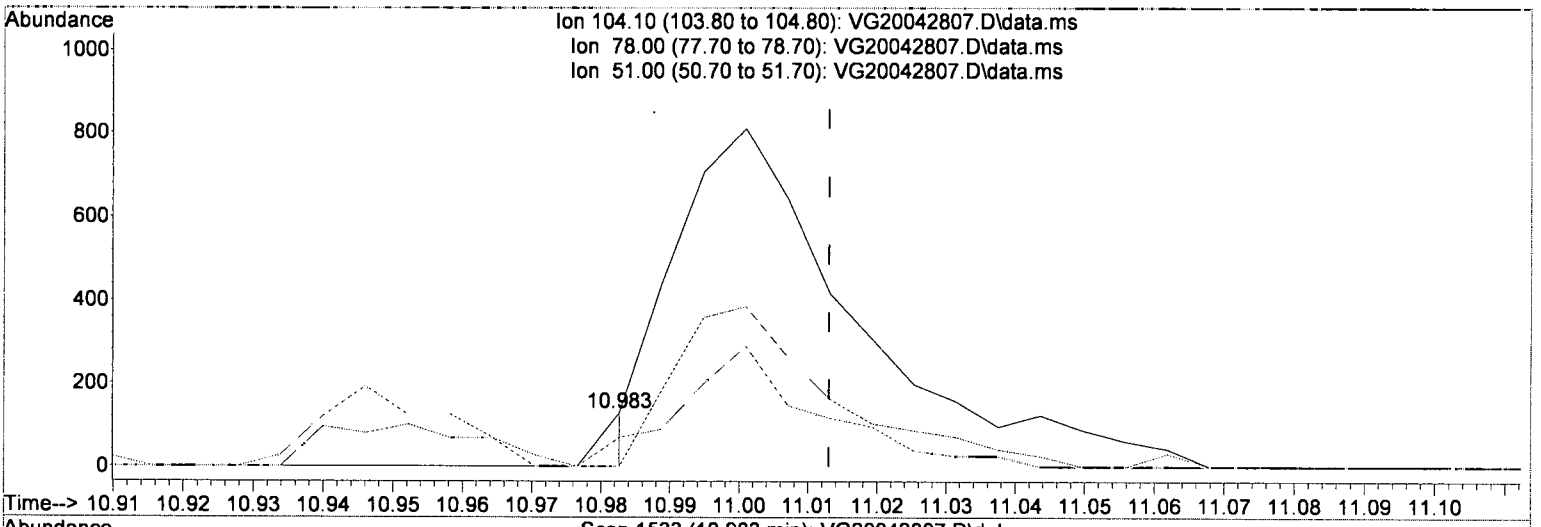
Intercept 2 MDL
4/30/2020

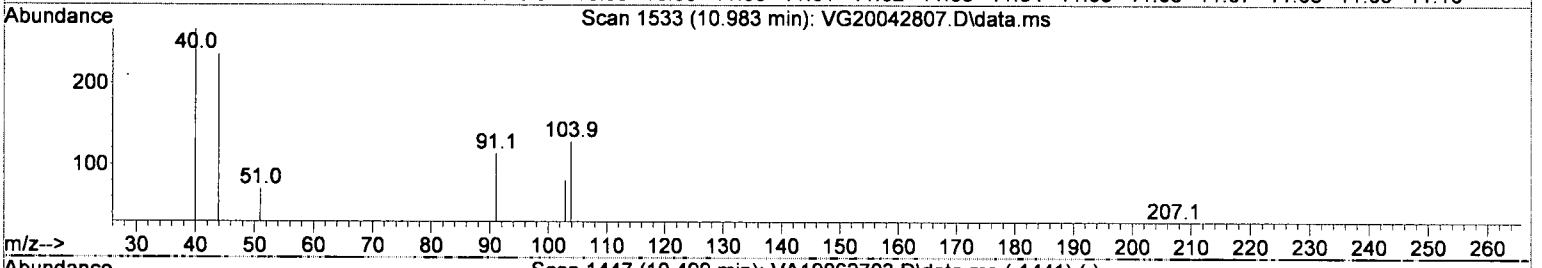
R = 4.90e-002 A*A + 9.27e-001 A - 3.78e-005
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 16:04:43 2020

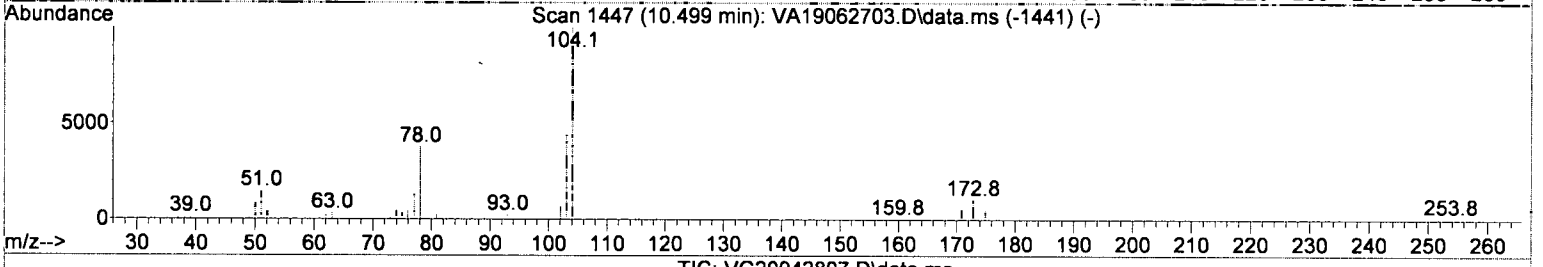
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 30 09:15:46 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







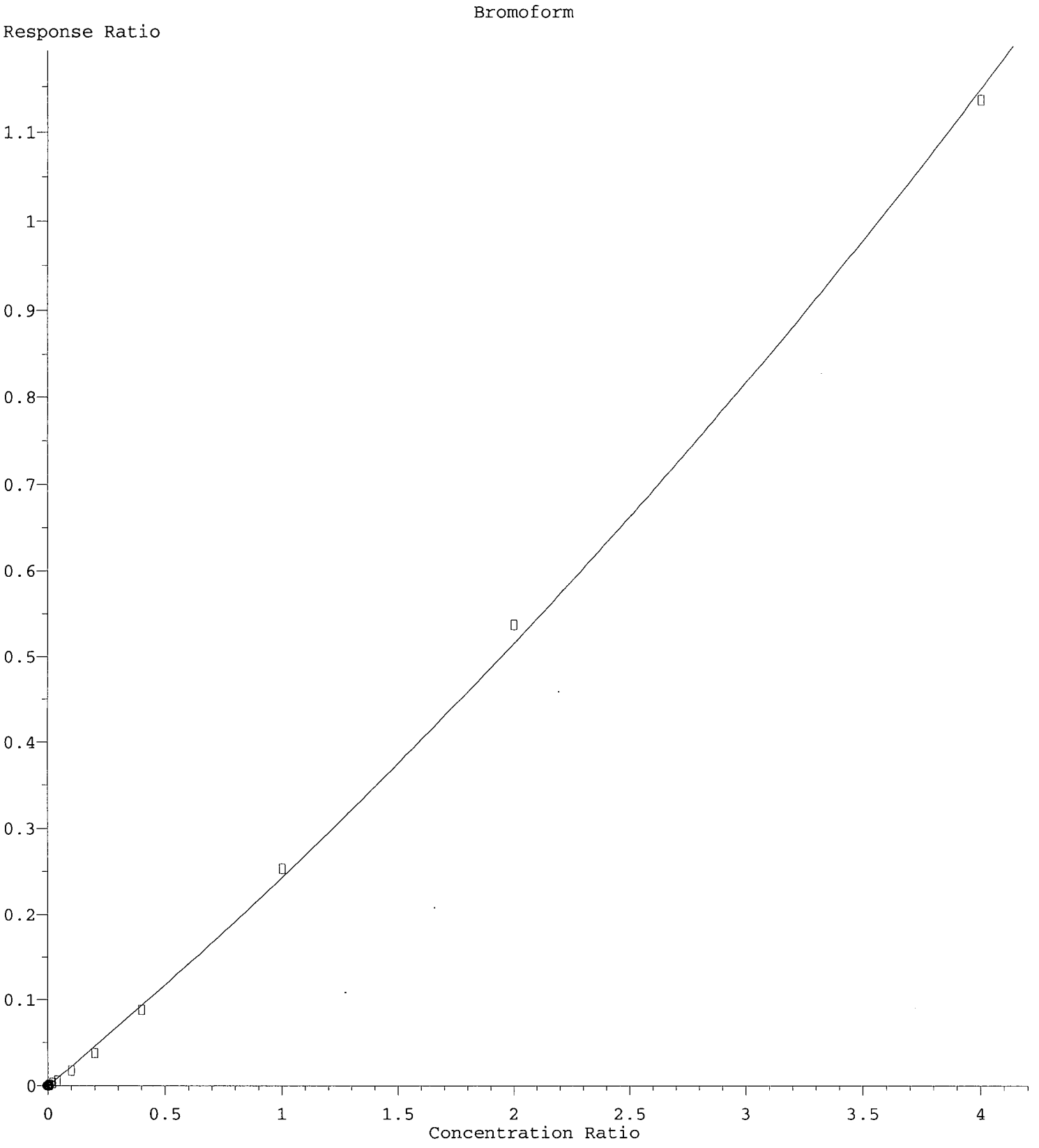
TIC: VG20042807.D\data.ms

(63) Styrene

10.983min (-0.030) 0.21 ug/L m

response 47

Ion	Exp%	Act%
104.10	100.00	100.00
78.00	42.20	0.00#
51.00	24.70	54.26
0.00	0.00	0.00



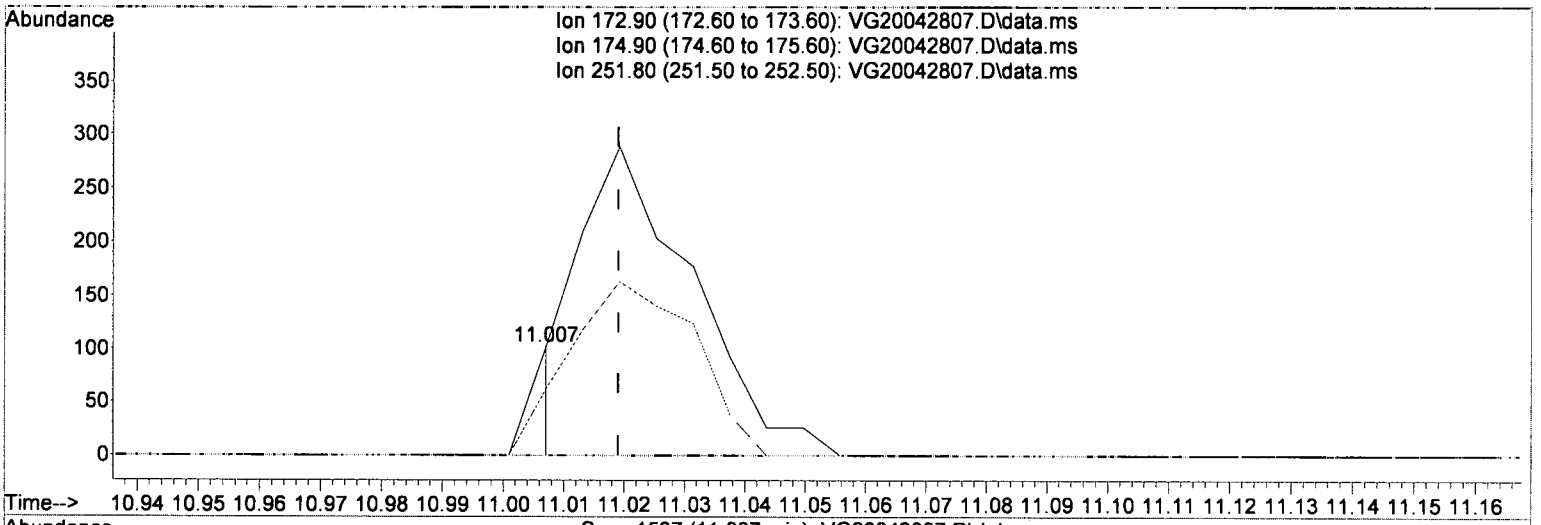
Intercept LMDL
4/30/2020

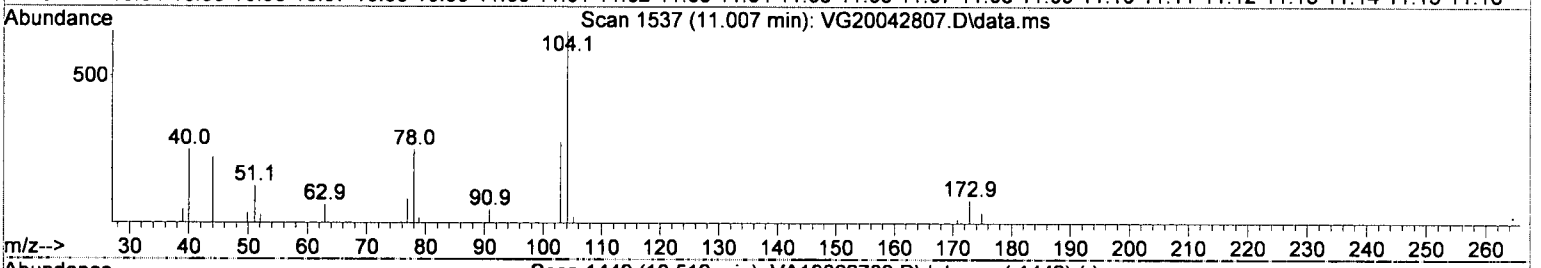
R = 1.44e-002 A*A + 2.29e-001 A - 9.54e-004
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 16:07:21 2020

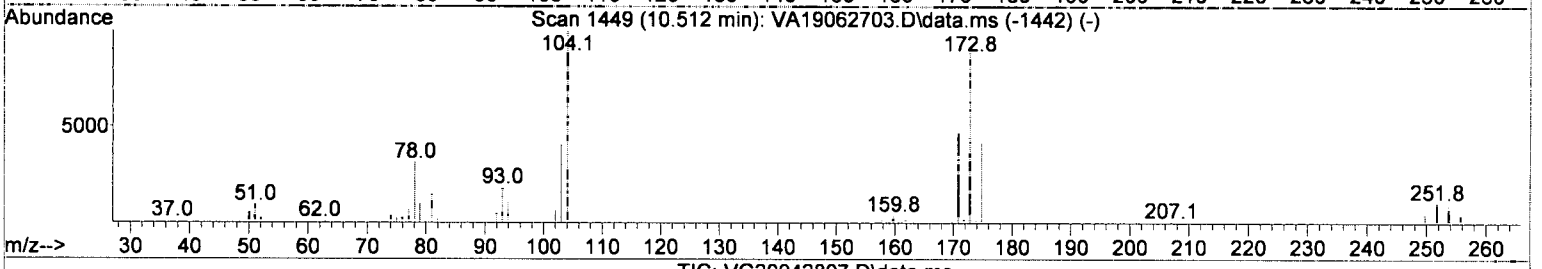
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 30 09:15:46 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







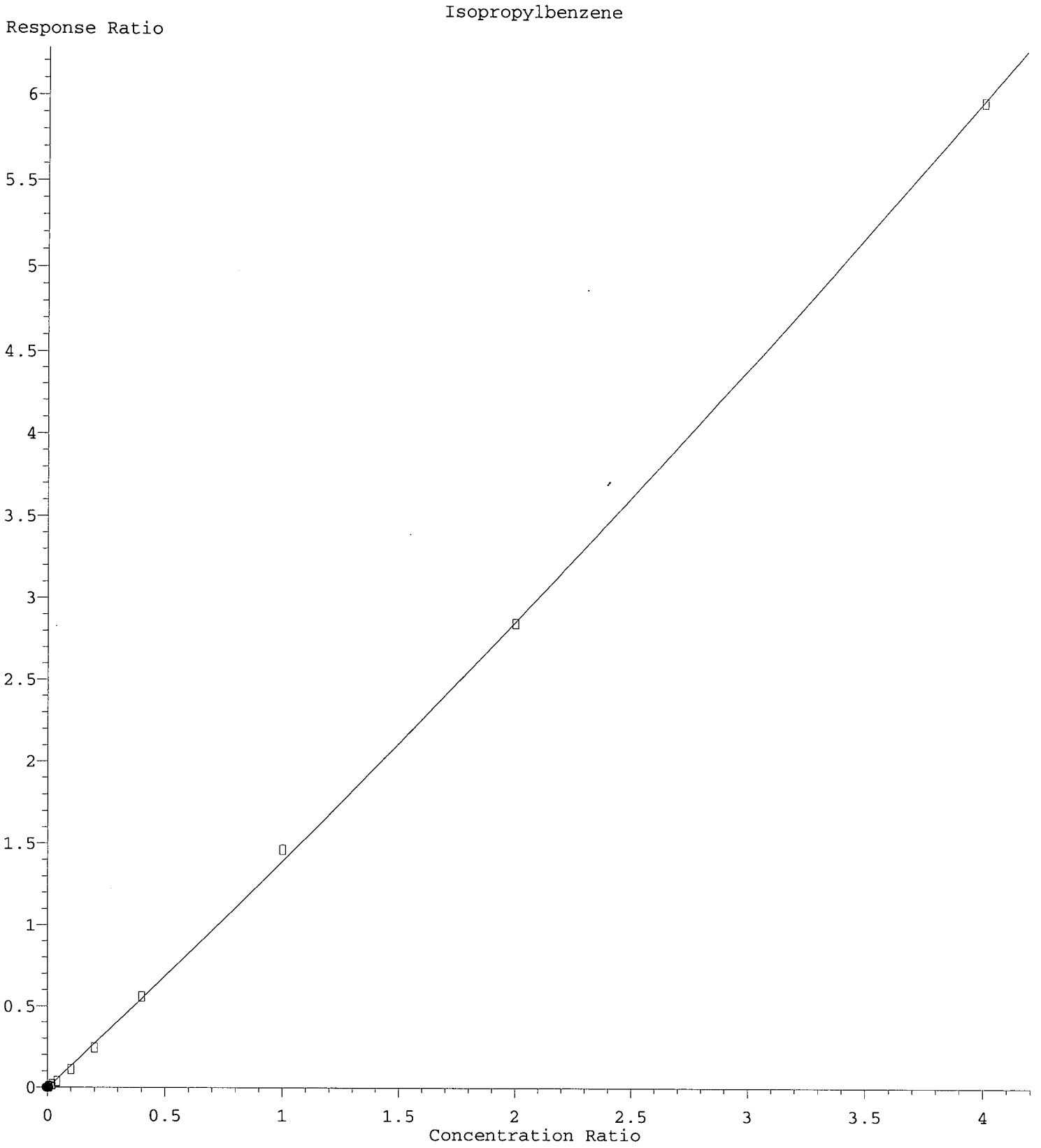
TIC: VG20042807.D\data.ms

(64) Bromoform (P)

11.007min (-0.012) 0.23 ug/L m

response 37

Ion	Exp%	Act%
172.90	100.00	100.00
174.90	48.50	60.78
251.80	13.90	0.00
0.00	0.00	0.00



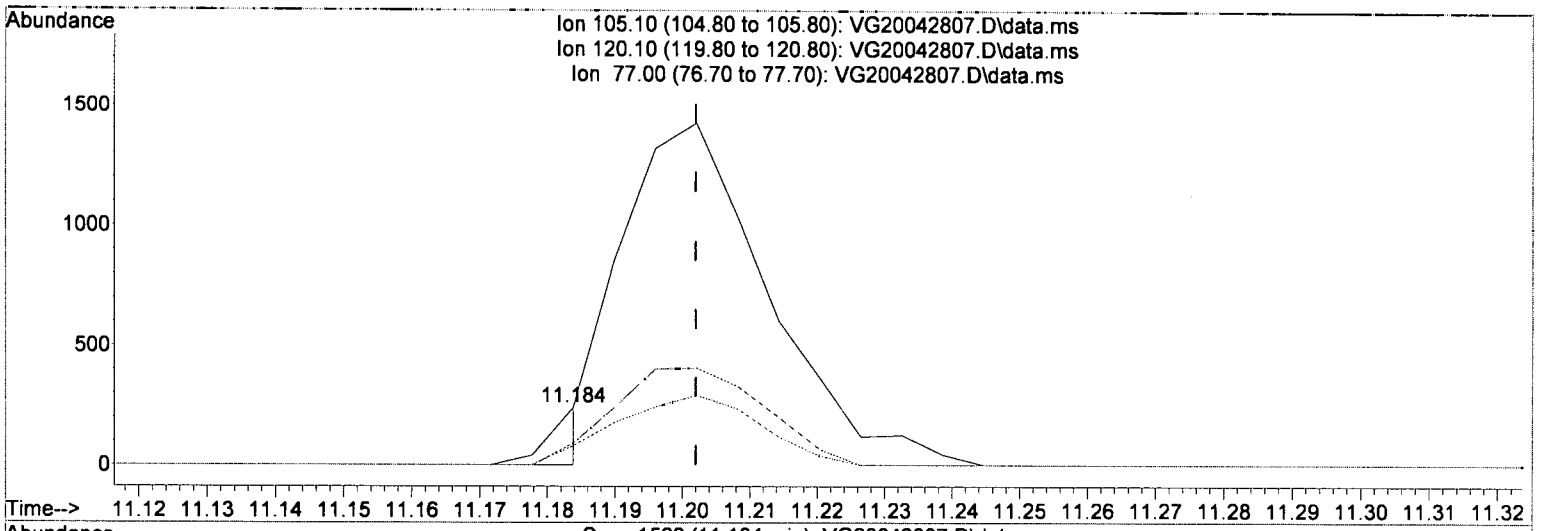
Intercept LMK
4/30/2020

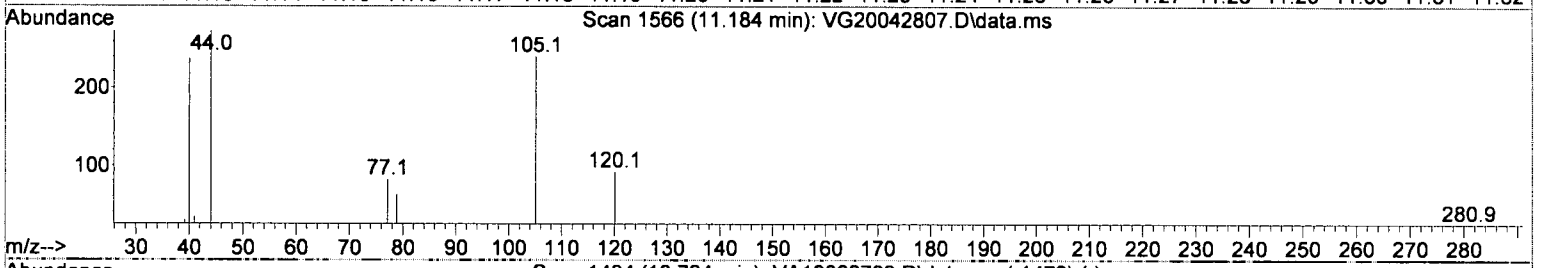
R = 3.40e-002 A*A +07 1.36e+000 A + 5.02e-005
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 16:08:05 2020

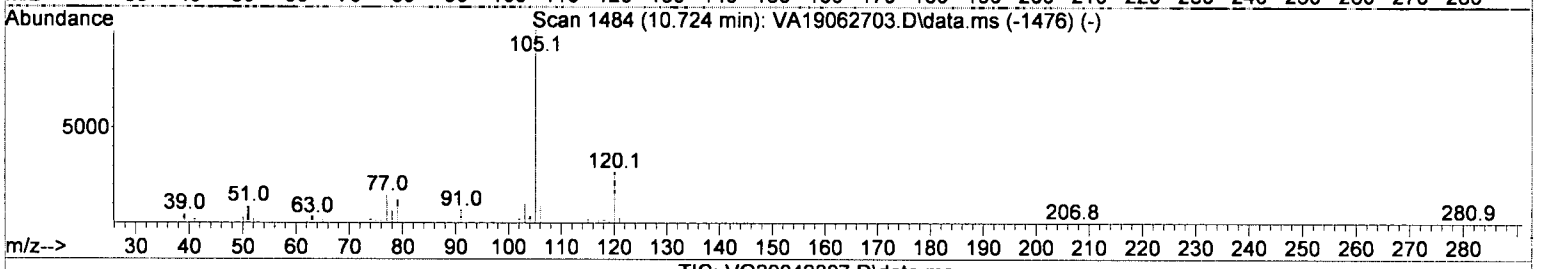
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 30 09:15:46 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







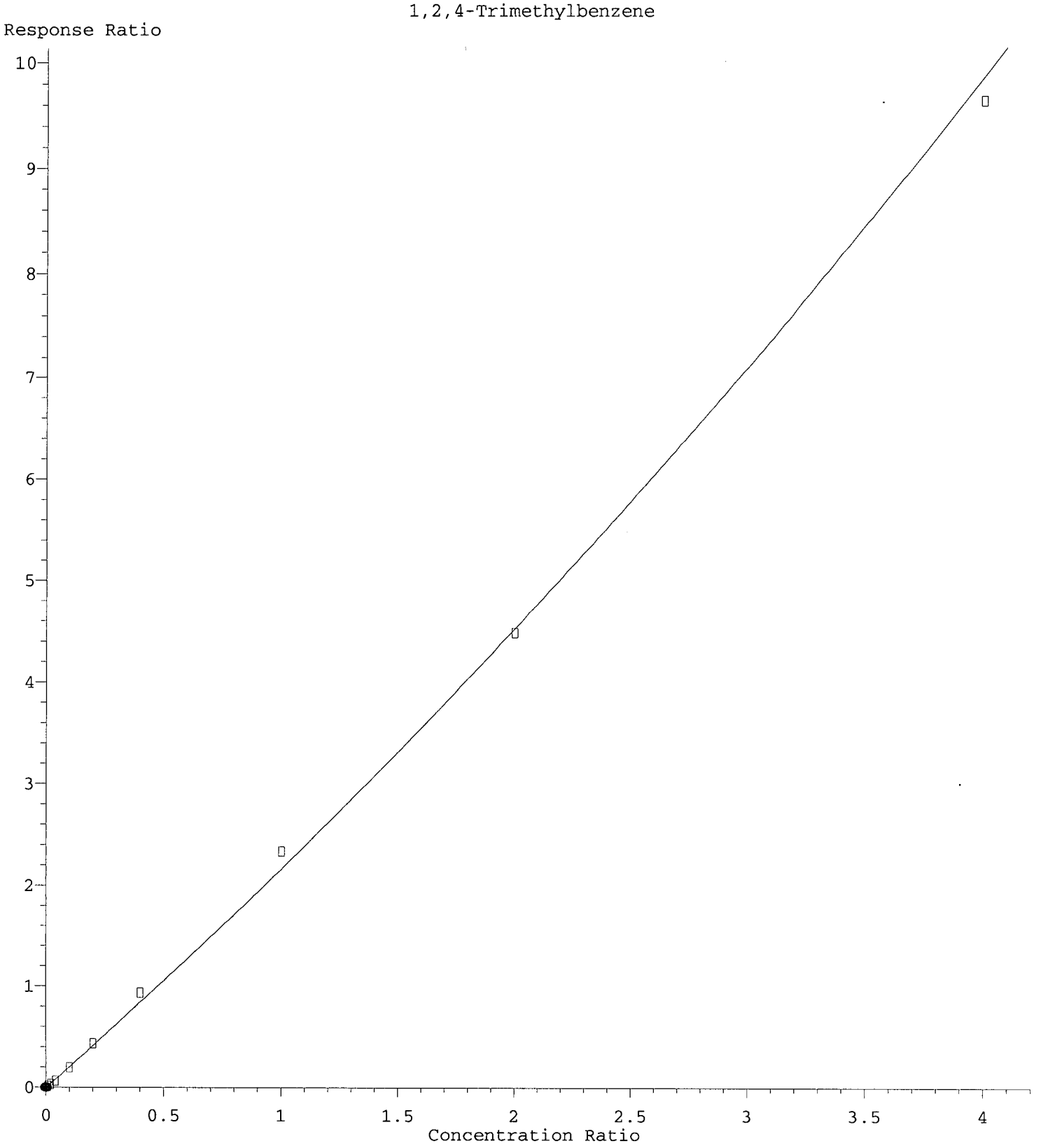
TIC: VG20042807.D\data.ms

(65) Isopropylbenzene

11.184min (-0.018) 0.19 ug/L m

response 103

Ion	Exp%	Act%
105.10	100.00	100.00
120.10	27.80	38.17
77.00	14.50	34.02
0.00	0.00	0.00



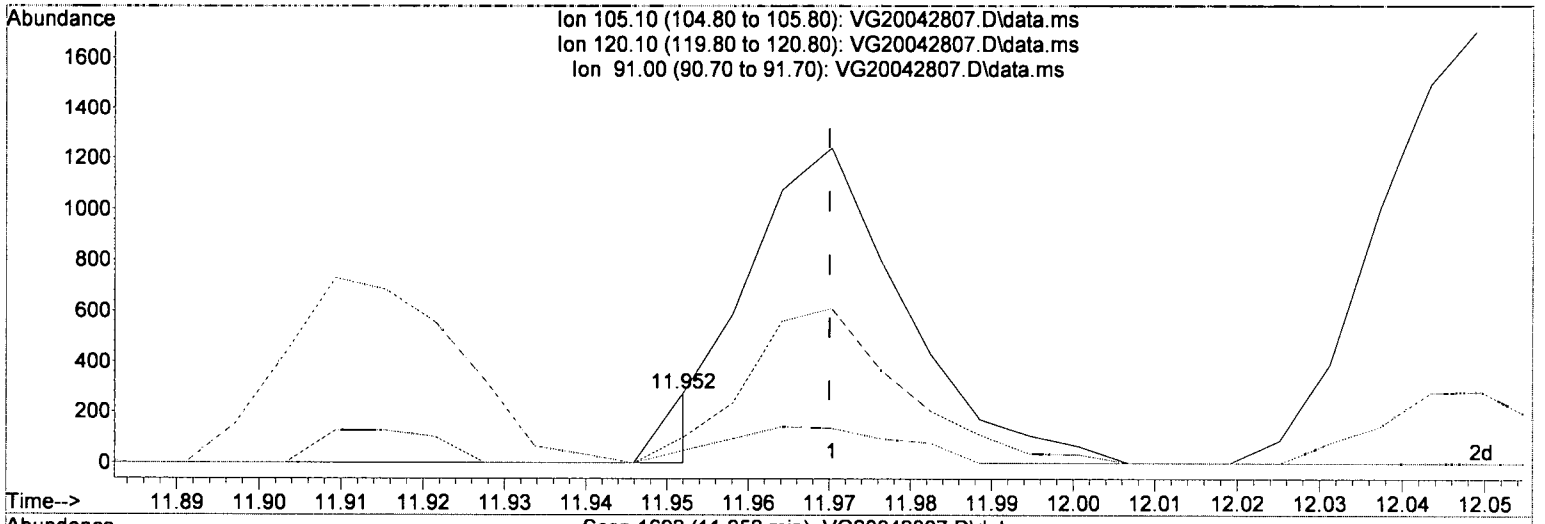
Intercept CMIX
4/30/2021

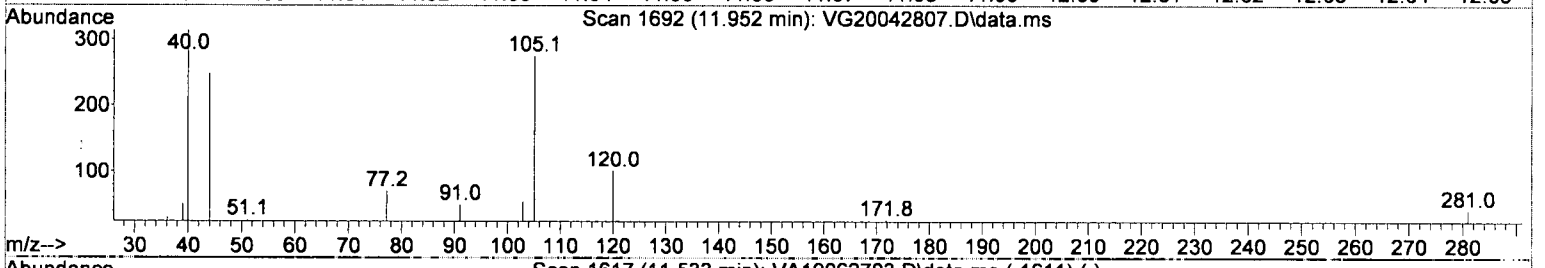
R = 1.01e-001 A*A + 2.67e+000 A + 6.31e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 16:11:54 2020

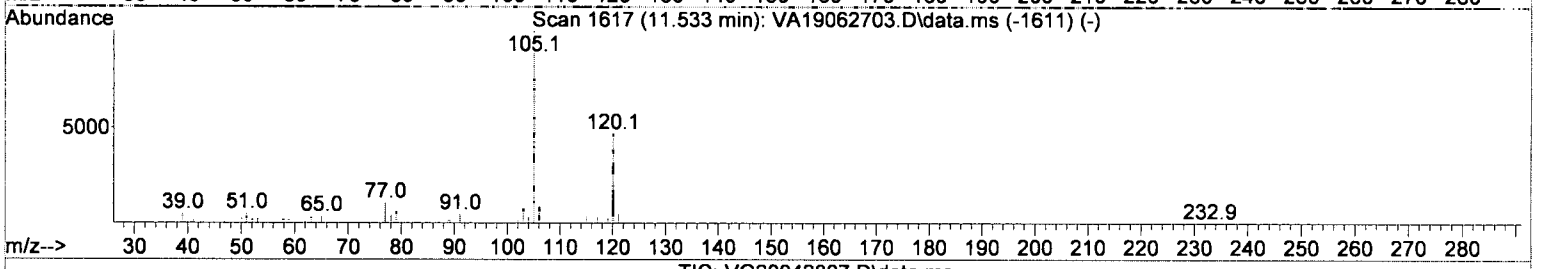
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 30 09:15:46 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







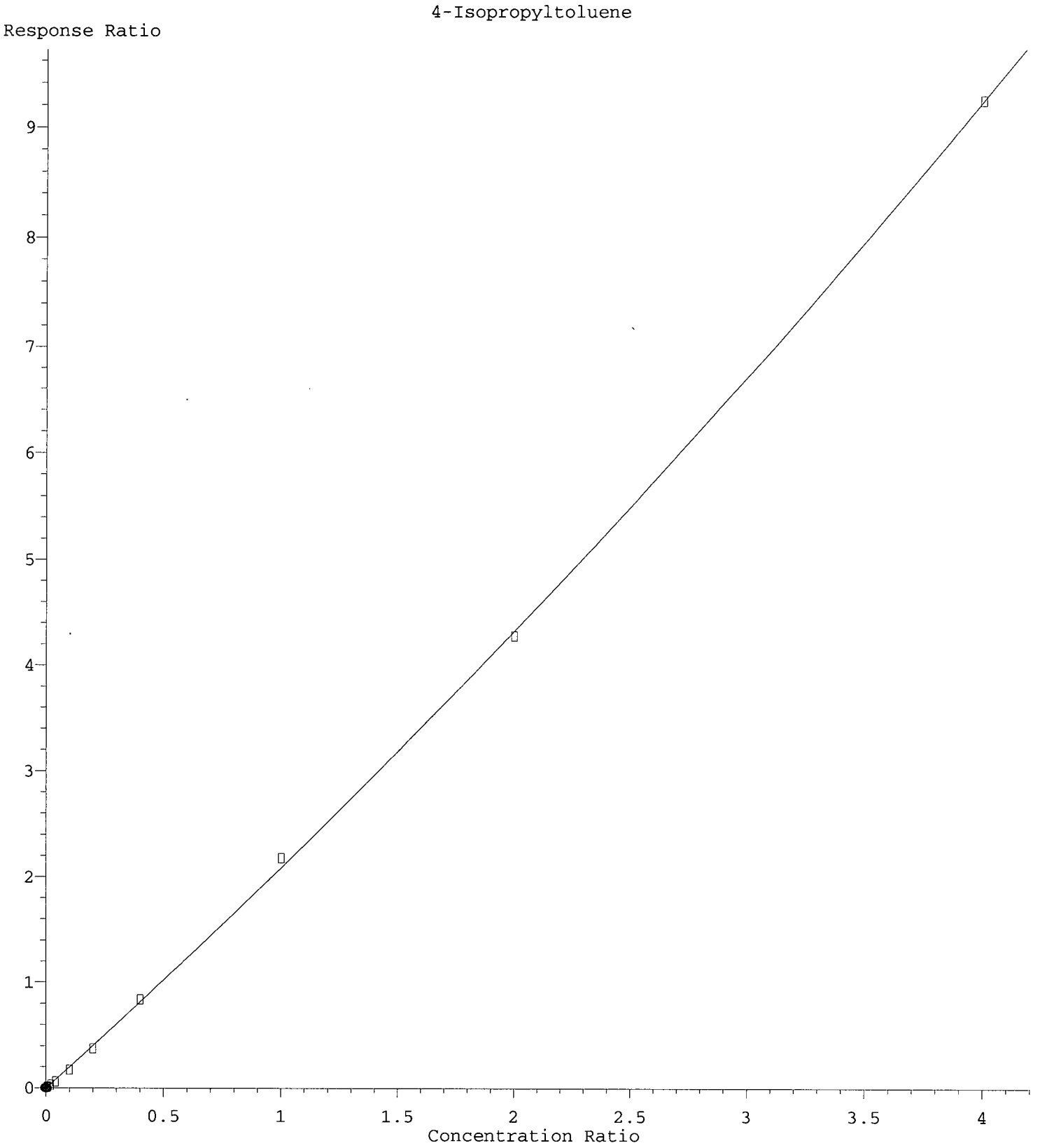
TIC: VG20042807.D\data.ms

(77) 1,2,4-Trimethylbenzene

11.952min (-0.018) 0.17 ug/L m

response 101

Ion	Exp%	Act%
105.10	100.00	100.00
120.10	48.60	36.73
91.00	9.80	18.18
0.00	0.00	0.00



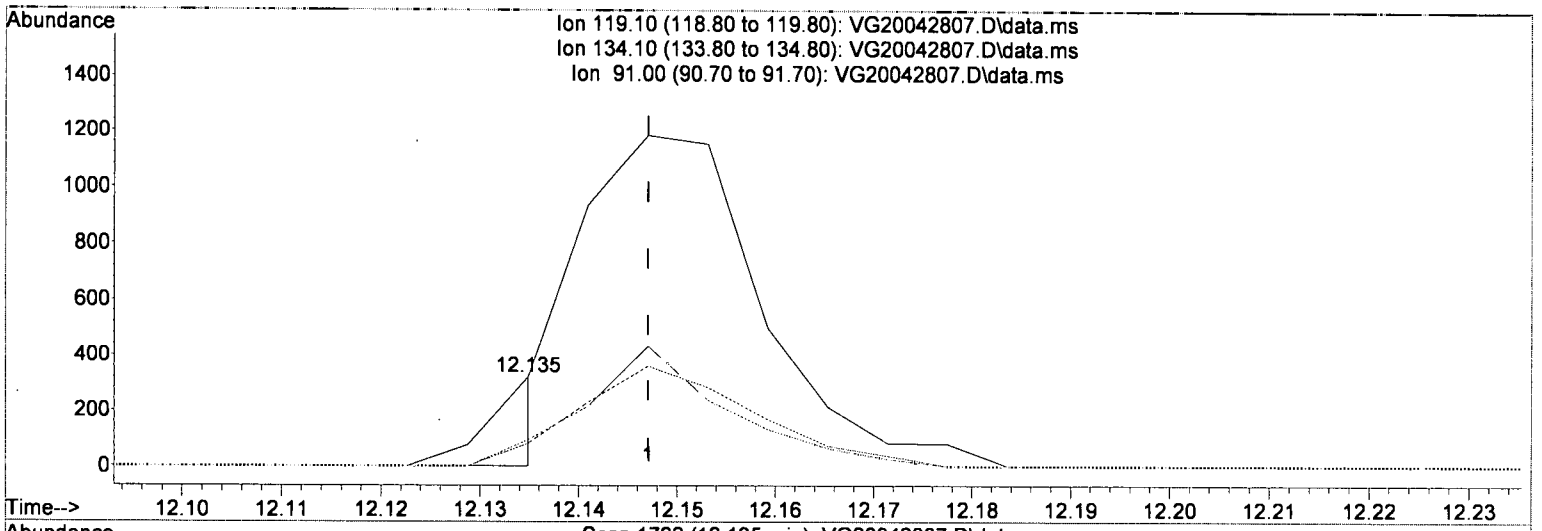
Intercept CMM
4/30/2020

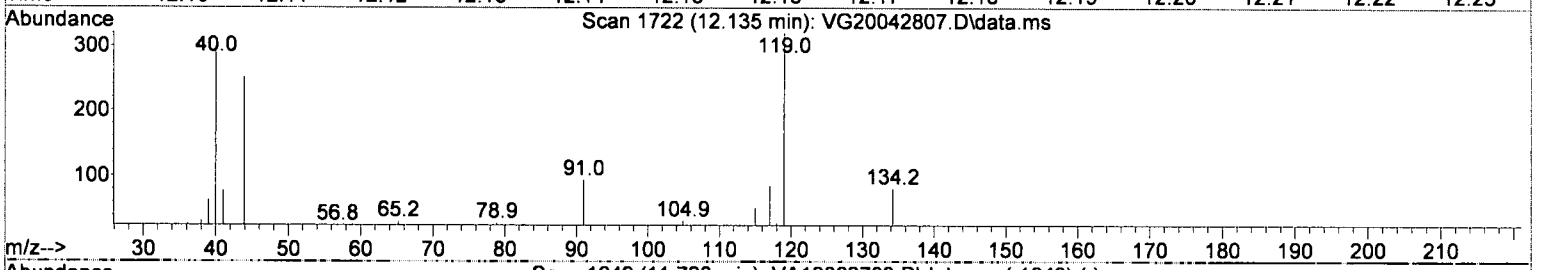
R = 7.24e-002 A*A +0.00 A + 6.38e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Wed Apr 29 16:15:22 2020

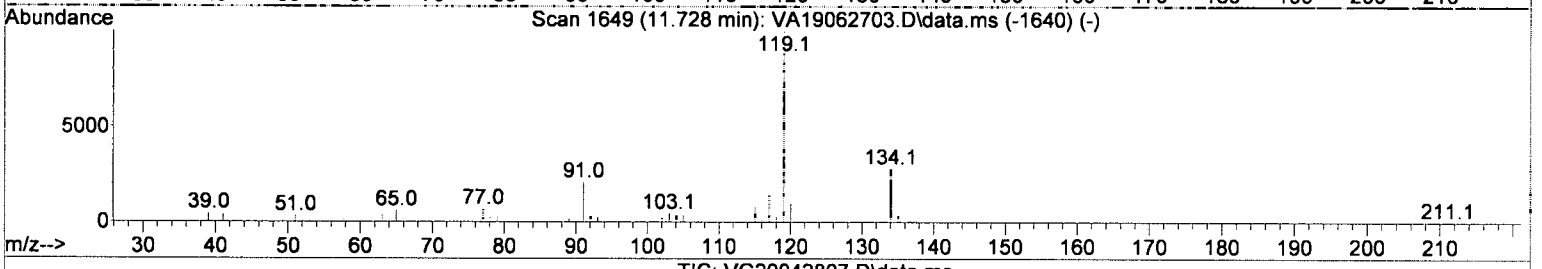
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 30 09:15:46 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







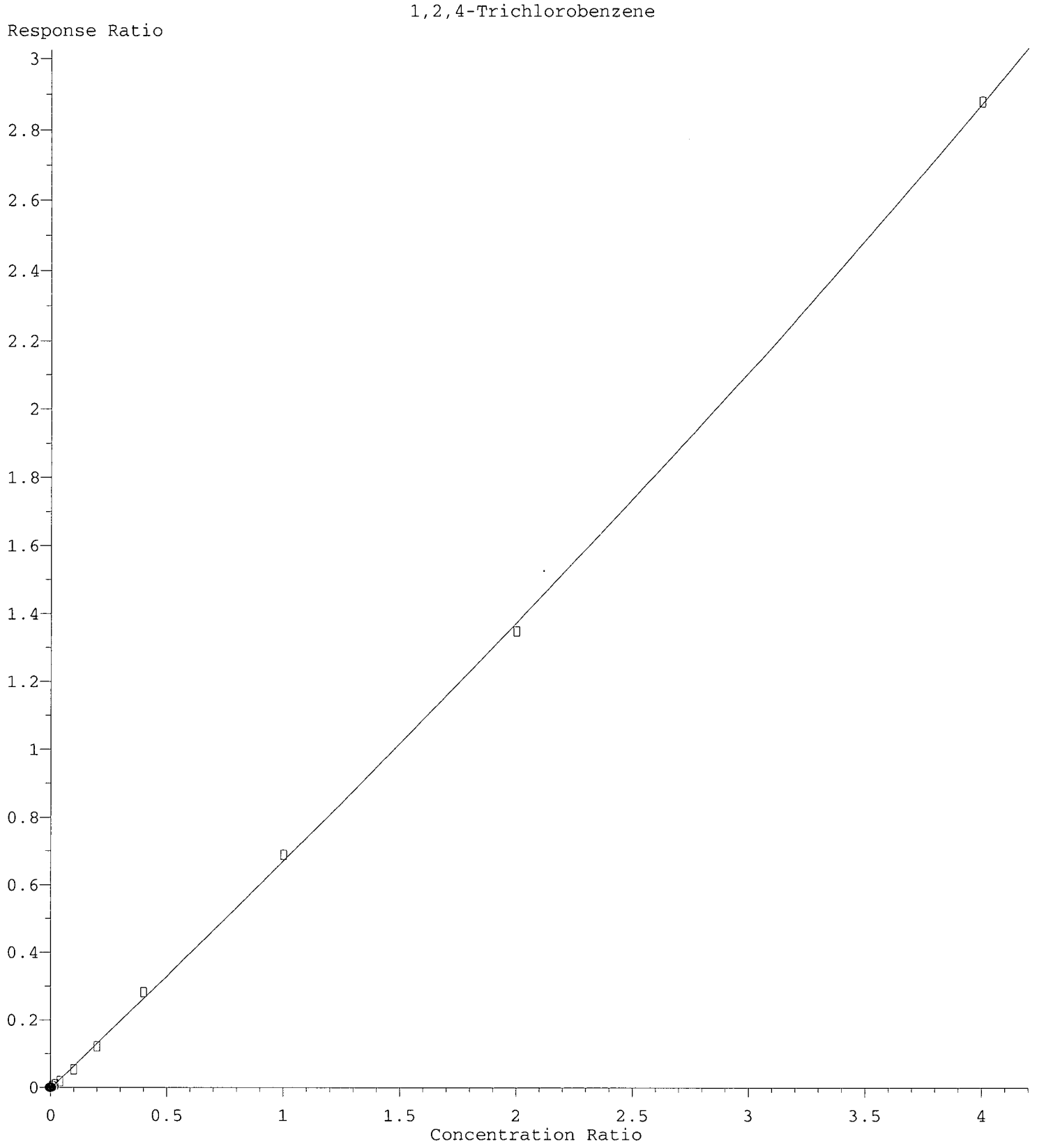
TIC: VG20042807.D\data.ms

(79) 4-Isopropyltoluene

12.135min (-0.012) 0.18 ug/L m

response 145

Ion	Exp%	Act%
119.10	100.00	100.00
134.10	26.60	25.23
91.00	21.70	29.28
0.00	0.00	0.00

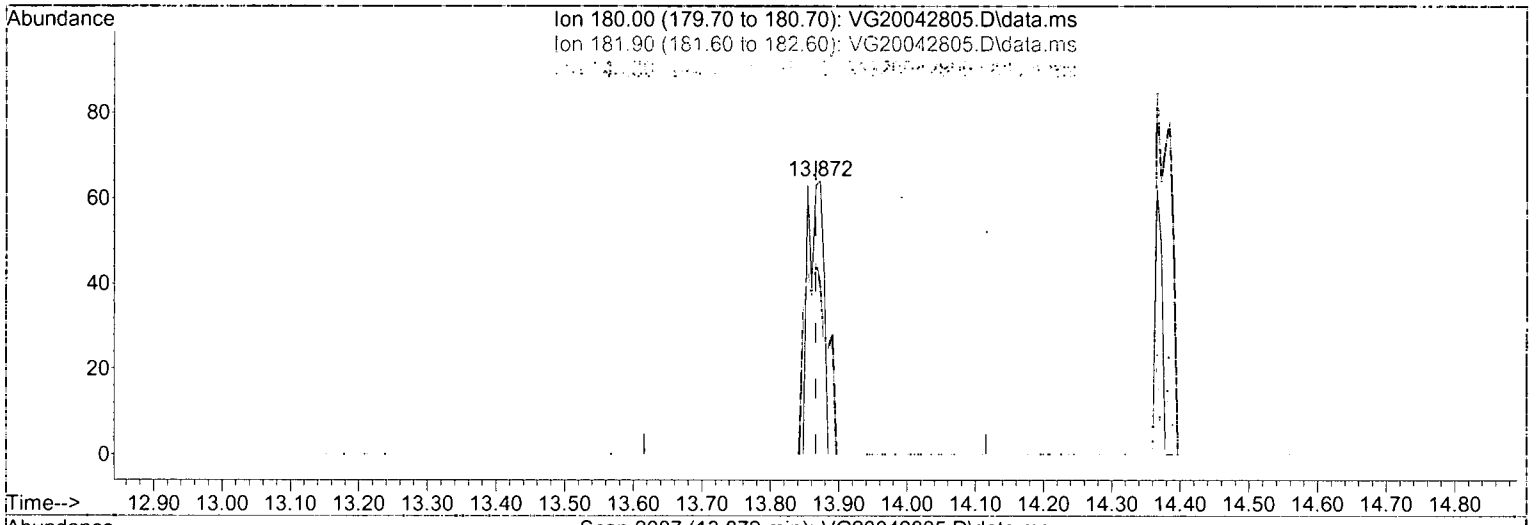


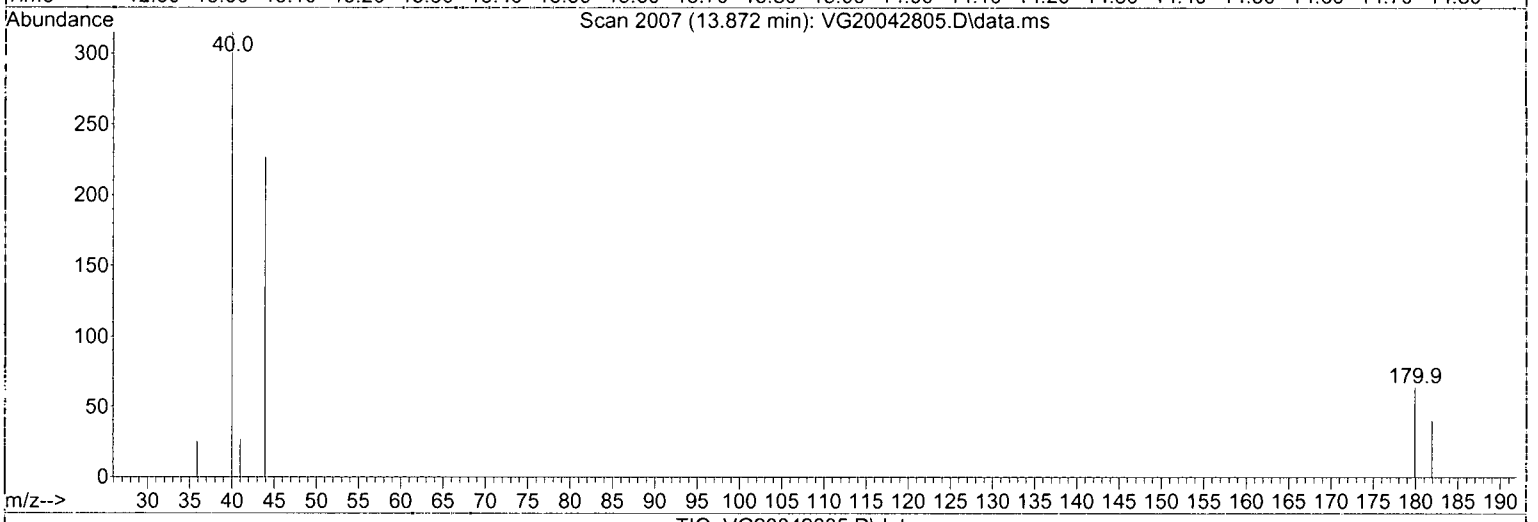
R = 1.532e-002 A*A + 6.580e-001 A - 3.262e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\0D28059\
Data File : VG20042805.D
Acq On : 28 Apr 2020 3:49 pm
Operator : PS
Sample : 0D28059-CAL1
Misc : 1X 5mL 0.1 PPB VOCRO
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 29 14:35:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration





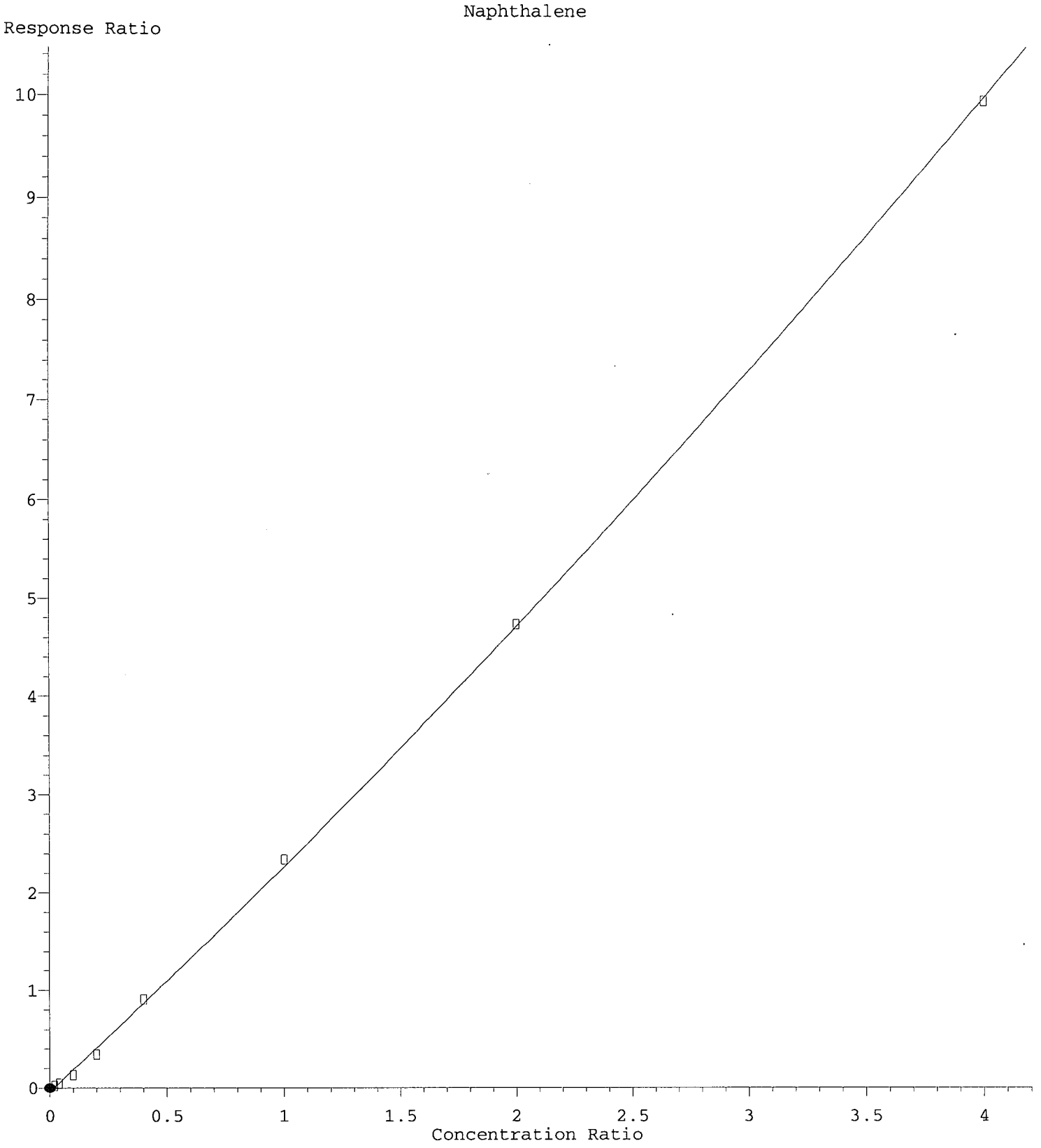
TIC: VG20042805.D\data.ms

(86) 1,2,4-Trichlorobenzene

13.872min (+ 0.006) 0.06 ug/L m

response 99

Ion	Exp%	Act%
180.00	100.00	100.00
181.90	99.10	62.50#
145.00	27.30	0.00
0.00	0.00	0.00



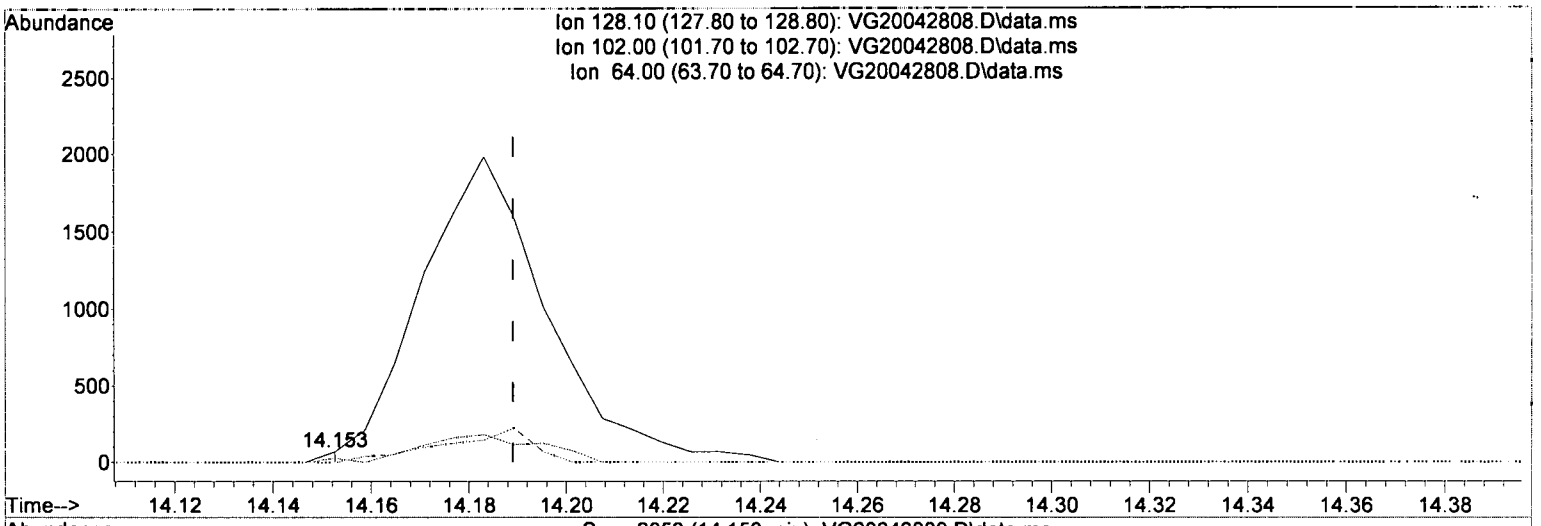
Intercept CMDR
4/30/20 hm

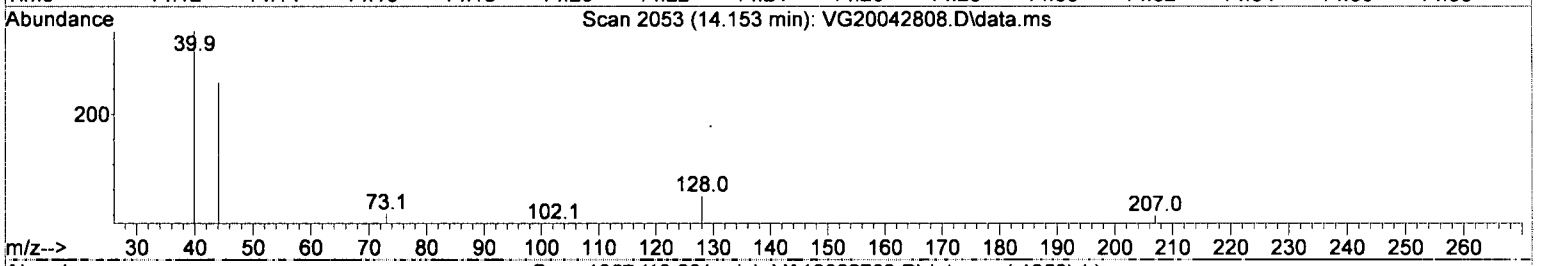
R = 6.90e-002 A*A 07/24/2020 00:00 QEA, LLC - Geo-PRD_DG 2019 - 4a-b. DOC-CAP Testing Cores Page 446 of 550
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VG200429W.M
Calibration Table Last Updated: Thu Apr 30 09:25:52 2020

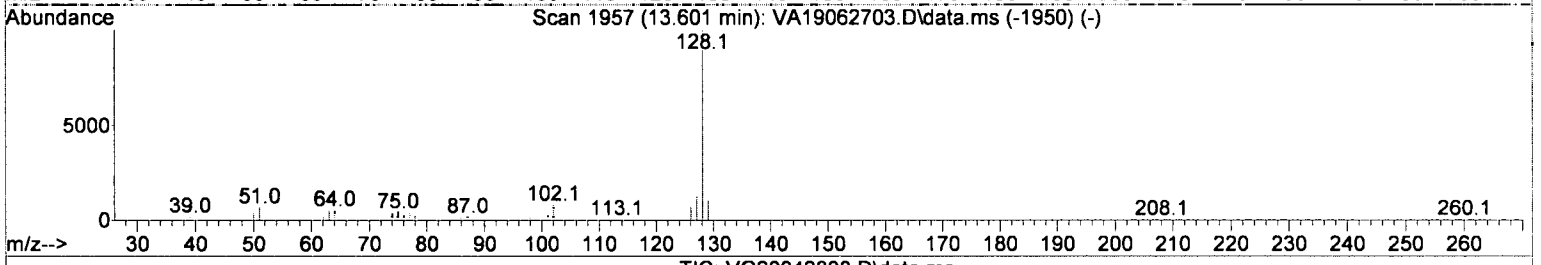
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\REQUANT\
Data File : VG20042808.D
Acq On : 28 Apr 2020 5:10 pm
Operator : PS
Sample : 0D28059-CAL4
Misc : 1X 5mL 1 PPB VOCRO
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 30 09:26:35 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration







TIC: VG20042808.D\data.ms

(87) Naphthalene

14.153min (-0.036) 0.90 ug/L m

response 26

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	38.57#
64.00	6.30	0.00
0.00	0.00	0.00

Response Factor Report VOA-GCMS7

Method Path : C:\msdchem\1\methods\
Method File : VG200429W.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Wed Apr 29 15:17:10 2020
Response Via : Initial Calibration

Calibration Files
1 =VG20042805.D 2 =VG20042806.D 3 =VG20042807.D 4 =VG20042808.D 5 =VG20042809.D 6 =VG20042810.D
7 =VG20042811.D 8 =VG20042812.D 9 =VG20042813.D 10 =VG20042815.D 1a =VG20042817.D

		Compound	1	2	3	4	5	6	7	8	9	10	1a	Avg	%RSD
1)	I	Pentafluorobenzene...	----------	----------	----------	ISTD	----------	----------	----------	----------	----------	----------	----------		
2)		Dichlorodifluo...	1.339	1.047	1.088	0.996	0.982	0.970	0.941	0.983	1.078	0.975	1.032	1.039	10.57
3)	P	Chloromethane	—	1.563	1.464	1.222	1.188	1.162	1.126	1.171	1.210	1.091	1.126	1.232	12.60
4)	C	Vinyl Chloride	1.387	1.293	1.211	1.211	1.168	1.165	1.155	1.202	1.302	1.188	1.263	1.231	5.86
5)		Bromomethane	—					0.876	0.817	0.762	0.706	0.624	0.630	0.736	13.77
6)		Chloroethane	—				0.608	0.583	0.407	0.362	0.361	0.301	0.277	0.414	31.70
7)		Trichlorofluor...	1.550	1.420	1.354	1.290	1.229	1.227	1.159	1.206	1.207	1.058	1.087	1.253	11.51
8)		Ethanol	—		0.029	0.025	0.026	0.024	0.026	0.026	0.026	—		0.026	5.55
9)	C	1,1-Dichloroet...	1.568	1.412	1.393	1.367	1.314	1.317	1.330	1.421	1.410	1.334	1.449	1.392	5.34
10)		Carbon Disulfide	—	1.688	1.691	1.539	1.509	1.605	1.634	1.858	2.089	2.056	—	1.741	12.24
11)		Freon 113	1.009	0.864	0.931	0.885	0.870	0.882	0.838	0.878	0.849	0.784	0.886	0.880	6.38
12)		Iodomethane	—					0.105	0.165	0.266	0.451	0.541	0.693	0.370	61.96
13)		Acrolein	—			0.224	0.203	0.213	0.226	0.248	0.261	0.287	0.287	0.244	13.26
14)		Methylene Chlo...	—					1.397	1.216	1.144	1.066	0.995	1.017	1.139	13.22
15)		Acetone	—				0.629	0.517	0.505	0.513	0.474	0.476	0.479	0.513	10.58
16)		t-1,2-Dichloro...	1.704	1.295	1.298	1.253	1.275	1.284	1.300	1.379	1.390	1.342	1.441	1.360	9.39
17)		n-Hexane	—				0.097	0.120	0.116	0.129	0.140	0.135	0.150	0.127	13.76
18)		Methyl-tert-bu...	—	1.822	1.928	1.900	1.936	2.105	2.242	2.476	2.496	2.513	2.657	2.208	13.99
19)		tert-Butanol (...	—			0.124	0.134	0.140	0.156	0.175	0.179	—		0.151	14.76
20)		Diisopropyl et...	—		2.313	2.422	2.282	2.395	2.567	2.701	2.749	—		2.490	7.44
21)	P	1,1-Dichloroet...	1.938	1.746	1.783	1.798	1.748	1.742	1.761	1.853	1.818	1.731	1.828	1.795	3.44
22)		Acrylonitrile	—			0.485	0.480	0.534	0.574	0.622	0.599	0.617	0.615	0.566	10.40
23)		Vinyl Acetate	—			0.737	0.815	1.022	1.190	1.444	1.951	2.216	2.228	1.450	42.06
24)		Ethyl-tert-but...	—			1.708	1.724	1.812	1.933	2.119	2.247	—		1.924	11.44
25)		c-1,2-Dichloro...	1.348	1.204	1.163	1.212	1.221	1.277	1.319	1.400	1.417	1.375	1.448	1.308	7.48
26)		2,2-Dichloropr...	0.665	0.814	0.723	0.706	0.680	0.721	0.717	0.794	0.815	0.794	0.891	0.756	9.19
27)		Bromochloromet...	1.194	1.045	1.036	0.979	0.962	0.961	0.956	0.977	0.932	0.890	0.890	0.984	8.65
28)	C	Chloroform	2.070	1.686	1.656	1.671	1.674	1.701	1.702	1.746	1.715	1.648	1.739	1.728	6.81
29)		Carbon Tetrach...	—			0.693	0.743	0.821	0.871	0.972	1.022	0.999	—	0.874	14.78
30)		Tetrahydrofuran	—			0.417	0.401	0.429	0.481	0.515	0.530	0.555	0.569	0.487	13.39
31)		1,1,1-Trichlor...	1.550	1.077	1.190	1.139	1.106	1.207	1.197	1.300	1.317	1.262	1.412	1.251	11.16
32)	S	Dibromofluorom...	0.993	1.008	0.998	0.992	0.988	0.989	0.980	0.983	0.987	0.993	1.025	0.994	1.27
33)		1,1-Dichloropr...	1.132	1.098	1.000	1.016	0.981	1.120	1.164	1.303	1.322	1.260	1.394	1.163	12.04
34)		2-Butanone (MEK)	—			0.600	0.631	0.698	0.750	0.828	0.816	0.843	0.844	0.751	13.07
35)		Benzene	4.417	3.806	3.472	3.622	3.628	3.914	3.992	4.253	4.216	4.027	4.301	3.968	7.85
36)		tert-Amyl meth...	—			2.055	1.788	1.794	1.851	1.972	1.976			1.906	5.80
37)		1,2-Dichloroet...	1.511	1.420	1.296	1.308	1.316	1.336	1.340	1.378	1.331	1.286	1.320	1.349	4.86
38)		iso-Butyl Alcohol	—					0.077	0.086	0.097	0.100	0.105	0.102	0.095	11.58
39)	S	1,4-Difluorobe...	3.247	3.305	3.283	3.272	3.226	3.185	3.155	3.150	3.170	3.156	3.237	3.217	1.75
40)		Trichloroethen...	1.400	1.136	1.162	1.039	1.008	1.057	1.023	1.091	1.058	0.995	1.089	1.096	10.32
41)		tert-Amyl ethy...	—			1.149	1.215	1.162	1.272	1.392	1.448	—		1.273	9.68

4/30/2020

Method Path : C:\msdchem\1\methods\
Method File : VG200429W.M
Title : EPA 8260C: Volatile Organic Compounds

42)		Dibromomethane	0.815	0.590	0.659	0.652	0.629	0.641	0.662	0.687	0.683	0.672	0.704	0.672	8.40
43)	C	1,2-Dichloropr...	1.075	1.013	1.039	1.024	1.040	1.031	1.070	1.112	1.118	1.085	1.148	1.069	4.09
44)		Bromodichlorom...	0.907	0.985	0.964	1.002	0.932	1.038	1.066	1.171	1.212	1.217	1.313	1.073	12.52
45)		Chlorobenzene-d5 (I)	----------				ISTD								
46)		2-Chloroethyl ...				0.093	0.100	0.112	0.125	0.157	0.174	0.193	0.211	0.146	30.64
47)		c-1,3-Dichloro...				0.314	0.338	0.366	0.414	0.476	0.518	0.521	0.550	0.437	20.91
48)	S	Toluene-d8 (S)	1.411	1.407	1.386	1.388	1.394	1.370	1.361	1.350	1.335	1.323	1.292	1.365	2.73
49)	C	Toluene	2.040	1.607	1.601	1.507	1.464	1.518	1.513	1.583	1.561	1.473	1.521	1.581	10.10
50)		Tetrachloroeth...	0.303	0.308	0.350	0.314	0.293	0.333	0.320	0.344	0.341	0.326	0.363	0.327	6.62
51)		4-Methyl-2-Pen...					0.416	0.448	0.511	0.563	0.571	0.574	0.539	0.517	12.14
52)		t-1,3-Dichloro...			0.246	0.285	0.279	0.330	0.371	0.430	0.466	0.478	0.505	0.377	25.71
53)		1,1,2-Trichlor...	0.356	0.344	0.347	0.349	0.345	0.360	0.358	0.372	0.369	0.355	0.363	0.356	2.67
54)		Dibromochlorom...		0.203	0.217	0.234	0.236	0.259	0.286	0.321	0.349	0.354	0.379	0.284	22.30
55)		1,3-Dichloropr...	0.619	0.476	0.538	0.556	0.533	0.561	0.583	0.608	0.610	0.593	0.596	0.570	7.53
56)		1,2-Dibromoeth...		0.268	0.296	0.290	0.308	0.327	0.337	0.370	0.374	0.369	0.382	0.332	12.22
57)		2-Hexanone						0.285	0.355	0.407	0.421	0.432	0.402	0.384	14.36
58)	P	Chlorobenzene	1.264	0.977	0.973	0.958	0.936	0.972	0.957	1.005	0.992	0.946	0.980	0.996	9.13
59)	C	Ethylbenzene	1.741	1.390	1.396	1.506	1.471	1.528	1.564	1.665	1.668	1.586	1.656	1.561	7.39
60)		1,1,1,2-Tetrac...		0.286	0.242	0.247	0.247	0.271	0.276	0.304	0.313	0.312	0.331	0.283	11.17
61)		m,p-Xylenes (2)	0.942	0.900	0.840	0.912	0.916	1.048	1.124	1.230	1.256	1.210	1.250	1.057	15.26
62)		o-Xylene	1.064	0.745	0.755	0.795	0.822	0.947	1.050	1.194	1.258	1.223	1.275	1.012	20.67
63)		Styrene		0.459	0.533	0.570	0.592	0.743	0.857	0.969	1.023	1.010		0.751	29.43
64)	P	Bromoform		0.129	0.142	0.154	0.145	0.173	0.189	0.220	0.253	0.268	0.284	0.196	29.04
65)		Isopropylbenzene		0.824	0.782	0.915	0.930	1.094	1.216	1.397	1.462	1.423	1.495	1.154	24.25
66)	I	1,4-Dichlorobenzen...	----------				ISTD								
67)	S	4-Bromofluorob...	0.833	0.826	0.830	0.824	0.823	0.804	0.799	0.781	0.768	0.755	0.780	0.802	3.41
68)		Bromobenzene	0.849	0.807	0.830	0.850	0.775	0.806	0.790	0.833	0.819	0.792	0.864	0.819	3.46
69)		n-Propylbenzene	3.750	2.973	3.065	2.921	2.908	3.087	3.242	3.483	3.458	3.317	3.601	3.255	8.90
70)	P	1,1,2,2-Tetrac...	1.204	0.947	0.995	1.019	0.979	0.973	0.984	1.011	1.003	1.016	1.010	1.013	6.61
71)		2-Chlorotoluene	0.737	0.617	0.618	0.615	0.629	0.655	0.677	0.722	0.726	0.702	0.769	0.679	8.18
72)		1,3,5-Trimethy...				1.616	1.713	1.994	2.179	2.366	2.358	2.283	2.466	2.122	14.93
73)		1,2,3-Trichlor...		0.311	0.311	0.352	0.323	0.319	0.326	0.331	0.312	0.303	0.301	0.319	4.72
74)		t-1,4-Dichloro...							0.090	0.105	0.112	0.119	0.124	0.110	12.02
75)		4-Chlorotoluene	2.149	1.820	1.738	1.768	1.821	1.943	2.075	2.214	2.179	2.096	2.224	2.002	9.41
76)		tert-Butylbenzene		1.001	0.905	0.944	0.984	1.044	1.107	1.206	1.220	1.187	1.295	1.089	12.18
77)		1,2,4-Trimethy...			1.426	1.530	1.612	1.957	2.162	2.334	2.336	2.246	2.412	2.002	19.22
78)		sec-Butylbenzene				1.964	2.019	2.313	2.466	2.690	2.706	2.632	2.851	2.455	13.40
79)		4-Isopropyltol...		1.302	1.365	1.360	1.467	1.715	1.860	2.099	2.182	2.139	2.309	1.780	21.82
80)		1,3-Dichlorobe...	1.354	1.218	1.195	1.209	1.167	1.293	1.323	1.395	1.398	1.338	1.402	1.299	6.79
81)		1,4-Dichlorobe...	1.775	1.647	1.523	1.473	1.353	1.415	1.403	1.451	1.427	1.363	1.420	1.477	8.67
82)		n-Butylbenzene				1.433	1.451	1.646	1.764	1.932	1.934	1.861	1.969	1.749	12.38
83)		1,2-Dichlorobe...	1.262	1.040	1.155	1.117	1.184	1.244	1.273	1.354	1.352	1.284	1.315	1.234	8.10
84)		1,2-Dibromo-3-...						0.166	0.173	0.197	0.209	0.215	0.224	0.198	11.85
85)		Hexachlorobuta...			0.152	0.142	0.147	0.159	0.155	0.164	0.150	0.141	0.155	0.152	4.94
86)		1,2,4-Trichlor...			0.455	0.476	0.465	0.534	0.607	0.706	0.689	0.675	0.720	0.592	18.65
87)		Naphthalene				1.072	1.107	1.301	1.710	2.270	2.341	2.366	2.495	1.833	33.09
88)		1,2,3-Trichlor...					0.468	0.538	0.621	0.714	0.663	0.647	0.689	0.620	14.09

(#) = Out of Range

Compound List Report VOA-GCMS7

Method Path : C:\msdchem\1\methods\
Method File : VG200429W.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Wed Apr 29 15:17:10 2020
Response Via : Initial Calibration

Total Cpnds : 88

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID	
1	I	Pentafluorobenzene (I)	99	6.837	1.000	A	2	A	R	
2		Dichlorodifluoromethane	85	1.716	0.251	A	2	A	R	
3	P	Chloromethane	50	1.978	0.289	A	2	A	R	
4	C	Vinyl Chloride	62	2.100	0.307	A	2	A	R	
5		Bromomethane	96	2.526	0.369	A	2	A	R	
6		Chloroethane	64	2.722	0.398	Q	2	A	R	1/a
7		Trichlorofluoromethane	101	2.917	0.427	A	2	A	R	
8		Ethanol	45	3.618	0.529	A	1	A	R	
9	C	1,1-Dichloroethene	61	3.563	0.521	A	2	A	R	
10		Carbon Disulfide	76	3.569	0.522	A	2	A	R	
11		Freon 113	101	3.654	0.534	A	2	A	R	
12		Iodomethane	142	3.727	0.545	Q	2	A	R	1/a
13		Acrolein	56	4.008	0.586	A	2	A	R	
14		Methylene Chloride	84	4.301	0.629	A	2	A	R	
15		Acetone	43	4.392	0.642	A	1	A	R	
16		t-1,2-Dichloroethene	61	4.490	0.657	A	2	A	R	
17		n-Hexane	86	4.587	0.671	A	3	A	R	
18		Methyl-tert-butyl-ether	73	4.636	0.678	A	3	A	R	
19		tert-Butanol (TBA)	59	4.807	0.703	A	1	A	R	
20		Diisopropyl ether (DIPE)	45	5.087	0.744	A	2	A	R	
21	P	1,1-Dichloroethane	63	5.197	0.760	A	2	A	R	
22		Acrylonitrile	53	5.264	0.770	A	2	A	R	
23		Vinyl Acetate	43	5.502	0.805	Q	2	A	R	1/a
24		Ethyl-tert-butyl ether (ETBE)	59	5.489	0.803	A	2	A	R	
25		c-1,2-Dichloroethene	61	5.801	0.848	A	2	A	R	
26		2,2-Dichloropropane	77	5.922	0.866	A	2	A	R	
27		Bromochloromethane	49	6.020	0.881	A	2	A	R	
28	C	Chloroform	83	6.106	0.893	A	2	A	R	
29		Carbon Tetrachloride	117	6.245	0.913	A	2	A	R	
30		Tetrahydrofuran	42	6.282	0.919	A	2	A	R	
31		1,1,1-Trichloroethane	97	6.319	0.924	A	2	A	R	
32	S	Dibromofluoromethane (S)	111	6.307	0.922	A	2	A	R	
33		1,1-Dichloropropene	75	6.465	0.946	A	2	A	R	
34		2-Butanone (MEK)	43	6.452	0.944	A	2	A	R	
35		Benzene	78	6.733	0.985	A	2	A	R	
36		tert-Amyl methyl ether (TAME)	73	6.837	1.000	A	2	A	R	
37		1,2-Dichloroethane (EDC)	62	6.959	1.018	A	2	A	R	
38		iso-Butyl Alcohol	43	7.032	1.029	A	2	A	R	
39	S	1,4-Difluorobenzene (S)	114	7.422	1.086	A	2	A	R	
40		Trichloroethene (TCE)	130	7.392	1.081	A	2	A	R	
41		tert-Amyl ethyl ether (TAEE)	59	7.659	1.120	A	2	A	R	
42		Dibromomethane	93	7.843	1.147	A	2	A	R	
43	C	1,2-Dichloropropane	63	7.977	1.167	A	2	A	R	
44		Bromodichloromethane	83	8.050	1.177	A	2	A	R	
45	I	Chlorobenzene-d5 (I)	117	10.434	1.000	A	2	A	R	
46		2-Chloroethyl Vinyl Ether	63	8.714	0.835	Q	2	A	R	
47		c-1,3-Dichloropropene	75	8.781	0.842	Q	2	A	R	1/a
48	S	Toluene-d8 (S)	98	8.965	0.859	A	2	A	R	
49	C	Toluene	91	9.025	0.865	A	2	A	R	
50		Tetrachloroethene (PCE)	166	9.415	0.902	A	2	A	R	
51		4-Methyl-2-Pentanone (MIBK)	43	9.440	0.905	A	2	A	R	
52		t-1,3-Dichloropropene	75	9.464	0.907	Q	2	A	R	
53		1,1,2-Trichloroethane	97	9.616	0.922	A	2	A	R	1/a
54		Dibromochloromethane	129	9.769	0.936	Q	2	A	R	
55		1,3-Dichloropropane	76	9.861	0.945	A	2	A	R	1/a

56		1,2-Dibromoethane (EDB)	107	9.988	0.957	A	2	A	R
57		2-Hexanone	43	10.220	0.979	A	2	A	R
58	P	Chlorobenzene	112	10.446	1.001	A	2	A	R
59	C	Ethylbenzene	91	10.477	1.004	A	2	A	R
60		1,1,1,2-Tetrachloroethane	131	10.507	1.007	A	2	A	R
61		m,p-Xylenes (2)	91	10.599	1.016	Q	2	A	R
62		o-Xylene	91	10.946	1.049	Q	2	A	R
63		Styrene	104	11.013	1.055	Q	2	A	R
64	P	Bromoform	173	11.019	1.056	Q	2	A	R
65		Isopropylbenzene	105	11.202	1.074	Q	2	A	R
66	I	1,4-Dichlorobenzene-d4 (I)	152	12.275	1.000	A	2	A	R
67	S	4-Bromofluorobenzene (S)	174	11.428	0.931	A	2	A	R
68		Bromobenzene	156	11.507	0.937	A	2	A	R
69		n-Propylbenzene	91	11.525	0.939	A	2	A	R
70	P	1,1,2,2-Tetrachloroethane	83	11.598	0.945	A	2	A	R
71		2-Chlorotoluene	126	11.659	0.950	A	2	A	R
72		1,3,5-Trimethylbenzene	105	11.677	0.951	A	2	A	R
73		1,2,3-Trichloropropane	110	11.696	0.953	A	2	A	R
74		t-1,4-Dichloro-2-butene	88	11.720	0.955	A	3	A	R
75		4-Chlorotoluene	91	11.781	0.960	A	2	A	R
76		tert-Butylbenzene	91	11.915	0.971	A	2	A	R
77		1,2,4-Trimethylbenzene	105	11.970	0.975	Q	2	A	R
78		sec-Butylbenzene	105	12.043	0.981	A	2	A	R
79		4-Isopropyltoluene	119	12.147	0.990	Q	2	A	R
80		1,3-Dichlorobenzene	146	12.226	0.996	A	2	A	R
81		1,4-Dichlorobenzene	146	12.281	1.000	A	2	A	R
82		n-Butylbenzene	91	12.476	1.016	A	2	A	R
83		1,2-Dichlorobenzene	146	12.616	1.028	A	2	A	R
84		1,2-Dibromo-3-Chloropropane	157	13.262	1.080	A	2	A	R
85		Hexachlorobutadiene	223	13.811	1.125	A	3	A	R
86		1,2,4-Trichlorobenzene	180	13.872	1.130	Q	2	A	R
87		Naphthalene	128	14.189	1.156	Q	2	A	R
88		1,2,3-Trichlorobenzene	180	14.372	1.171	A	2	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VG200429W.M Thu Apr 30 09:39:18 2020

Injection Log

Directory: z:\data\2020-04\0D28059

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Vg20042801.d	1.	0D28059-IBL1	1X 5mL DI	28 Apr 2020 14:01
2	2	Vg20042802.d	1.	0D28059-IBL2	1X 5mL DI	28 Apr 2020 14:28
3	3	Vg20042803.d	1.	0D28059-TUN1	1X A20D004 BFB ...	28 Apr 2020 14:55
4	4	Vg20042804.d	1.	0D28059-ICB1	1X 5mL DI	28 Apr 2020 15:22
5	5	Vg20042805.d	1.	0D28059-CAL1	1X 5mL 0.1 PPB...	28 Apr 2020 15:49
6	6	Vg20042806.d	1.	0D28059-CAL2	1X 5mL 0.2 PPB...	28 Apr 2020 16:16
7	7	Vg20042807.d	1.	0D28059-CAL3	1X 5mL 0.4 PPB...	28 Apr 2020 16:43
8	8	Vg20042808.d	1.	0D28059-CAL4	1X 5mL 1 PPB ...	28 Apr 2020 17:10
9	9	Vg20042809.d	1.	0D28059-CAL5	1X 5mL 2 PPB ...	28 Apr 2020 17:37
10	10	Vg20042810.d	1.	0D28059-CAL6	1X 5mL 5 PPB ...	28 Apr 2020 18:04
11	11	Vg20042811.d	1.	0D28059-CAL7	1X 5mL 10 PPB ...	28 Apr 2020 18:31
12	12	Vg20042812.d	1.	0D28059-CAL8	1X 5mL 20 PPB ...	28 Apr 2020 18:58
13	13	Vg20042813.d	1.	0D28059-CAL9	1X 5mL 50 PPB ...	28 Apr 2020 19:25
14	14	Vg20042814.d	1.	0D28059-IBL3	1X 5mL DI	28 Apr 2020 19:52
15	15	Vg20042815.d	1.	0D28059CALA	1X 5mL 100 PPB...	28 Apr 2020 20:19
16	16	Vg20042816.d	1.	0D28059-IBL4	1X 5mL DI	28 Apr 2020 20:47
17	17	Vg20042817.d	1.	0D28059-CALB	1X 5mL 200 PPB...	28 Apr 2020 21:14
18	18	Vg20042818.d	1.	0D28059-IBL5	1X 5mL DI	28 Apr 2020 21:41
19	19	Vg20042819.d	1.	0D28059-IBL6	1X 5mL DI	28 Apr 2020 22:08
20	20	Vg20042820.d	1.	0D28059-ICV1	1X 5mL 20-40PP...	28 Apr 2020 22:35
21	21	Vg20042821.d	1.	0D28059-IBL7	1X 5mL DI	28 Apr 2020 23:02
22	22	Vg20042822.d	1.	0D02028-TUN2	1X A19L316 BFB...	28 Apr 2020 23:29
23	23	Vg20042823.d	1.	0D28059-ICB2	1X 5mL DI	28 Apr 2020 23:56
24	24	Vg20042824.d	1.	0D28059RT1	1X 5mL A19J423	29 Apr 2020 00:23
25	25	Vg20042825.d	1.	0D28059-IBL8	1X 5mL DI	29 Apr 2020 00:50
26	26	Vg20042826.d	1.	0D28059-CALC	1X 5mL 50 PPB GX	29 Apr 2020 01:17
27	27	Vg20042827.d	1.	0D28059-CALD	1X 5mL 100 PP...	29 Apr 2020 01:44
28	28	Vg20042828.d	1.	0D28059-CALE	1X 5mL 250 PP...	29 Apr 2020 02:11
29	29	Vg20042829.d	1.	0D28059-CALF	1X 5mL 500 PP...	29 Apr 2020 02:38
30	30	Vg20042830.d	1.	0D28059-CALG	1X 5mL 1000 P...	29 Apr 2020 03:05
31	31	Vg20042831.d	1.	0D28059-CALH	1X 5mL 2500 P...	29 Apr 2020 03:32
32	32	Vg20042832.d	1.	0D28059-CALI	1X 5mL 5000 P...	29 Apr 2020 03:59
33	33	Vg20042833.d	1.	0D28059-CALJ	1X 5mL 10000 ...	29 Apr 2020 04:27
34	34	Vg20042834.d	1.	0D28059-IBL9	1X 5mL DI	29 Apr 2020 04:54
35	35	Vg20042835.d	1.	0D28059-IBLA	1X 5mL DI	29 Apr 2020 05:21
36	36	Vg20042836.d	1.	0D28059-ICV2	1X 5mL 500PPB ...	29 Apr 2020 05:48
37	37	Vg20042837.d	1.	0D28059-IBLB	1X 5mL DI	29 Apr 2020 06:15

Need to Rerun 250ppb was prepped Wrong

4/30/20 hy

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042801.D
Acq On : 28 Apr 2020 2:01 pm
Operator : PS
Sample : 0D28059-IBL1
Misc : 1X 5mL DI
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:38:08 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.837	99	134037	50.00 ug/L	0.00
45) Chlorobenzene-d5 (I)	10.434	117	360766	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	149450	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (S)	6.307	111	131607	49.38 ug/L	0.00
39) 1,4-Difluorobenzene (S)	7.422	114	431555	50.04 ug/L	0.00
48) Toluene-d8 (S)	8.965	98	505629	51.33 ug/L	0.00
67) 4-Bromofluorobenzene (S)	11.428	174	126880	52.92 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	1.972	50	161	0.05 ug/L	80
4) Vinyl Chloride	0.000		0	N.D.	
5) Bromomethane	2.539	96	37	0.02 ug/L	71
6) Chloroethane	2.734	64	11	Below Cal #	47
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethanol	3.606	45	851	12.26 ug/L	86
9) 1,1-Dichloroethene	0.000		0	N.D.	
10) Carbon Disulfide	3.563	76	159	0.03 ug/L	78
11) Freon 113	0.000		0	N.D.	
12) Iodomethane	0.000		0	N.D.	
13) Acrolein	0.000		0	N.D.	
14) Methylene Chloride	4.295	84	8931	2.92 ug/L	95
15) Acetone	4.386	43	1860	1.35 ug/L	90
16) t-1,2-Dichloroethene	0.000		0	N.D.	
17) n-Hexane	0.000		0	N.D.	
18) Methyl-tert-butyl-ether	0.000		0	N.D.	
19) tert-Butanol (TBA)	4.807	59	316	0.78 ug/L #	88
20) Diisopropyl ether (DIPE)	5.112	45	21	0.00 ug/L #	33
21) 1,1-Dichloroethane	0.000		0	N.D.	
22) Acrylonitrile	0.000		0	N.D.	
23) Vinyl Acetate	5.539	43	10	1.13 ug/L	74
24) Ethyl-tert-butyl ether...	0.000		0	N.D.	
25) c-1,2-Dichloroethene	0.000		0	N.D.	
26) 2,2-Dichloropropane	0.000		0	N.D.	
27) Bromochloromethane	6.136	49	10	0.00 ug/L #	14
28) Chloroform	0.000		0	N.D.	
29) Carbon Tetrachloride	6.234	117	10	0.00 ug/L #	13
30) Tetrahydrofuran	0.000		0	N.D.	
31) 1,1,1-Trichloroethane	0.000		0	N.D.	
33) 1,1-Dichloropropene	6.459	75	11	0.00 ug/L #	39
34) 2-Butanone (MEK)	6.343	43	10	0.00 ug/L	52
35) Benzene	6.740	78	40	0.00 ug/L	56
36) tert-Amyl methyl ether...	6.831	73	190	0.04 ug/L #	1
37) 1,2-Dichloroethane (EDC)	0.000		0	N.D.	
38) iso-Butyl Alcohol	0.000		0	N.D.	
40) Trichloroethene (TCE)	0.000		0	N.D.	
41) tert-Amyl ethyl ether ...	0.000		0	N.D.	
42) Dibromomethane	0.000		0	N.D.	
43) 1,2-Dichloropropane	8.026	63	11	0.00 ug/L #	40
44) Bromodichloromethane	0.000		0	N.D.	
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.	
47) c-1,3-Dichloropropene	0.000		0	N.D.	
49) Toluene	9.020	91	21	0.01 ug/L #	34

NL
4/30/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042801.D
Acq On : 28 Apr 2020 2:01 pm
Operator : PS
Sample : 0D28059-IBL1
Misc : 1X 5mL DI
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:38:08 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

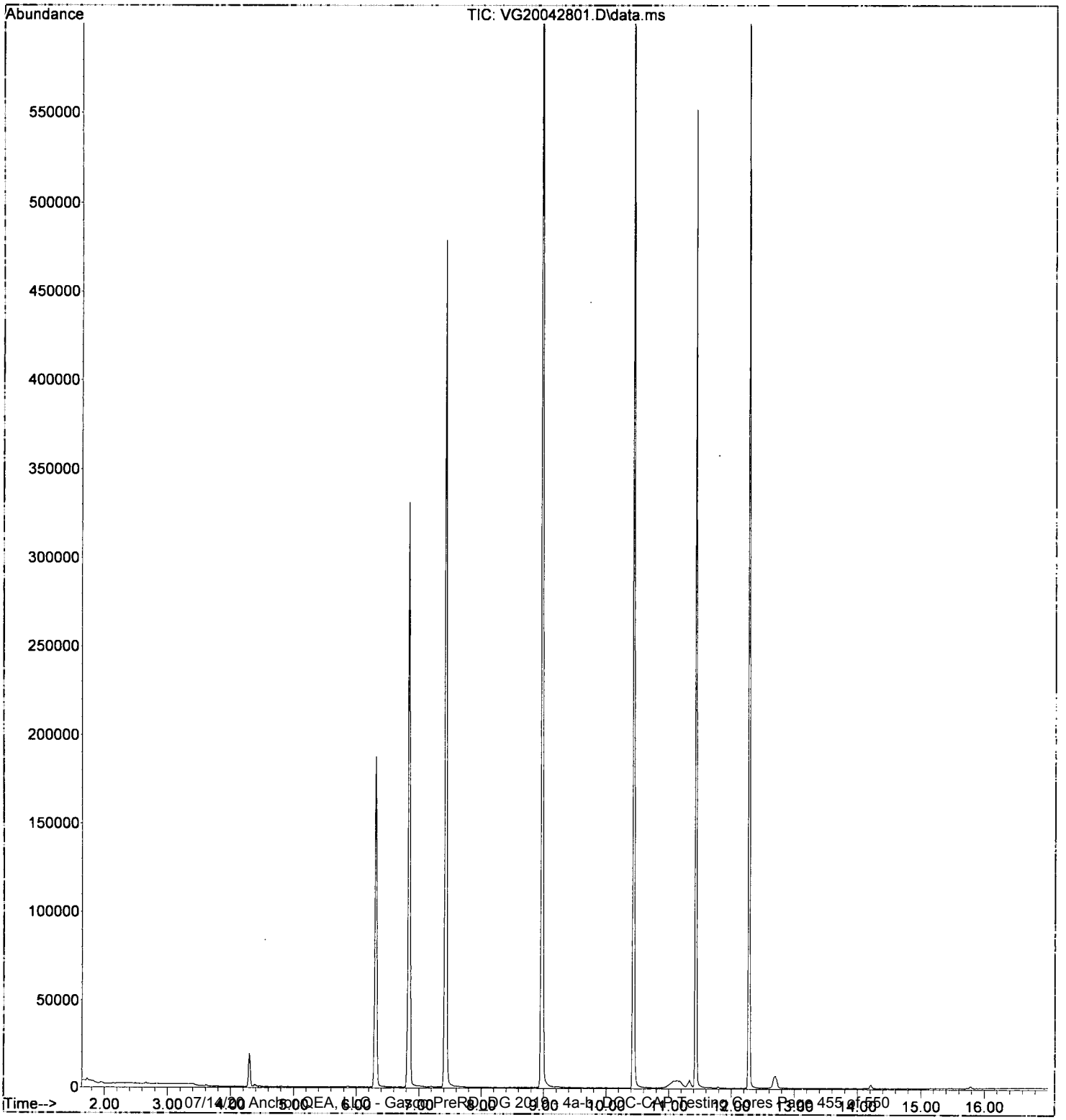
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) Tetrachloroethene (PCE)	0.000		0	N.D.	
51) 4-Methyl-2-Pentanone (...	0.000		0	N.D.	
52) t-1,3-Dichloropropene	9.513	75	10	0.35 ug/L #	45
53) 1,1,2-Trichloroethane	0.000		0	N.D.	
54) Dibromochloromethane	0.000		0	N.D.	
55) 1,3-Dichloropropane	0.000		0	N.D.	
56) 1,2-Dibromoethane (EDB)	0.000		0	N.D.	
57) 2-Hexanone	10.245	43	19	0.01 ug/L #	32
58) Chlorobenzene	10.458	112	20	0.00 ug/L #	1
59) Ethylbenzene	10.471	91	55	0.00 ug/L #	50
60) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
61) m,p-Xylenes (2)	10.605	91	37	0.14 ug/L #	34
62) o-Xylene	0.000		0	N.D.	
63) Styrene	0.000		0	N.D.	
64) Bromoform	0.000		0	N.D.	
65) Isopropylbenzene	0.000		0	N.D.	
68) Bromobenzene	11.428	156	30	0.01 ug/L #	1
69) n-Propylbenzene	11.428	91	425	0.04 ug/L #	32
70) 1,1,2,2-Tetrachloroethane	11.550	83	10	0.00 ug/L #	24
71) 2-Chlorotoluene	0.000		0	N.D.	
72) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
73) 1,2,3-Trichloropropane	0.000		0	N.D.	
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.	
75) 4-Chlorotoluene	0.000		0	N.D.	
76) tert-Butylbenzene	0.000		0	N.D.	
77) 1,2,4-Trimethylbenzene	12.043	105	10	0.15 ug/L #	36
78) sec-Butylbenzene	12.043	105	10	0.00 ug/L	58
79) 4-Isopropyltoluene	12.147	119	31	0.16 ug/L	51
80) 1,3-Dichlorobenzene	12.287	146	74	0.02 ug/L #	1
81) 1,4-Dichlorobenzene	12.287	146	74	0.02 ug/L #	1
82) n-Butylbenzene	0.000		0	N.D.	
83) 1,2-Dichlorobenzene	0.000		0	N.D.	
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	
85) Hexachlorobutadiene	0.000		0	N.D.	
86) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
87) Naphthalene	0.000		0	N.D.	
88) 1,2,3-Trichlorobenzene	14.390	180	19	0.01 ug/L #	12

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042801.D
Acq On : 28 Apr 2020 2:01 pm
Operator : PS
Sample : 0D28059-IBL1
Misc : 1X 5mL DI
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:38:08 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042802.D
Acq On : 28 Apr 2020 2:28 pm
Operator : PS
Sample : 0D28059-IBL2
Misc : 1X 5mL DI
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 09:38:11 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.837	99	132944	50.00 ug/L	0.00
45) Chlorobenzene-d5 (I)	10.434	117	366584	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	154305	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (S)	6.306	111	132284	50.05 ug/L	0.00
39) 1,4-Difluorobenzene (S)	7.422	114	436346	51.01 ug/L	0.00
48) Toluene-d8 (S)	8.964	98	514229	51.38 ug/L	0.00
67) 4-Bromofluorobenzene (S)	11.427	174	129158	52.17 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	1.978	50	193	0.06 ug/L	78
4) Vinyl Chloride	0.000		0	N.D.	
5) Bromomethane	2.533	96	35	0.02 ug/L #	64
6) Chloroethane	2.728	64	23	Below Cal #	47
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethanol	3.612	45	128	1.86 ug/L	65
9) 1,1-Dichloroethene	0.000		0	N.D.	
10) Carbon Disulfide	3.569	76	72	0.02 ug/L	78
11) Freon 113	0.000		0	N.D.	
12) Iodomethane	0.000		0	N.D.	
13) Acrolein	0.000		0	N.D.	
14) Methylene Chloride	4.295	84	7762	2.56 ug/L	96
15) Acetone	4.380	43	4628	3.39 ug/L	87
16) t-1,2-Dichloroethene	0.000		0	N.D.	
17) n-Hexane	0.000		0	N.D.	
18) Methyl-tert-butyl-ether	0.000		0	N.D.	
19) tert-Butanol (TBA)	4.801	59	277	0.69 ug/L #	59
20) Diisopropyl ether (DIPE)	0.000		0	N.D.	
21) 1,1-Dichloroethane	0.000		0	N.D.	
22) Acrylonitrile	0.000		0	N.D.	
23) Vinyl Acetate	0.000		0	N.D.	
24) Ethyl-tert-butyl ether...	0.000		0	N.D.	
25) c-1,2-Dichloroethene	0.000		0	N.D.	
26) 2,2-Dichloropropane	0.000		0	N.D.	
27) Bromochloromethane	0.000		0	N.D.	
28) Chloroform	0.000		0	N.D.	
29) Carbon Tetrachloride	0.000		0	N.D.	
30) Tetrahydrofuran	0.000		0	N.D.	
31) 1,1,1-Trichloroethane	0.000		0	N.D.	
33) 1,1-Dichloropropene	0.000		0	N.D.	
34) 2-Butanone (MEK)	6.374	43	10	0.01 ug/L	52
35) Benzene	6.727	78	30	0.00 ug/L #	41
36) tert-Amyl methyl ether...	6.831	73	219	0.04 ug/L #	1
37) 1,2-Dichloroethane (EDC)	0.000		0	N.D.	
38) iso-Butyl Alcohol	0.000		0	N.D.	
40) Trichloroethene (TCE)	0.000		0	N.D.	
41) tert-Amyl ethyl ether ...	0.000		0	N.D.	
42) Dibromomethane	0.000		0	N.D.	
43) 1,2-Dichloropropane	7.885	63	10	0.00 ug/L #	1
44) Bromodichloromethane	7.940	83	10	0.00 ug/L #	26
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.	
47) c-1,3-Dichloropropene	8.897	75	10	0.59 ug/L #	33
49) Toluene	9.038	91	10	0.00 ug/L #	55

4/30/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042802.D
Acq On : 28 Apr 2020 2:28 pm
Operator : PS
Sample : 0D28059-IBL2
Misc : 1X 5mL DI
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 09:38:11 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

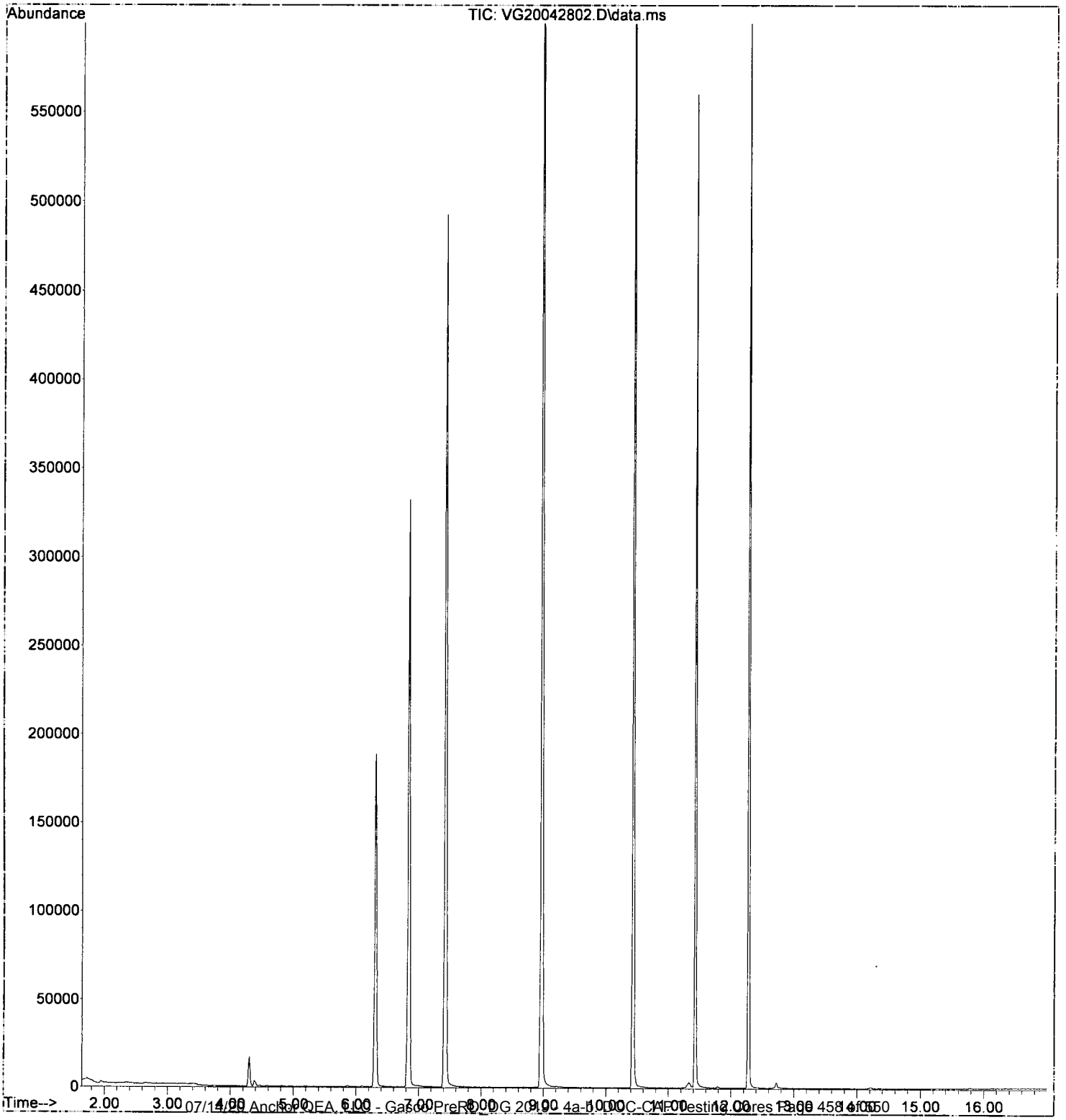
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) Tetrachloroethene (PCE)	9.416	166	23	0.01 ug/L #	24
51) 4-Methyl-2-Pentanone (...	9.391	43	10	0.00 ug/L #	43
52) t-1,3-Dichloropropene	0.000		0	N.D.	
53) 1,1,2-Trichloroethane	9.550	97	10	0.00 ug/L #	12
54) Dibromochloromethane	0.000		0	N.D.	
55) 1,3-Dichloropropane	0.000		0	N.D.	
56) 1,2-Dibromoethane (EDB)	0.000		0	N.D.	
57) 2-Hexanone	0.000		0	N.D.	
58) Chlorobenzene	10.452	112	11	0.00 ug/L #	1
59) Ethylbenzene	10.476	91	20	0.00 ug/L #	50
60) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
61) m,p-Xylenes (2)	10.604	91	51	0.15 ug/L #	22
62) o-Xylene	0.000		0	N.D.	
63) Styrene	0.000		0	N.D.	
64) Bromoform	0.000		0	N.D.	
65) Isopropylbenzene	0.000		0	N.D.	
68) Bromobenzene	11.519	156	10	0.00 ug/L #	1
69) n-Propylbenzene	11.531	91	93	0.01 ug/L #	35
70) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
71) 2-Chlorotoluene	0.000		0	N.D.	
72) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
73) 1,2,3-Trichloropropane	0.000		0	N.D.	
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.	
75) 4-Chlorotoluene	11.781	91	20	0.00 ug/L #	46
76) tert-Butylbenzene	0.000		0	N.D.	
77) 1,2,4-Trimethylbenzene	11.970	105	18	0.16 ug/L #	36
78) sec-Butylbenzene	11.970	105	18	0.00 ug/L	58
79) 4-Isopropyltoluene	12.153	119	29	0.16 ug/L	51
80) 1,3-Dichlorobenzene	12.287	146	68	0.02 ug/L #	1
81) 1,4-Dichlorobenzene	12.287	146	68	0.01 ug/L #	1
82) n-Butylbenzene	0.000		0	N.D.	
83) 1,2-Dichlorobenzene	0.000		0	N.D.	
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	
85) Hexachlorobutadiene	0.000		0	N.D.	
86) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
87) Naphthalene	0.000		0	N.D.	
88) 1,2,3-Trichlorobenzene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042802.D
Acq On : 28 Apr 2020 2:28 pm
Operator : PS
Sample : 0D28059-IBL2
Misc : 1X 5mL DI
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 09:38:11 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

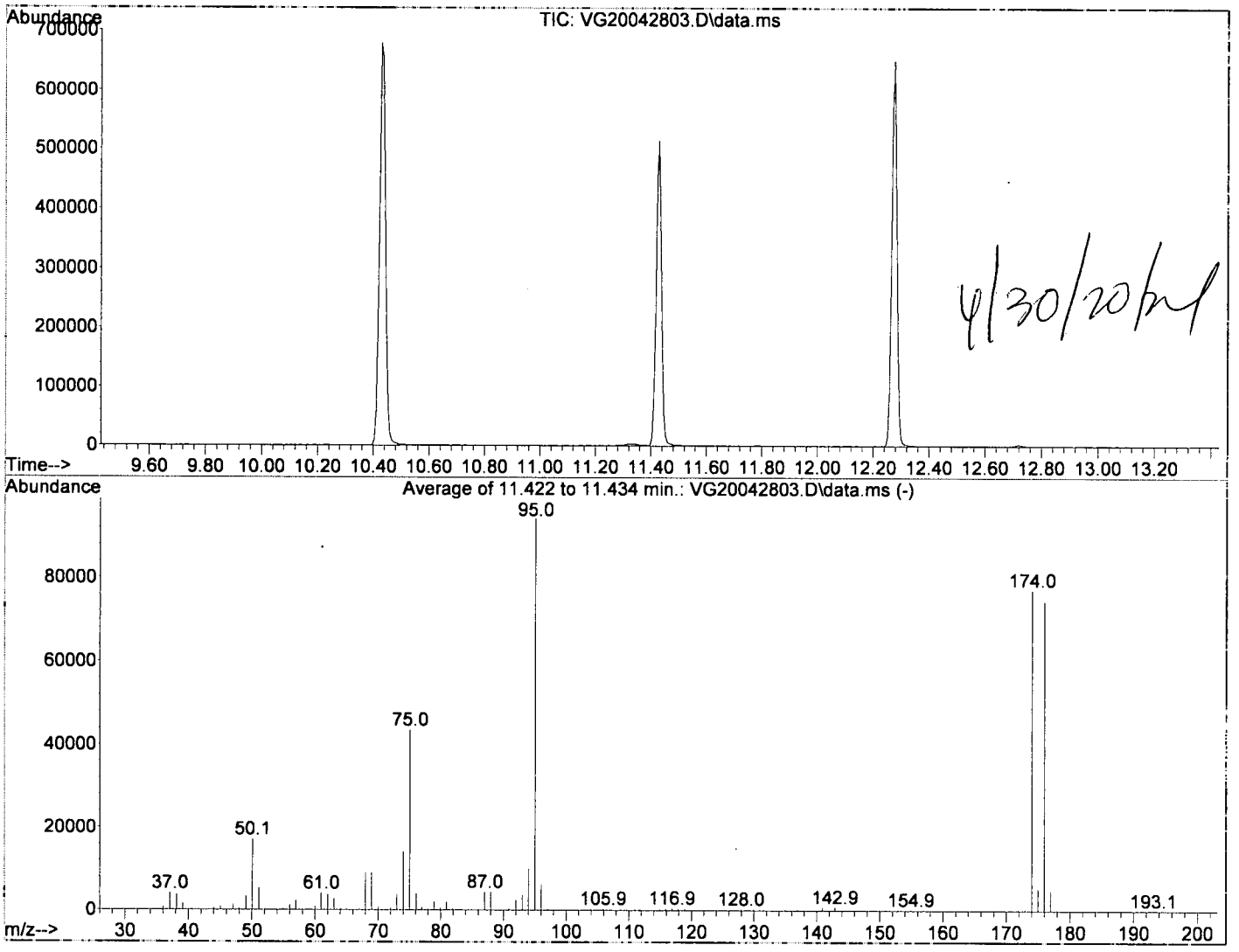


BFB

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042803.D
Acq On : 28 Apr 2020 2:55 pm
Operator : PS
Sample : 0D28059-TUN1
Misc : 1X A20D004 BFB (IS/SURR)
ALS Vial : 3 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VG200429W.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Wed Apr 29 15:17:10 2020



4/30/20

AutoFind: Scans 1605, 1606, 1607; Background Corrected with Scan 1598

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	122.1	94192	PASS
96	95	5	9	6.6	6205	PASS
173	174	0.00	2	0.6	456	PASS
174	95	50	200	81.9	77136	PASS
175	174	5	9	7.0	5387	PASS
176	174	95	105	96.5	74421	PASS
177	176	5	10	6.5	4838	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042803.D
Acq On : 28 Apr 2020 2:55 pm
Operator : PS
Sample : 0D28059-TUN1
Misc : 1X A20D004 BFB (IS/SURR)
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 30 09:38:14 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.837	99	124093	50.00 ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	341352	50.00 ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	142707	50.00 ug/L		0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	6.307	111	123436	50.03 ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	405997	50.85 ug/L		0.00
48) Toluene-d8 (S)	8.965	98	481590	51.67 ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	119487	52.19 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.972	50	162	0.05 ug/L	#	50
4) Vinyl Chloride	0.000		0	N.D.		
5) Bromomethane	2.533	96	33	0.02 ug/L	#	7
6) Chloroethane	2.716	64	22	Below Cal	#	47
7) Trichlorofluoromethane	2.935	101	10	0.00 ug/L	#	27
8) Ethanol	3.606	45	594	9.24 ug/L		89
9) 1,1-Dichloroethene	0.000		0	N.D.		
10) Carbon Disulfide	3.576	76	21	0.00 ug/L		78
11) Freon 113	0.000		0	N.D.		
12) Iodomethane	0.000		0	N.D.		
13) Acrolein	0.000		0	N.D.		
14) Methylene Chloride	4.295	84	5930	2.10 ug/L		94
15) Acetone	4.380	43	1661	1.30 ug/L		82
16) t-1,2-Dichloroethene	0.000		0	N.D.		
17) n-Hexane	0.000		0	N.D.		
18) Methyl-tert-butyl-ether	0.000		0	N.D.		
19) tert-Butanol (TBA)	4.819	59	283	0.75 ug/L	#	85
20) Diisopropyl ether (DIPE)	0.000		0	N.D.		
21) 1,1-Dichloroethane	0.000		0	N.D.		
22) Acrylonitrile	0.000		0	N.D.		
23) Vinyl Acetate	0.000		0	N.D.		
24) Ethyl-tert-butyl ether...	0.000		0	N.D.		
25) c-1,2-Dichloroethene	0.000		0	N.D.		
26) 2,2-Dichloropropane	0.000		0	N.D.		
27) Bromochloromethane	0.000		0	N.D.		
28) Chloroform	0.000		0	N.D.		
29) Carbon Tetrachloride	0.000		0	N.D.		
30) Tetrahydrofuran	0.000		0	N.D.		
31) 1,1,1-Trichloroethane	0.000		0	N.D.		
33) 1,1-Dichloropropene	0.000		0	N.D.		
34) 2-Butanone (MEK)	0.000		0	N.D.		
35) Benzene	6.740	78	22	0.00 ug/L		56
36) tert-Amyl methyl ether...	6.837	73	150	0.03 ug/L	#	1
37) 1,2-Dichloroethane (EDC)	0.000		0	N.D.		
38) iso-Butyl Alcohol	0.000		0	N.D.		
40) Trichloroethene (TCE)	0.000		0	N.D.		
41) tert-Amyl ethyl ether ...	7.666	59	10	0.00 ug/L	#	21
42) Dibromomethane	0.000		0	N.D.		
43) 1,2-Dichloropropane	7.922	63	10	0.00 ug/L	#	40
44) Bromodichloromethane	8.130	83	10	0.00 ug/L	#	26
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.		
47) c-1,3-Dichloropropene	0.000		0	N.D.		
49) Toluene	9.012	92	10	0.01 ug/L	#	30

4/30/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042803.D
Acq On : 28 Apr 2020 2:55 pm
Operator : PS
Sample : 0D28059-TUN1
Misc : 1X A20D004 BFB (IS/SURR)
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 30 09:38:14 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

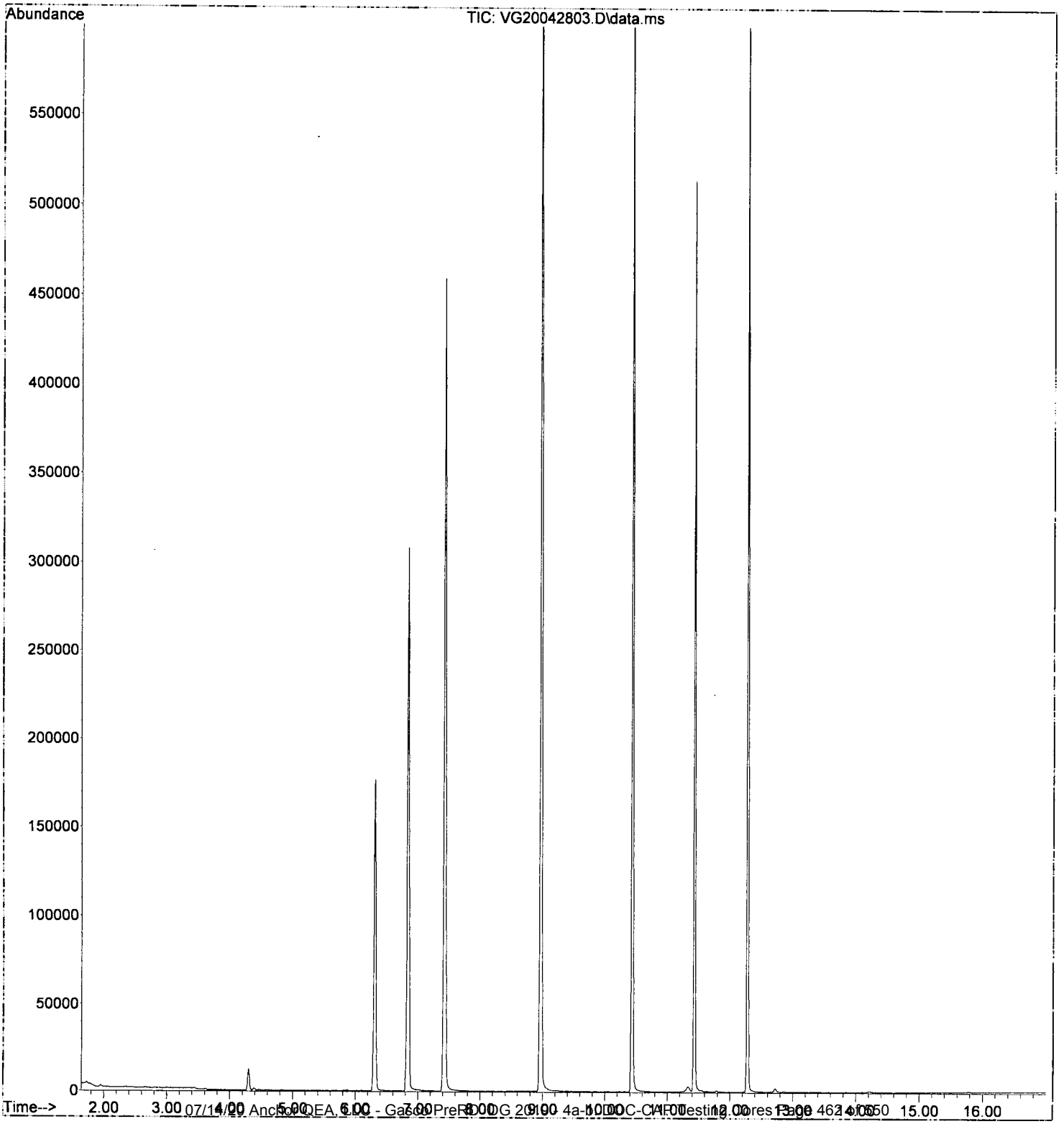
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) Tetrachloroethene (PCE)	0.000		0	N.D.	
51) 4-Methyl-2-Pentanone (...	0.000		0	N.D.	
52) t-1,3-Dichloropropene	0.000		0	N.D.	
53) 1,1,2-Trichloroethane	0.000		0	N.D.	
54) Dibromochloromethane	0.000		0	N.D.	
55) 1,3-Dichloropropane	0.000		0	N.D.	
56) 1,2-Dibromoethane (EDB)	0.000		0	N.D.	
57) 2-Hexanone	0.000		0	N.D.	
58) Chlorobenzene	10.452	112	11	0.00 ug/L #	1
59) Ethylbenzene	10.477	91	12	0.00 ug/L #	50
60) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
61) m,p-Xylenes (2)	10.605	91	24	0.14 ug/L #	34
62) o-Xylene	0.000		0	N.D.	
63) Styrene	0.000		0	N.D.	
64) Bromoform	0.000		0	N.D.	
65) Isopropylbenzene	0.000		0	N.D.	
68) Bromobenzene	11.422	156	63	0.03 ug/L #	1
69) n-Propylbenzene	11.544	91	42	0.00 ug/L	56
70) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
71) 2-Chlorotoluene	0.000		0	N.D.	
72) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
73) 1,2,3-Trichloropropane	0.000		0	N.D.	
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.	
75) 4-Chlorotoluene	11.672	91	10	0.00 ug/L #	46
76) tert-Butylbenzene	0.000		0	N.D.	
77) 1,2,4-Trimethylbenzene	0.000		0	N.D.	
78) sec-Butylbenzene	0.000		0	N.D.	
79) 4-Isopropyltoluene	12.141	119	10	0.16 ug/L	51
80) 1,3-Dichlorobenzene	12.293	146	41	0.01 ug/L #	1
81) 1,4-Dichlorobenzene	12.293	146	41	0.01 ug/L #	1
82) n-Butylbenzene	12.476	91	19	0.00 ug/L #	32
83) 1,2-Dichlorobenzene	0.000		0	N.D.	
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	
85) Hexachlorobutadiene	0.000		0	N.D.	
86) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
87) Naphthalene	0.000		0	N.D.	
88) 1,2,3-Trichlorobenzene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042803.D
Acq On : 28 Apr 2020 2:55 pm
Operator : PS
Sample : 0D28059-TUN1
Misc : 1X A20D004 BFB (IS/SURR)
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 30 09:38:14 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042804.D
Acq On : 28 Apr 2020 3:22 pm
Operator : PS
Sample : 0D28059-ICB1
Misc : 1X 5mL DI
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 30 09:38:17 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.837	99	129312	50.00 ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	360314	50.00 ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	151240	50.00 ug/L		0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	6.307	111	129593	50.41 ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	430329	51.72 ug/L		0.00
48) Toluene-d8 (S)	8.965	98	507019	51.54 ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.427	174	126557	52.16 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.978	50	111	0.03 ug/L	#	50
4) Vinyl Chloride	0.000		0	N.D.		
5) Bromomethane	2.533	96	140	0.07 ug/L		74
6) Chloroethane	2.728	64	37	Below Cal	#	47
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethanol	3.612	45	351	5.24 ug/L		76
9) 1,1-Dichloroethene	0.000		0	N.D.		
10) Carbon Disulfide	0.000		0	N.D.		
11) Freon 113	0.000		0	N.D.		
12) Iodomethane	0.000		0	N.D.		
13) Acrolein	0.000		0	N.D.		
14) Methylene Chloride	4.295	84	6371	2.16 ug/L		98
15) Acetone	4.380	43	1339	1.01 ug/L		89
16) t-1,2-Dichloroethene	0.000		0	N.D.		
17) n-Hexane	0.000		0	N.D.		
18) Methyl-tert-butyl-ether	0.000		0	N.D.		
19) tert-Butanol (TBA)	4.807	59	391	1.00 ug/L	#	53
20) Diisopropyl ether (DIPE)	0.000		0	N.D.		
21) 1,1-Dichloroethane	0.000		0	N.D.		
22) Acrylonitrile	0.000		0	N.D.		
23) Vinyl Acetate	0.000		0	N.D.		
24) Ethyl-tert-butyl ether...	0.000		0	N.D.		
25) c-1,2-Dichloroethene	0.000		0	N.D.		
26) 2,2-Dichloropropane	5.880	77	11	0.01 ug/L	#	32
27) Bromochloromethane	0.000		0	N.D.		
28) Chloroform	0.000		0	N.D.		
29) Carbon Tetrachloride	0.000		0	N.D.		
30) Tetrahydrofuran	0.000		0	N.D.		
31) 1,1,1-Trichloroethane	0.000		0	N.D.		
33) 1,1-Dichloropropene	0.000		0	N.D.		
34) 2-Butanone (MEK)	0.000		0	N.D.		
35) Benzene	6.727	78	21	0.00 ug/L		56
36) tert-Amyl methyl ether...	6.825	73	168	0.03 ug/L	#	1
37) 1,2-Dichloroethane (EDC)	0.000		0	N.D.		
38) iso-Butyl Alcohol	0.000		0	N.D.		
40) Trichloroethene (TCE)	0.000		0	N.D.		
41) tert-Amyl ethyl ether ...	0.000		0	N.D.		
42) Dibromomethane	0.000		0	N.D.		
43) 1,2-Dichloropropane	0.000		0	N.D.		
44) Bromodichloromethane	0.000		0	N.D.		
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.		
47) c-1,3-Dichloropropene	0.000		0	N.D.		
49) Toluene	8.007	91	79	0.01 ug/L	#	10

4/30/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042804.D
Acq On : 28 Apr 2020 3:22 pm
Operator : PS
Sample : 0D28059-ICB1
Misc : 1X 5mL DI
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 30 09:38:17 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

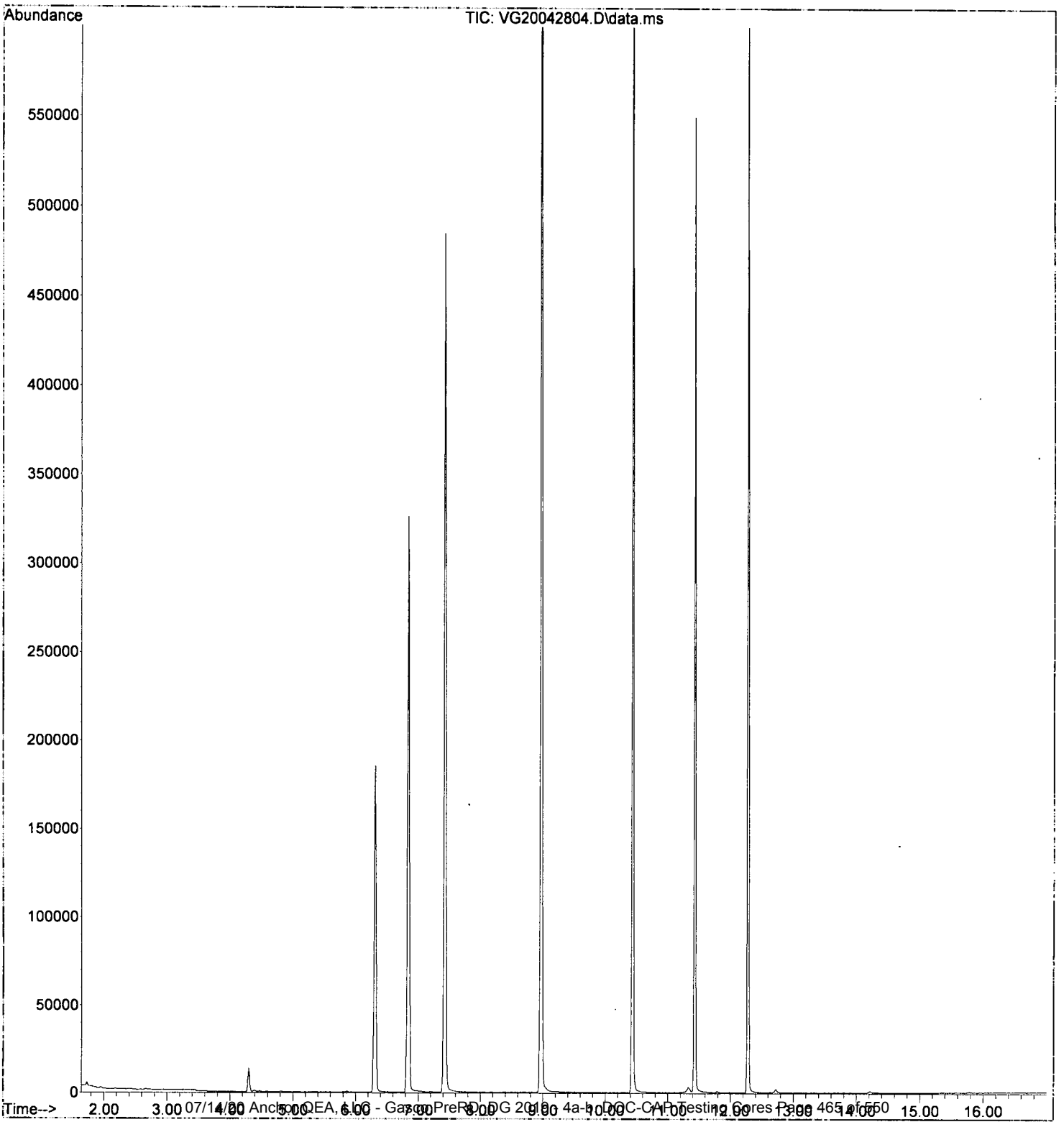
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) Tetrachloroethene (PCE)	9.422	166	10	0.00 ug/L #	24
51) 4-Methyl-2-Pentanone (...	9.434	43	11	0.00 ug/L #	43
52) t-1,3-Dichloropropene	0.000		0	N.D.	
53) 1,1,2-Trichloroethane	9.696	97	10	0.00 ug/L #	12
54) Dibromochloromethane	0.000		0	N.D.	
55) 1,3-Dichloropropane	0.000		0	N.D.	
56) 1,2-Dibromoethane (EDB)	0.000		0	N.D.	
57) 2-Hexanone	10.111	43	10	0.00 ug/L #	32
58) Chlorobenzene	10.452	112	10	0.00 ug/L #	1
59) Ethylbenzene	10.434	91	734	0.07 ug/L #	1
60) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
61) m,p-Xylenes (2)	10.604	91	61	0.15 ug/L #	34
62) o-Xylene	0.000		0	N.D.	
63) Styrene	0.000		0	N.D.	
64) Bromoform	0.000		0	N.D.	
65) Isopropylbenzene	0.000		0	N.D.	
68) Bromobenzene	0.000		0	N.D.	
69) n-Propylbenzene	11.543	91	10	0.00 ug/L	56
70) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
71) 2-Chlorotoluene	0.000		0	N.D.	
72) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
73) 1,2,3-Trichloropropane	0.000		0	N.D.	
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.	
75) 4-Chlorotoluene	0.000		0	N.D.	
76) tert-Butylbenzene	0.000		0	N.D.	
77) 1,2,4-Trimethylbenzene	0.000		0	N.D.	
78) sec-Butylbenzene	0.000		0	N.D.	
79) 4-Isopropyltoluene	12.147	119	11	0.16 ug/L #	12
80) 1,3-Dichlorobenzene	0.000		0	N.D.	
81) 1,4-Dichlorobenzene	0.000		0	N.D.	
82) n-Butylbenzene	0.000		0	N.D.	
83) 1,2-Dichlorobenzene	0.000		0	N.D.	
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	
85) Hexachlorobutadiene	0.000		0	N.D.	
86) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
87) Naphthalene	0.000		0	N.D.	
88) 1,2,3-Trichlorobenzene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042804.D
Acq On : 28 Apr 2020 3:22 pm
Operator : PS
Sample : 0D28059-ICB1
Misc : 1X 5mL DI
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 30 09:38:17 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042805.D
Acq On : 28 Apr 2020 3:49 pm
Operator : PS
Sample : 0D28059-CAL1
Misc : 1X 5mL 0.1 PPB VOCRO
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 29 14:35:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	113531	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	310108	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	129589	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	112724	53.18	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	368655	54.10	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	437447	53.71	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	107903	49.26	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	304	0.14	ug/L		81
3) Chloromethane	1.978	50	466	0.22	ug/L		94
4) Vinyl Chloride	2.100	62	315	0.14	ug/L	#	53
5) Bromomethane	2.527	96	385	0.27	ug/L	#	67
6) Chloroethane	2.722	64	290	0.11	ug/L	#	63
7) Trichlorofluoromethane	2.917	101	352	0.12	ug/L		95
8) Ethanol	3.618	45	653	12.61	ug/L		72
9) 1,1-Dichloroethene	3.563	61	356	0.12	ug/L	#	63
10) Carbon Disulfide	3.569	76	488	0.13	ug/L		78
11) Freon 113	3.655	101	229	0.12	ug/L	#	60
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	0.000		0	N.D.	d		
14) Methylene Chloride	4.301	84	3714	1.80	ug/L		90
15) Acetone	4.392	43	1500	1.41	ug/L		85
16) t-1,2-Dichloroethene	4.490	61	387	0.14	ug/L		77
17) n-Hexane	0.000		0	N.D.			
18) Methyl-tert-butyl-ether	4.636	73	537	0.12	ug/L		57
19) tert-Butanol (TBA)	4.807	59	2202	7.18	ug/L	#	38
20) Diisopropyl ether (DIPE)	0.000		0	N.D.	d		
21) 1,1-Dichloroethane	5.197	63	440	0.12	ug/L		74
22) Acrylonitrile	0.000		0	N.D.	d		
23) Vinyl Acetate	0.000		0	N.D.	d		
24) Ethyl-tert-butyl ether...	0.000		0	N.D.	d		
25) c-1,2-Dichloroethene	5.801	61	306	0.12	ug/L	#	73
26) 2,2-Dichloropropane	5.923	77	151	0.10	ug/L	#	32
27) Bromochloromethane	6.020	49	271	0.15	ug/L		74
28) Chloroform	6.106	83	470	0.13	ug/L		89
29) Carbon Tetrachloride	6.246	117	41	0.02	ug/L		86
30) Tetrahydrofuran	0.000		0	N.D.	d		
31) 1,1,1-Trichloroethane	6.319	97	352	0.13	ug/L		84
33) 1,1-Dichloropropene	6.465	75	257	0.11	ug/L	#	39
34) 2-Butanone (MEK)	0.000		0	N.D.	d		
35) Benzene	6.733	78	1003	0.13	ug/L		95
36) tert-Amyl methyl ether...	0.000		0	N.D.	d		
37) 1,2-Dichloroethane (EDC)	6.959	62	343	0.12	ug/L		78
38) iso-Butyl Alcohol	7.032	43	384	2.04	ug/L		80
40) Trichloroethene (TCE)	7.392	130	318	0.13	ug/L	#	77
41) tert-Amyl ethyl ether ...	0.000		0	N.D.	d		
42) Dibromomethane	7.843	93	185	0.14	ug/L	#	1
43) 1,2-Dichloropropane	7.977	63	244	0.12	ug/L	#	36
44) Bromodichloromethane	8.050	83	206	0.09	ug/L		91
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.	d		
47) c-1,3-Dichloropropene	8.782	75	199	0.09	ug/L	#	52
49) Toluene	8.926	91	1265	0.14	ug/L		81

4/30/2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042805.D
Acq On : 28 Apr 2020 3:49 pm
Operator : PS
Sample : 0D28059-CAL1
Misc : 1X 5mL 0.1 PPB VOCRO
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 29 14:35:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) Tetrachloroethene (PCE)	9.416	166	188	0.08 ug/L	79
51) 4-Methyl-2-Pentanone (...	9.440	43	425	0.14 ug/L	78
52) t-1,3-Dichloropropene	9.465	75	132	0.39 ug/L #	45
53) 1,1,2-Trichloroethane	9.617	97	221	0.11 ug/L #	54
54) Dibromochloromethane	9.769	129	141	0.25 ug/L #	55
55) 1,3-Dichloropropane	9.861	76	384	0.12 ug/L	78
56) 1,2-Dibromoethane (EDB)	9.989	107	135	0.06 ug/L	77
57) 2-Hexanone	10.221	43	181	0.08 ug/L	63
58) Chlorobenzene	10.446	112	784	0.13 ug/L #	23
59) Ethylbenzene	10.477	91	1080	0.11 ug/L	93
60) 1,1,1,2-Tetrachloroethane	10.507	131	140	0.08 ug/L #	69
61) m,p-Xylenes (2)	10.599	91	1169	0.23 ug/L	97
62) o-Xylene	10.946	91	660	0.17 ug/L	80
63) Styrene	11.013	104	277	0.39 ug/L	68
64) Bromoform	11.019	173	71	0.39 ug/L #	37
65) Isopropylbenzene	11.202	105	595	0.35 ug/L	89
68) Bromobenzene	11.507	156	220	0.10 ug/L #	64
69) n-Propylbenzene	11.525	91	972	0.12 ug/L	92
70) 1,1,2,2-Tetrachloroethane	11.598	83	312	0.14 ug/L #	55
71) 2-Chlorotoluene	11.659	126	191	0.11 ug/L #	49
72) 1,3,5-Trimethylbenzene	11.678	105	506	0.10 ug/L	79
73) 1,2,3-Trichloropropane	11.696	110	68	0.09 ug/L #	71
74) t-1,4-Dichloro-2-butene	0.000		0	N.D. d	
75) 4-Chlorotoluene	11.781	91	557	0.11 ug/L	91
76) tert-Butylbenzene	11.915	91	357	0.13 ug/L #	55
77) 1,2,4-Trimethylbenzene	11.970	105	468	0.09 ug/L	93
78) sec-Butylbenzene	12.043	105	570	0.10 ug/L	97
79) 4-Isopropyltoluene	12.147	119	409	0.22 ug/L	82
80) 1,3-Dichlorobenzene	12.226	146	351	0.10 ug/L	85
81) 1,4-Dichlorobenzene	12.281	146	460	0.12 ug/L #	1
82) n-Butylbenzene	12.476	91	402	0.10 ug/L	73
83) 1,2-Dichlorobenzene	12.616	146	327	0.10 ug/L	90
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	
85) Hexachlorobutadiene	0.000		0	N.D. d	
86) 1,2,4-Trichlorobenzene	13.872	180	99	0.06 ug/L #	60
87) Naphthalene	14.189	128	291	0.96 ug/L	79
88) 1,2,3-Trichlorobenzene	0.000		0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042805.D
Acq On : 28 Apr 2020 3:49 pm
Operator : PS
Sample : 0D28059-CAL1
Misc : 1X 5mL 0.1 PPB VOCRO
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 29 14:27:14 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

4/29/2020

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	113531	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	310108	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	129589	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	112724	53.18	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	368655	54.10	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	437447	53.71	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	107903	49.26	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	304	0.14	ug/L		81
3) Chloromethane	1.978	50	466	0.22	ug/L		94
4) Vinyl Chloride	2.100	62	315	0.14	ug/L	#	53
5) Bromomethane	2.527	96	385	0.27	ug/L	#	67
6) Chloroethane	2.722	64	290	0.11	ug/L	#	63
7) Trichlorofluoromethane	2.917	101	352	0.12	ug/L		95
8) Ethanol	3.618	45	653	12.61	ug/L		72
9) 1,1-Dichloroethene	3.563	61	356	0.12	ug/L	#	63
10) Carbon Disulfide	3.569	76	488	0.13	ug/L		78
11) Freon 113	3.655	101	229	0.12	ug/L	#	60
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	4.008	56	19	0.04	ug/L	#	23
14) Methylene Chloride	4.301	84	3714	1.80	ug/L		90
15) Acetone	4.392	43	1500	1.41	ug/L		85
16) t-1,2-Dichloroethene	4.490	61	387	0.14	ug/L		77
17) n-Hexane	0.000		0	N.D.			
18) Methyl-tert-butyl-ether	4.636	73	537	0.12	ug/L		57
19) tert-Butanol (TBA)	4.807	59	2202	7.18	ug/L	#	38
20) Diisopropyl ether (DIPE)	5.094	45	115	0.02	ug/L	#	33
21) 1,1-Dichloroethane	5.197	63	440	0.12	ug/L		74
22) Acrylonitrile	5.270	53	10	0.01	ug/L	#	14
23) Vinyl Acetate	5.532	43	10	0.61	ug/L		74
24) Ethyl-tert-butyl ether...	5.478	59	46	0.01	ug/L	#	38
25) c-1,2-Dichloroethene	5.801	61	306	0.12	ug/L	#	73
26) 2,2-Dichloropropane	5.923	77	151	0.10	ug/L	#	32
27) Bromochloromethane	6.020	49	271	0.15	ug/L		74
28) Chloroform	6.106	83	470	0.13	ug/L		89
29) Carbon Tetrachloride	6.246	117	41	0.02	ug/L		86
30) Tetrahydrofuran	6.301	42	10	0.01	ug/L	#	37
31) 1,1,1-Trichloroethane	6.319	97	352	0.13	ug/L		84
33) 1,1-Dichloropropene	6.465	75	257	0.11	ug/L	#	39
34) 2-Butanone (MEK)	6.490	43	113	0.07	ug/L		52
35) Benzene	6.733	78	1003	0.13	ug/L		95
36) tert-Amyl methyl ether...	6.843	73	311	0.08	ug/L	#	1
37) 1,2-Dichloroethane (EDC)	6.959	62	343	0.12	ug/L		78
38) iso-Butyl Alcohol	7.032	43	384	2.04	ug/L		80
40) Trichloroethene (TCE)	7.392	130	318	0.13	ug/L	#	77
41) tert-Amyl ethyl ether ...	7.654	59	11	0.00	ug/L	#	21
42) Dibromomethane	7.843	93	185	0.14	ug/L	#	1
43) 1,2-Dichloropropane	7.977	63	244	0.12	ug/L	#	36
44) Bromodichloromethane	8.050	83	206	0.09	ug/L		91
46) 2-Chloroethyl Vinyl Ether	8.733	63	21	0.02	ug/L	#	1
47) c-1,3-Dichloropropene	8.782	75	199	0.09	ug/L	#	52
49) Toluene	9.026	92	1265	0.14	ug/L		81

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042805.D
Acq On : 28 Apr 2020 3:49 pm
Operator : PS
Sample : 0D28059-CAL1
Misc : 1X 5mL 0.1 PPB VOCRO
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 29 14:27:14 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

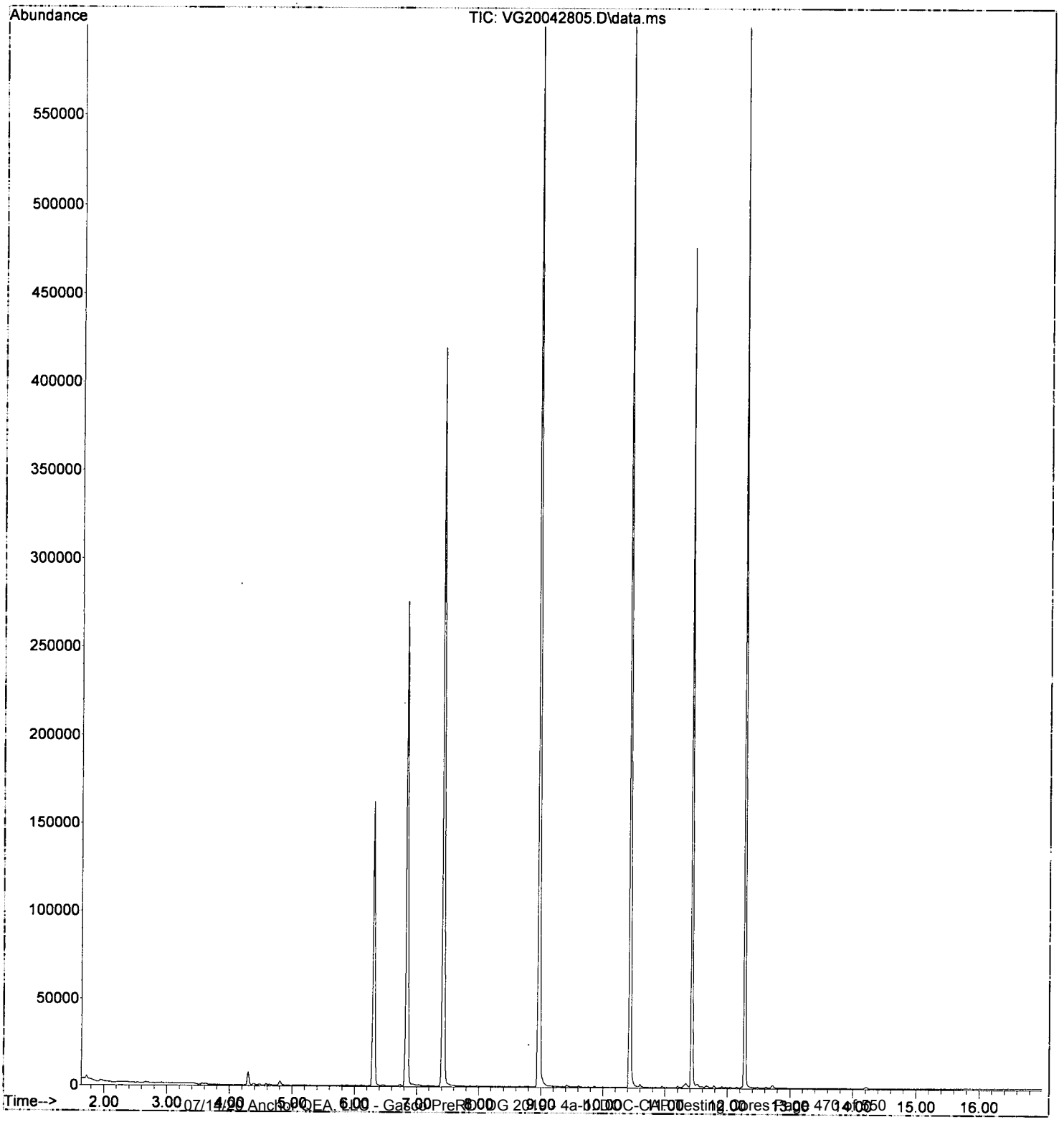
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.416	166	188	0.08	ug/L		79
51) 4-Methyl-2-Pentanone (...	9.440	43	425	0.14	ug/L		78
52) t-1,3-Dichloropropene	9.465	75	132	0.39	ug/L	#	45
53) 1,1,2-Trichloroethane	9.617	97	221	0.11	ug/L	#	54
54) Dibromochloromethane	9.769	129	141	0.25	ug/L	#	55
55) 1,3-Dichloropropane	9.861	76	384	0.12	ug/L		78
56) 1,2-Dibromoethane (EDB)	9.989	107	135	0.06	ug/L		77
57) 2-Hexanone	10.221	43	181	0.08	ug/L		63
58) Chlorobenzene	10.446	112	784	0.13	ug/L	#	23
59) Ethylbenzene	10.477	91	1080	0.11	ug/L		93
60) 1,1,1,2-Tetrachloroethane	10.507	131	140	0.08	ug/L	#	69
61) m,p-Xylenes (2)	10.599	91	1169	0.23	ug/L		97
62) o-Xylene	10.946	91	660	0.17	ug/L		80
63) Styrene	11.013	104	277	0.09	ug/L		68
64) Bromoform	11.019	173	71	0.09	ug/L	#	37
65) Isopropylbenzene	11.202	105	595	0.15	ug/L		89
68) Bromobenzene	11.507	156	220	0.10	ug/L	#	64
69) n-Propylbenzene	11.525	91	972	0.12	ug/L		92
70) 1,1,2,2-Tetrachloroethane	11.598	83	312	0.14	ug/L	#	55
71) 2-Chlorotoluene	11.659	126	191	0.11	ug/L	#	49
72) 1,3,5-Trimethylbenzene	11.678	105	506	0.10	ug/L		79
73) 1,2,3-Trichloropropane	11.696	110	68	0.09	ug/L	#	71
74) t-1,4-Dichloro-2-butene	11.781	88	10	1.24	ug/L	#	1
75) 4-Chlorotoluene	11.781	91	557	0.11	ug/L		91
76) tert-Butylbenzene	11.915	91	357	0.13	ug/L	#	55
77) 1,2,4-Trimethylbenzene	11.970	105	468	0.09	ug/L		93
78) sec-Butylbenzene	12.043	105	570	0.10	ug/L		97
79) 4-Isopropyltoluene	12.147	119	409	0.22	ug/L		82
80) 1,3-Dichlorobenzene	12.226	146	351	0.10	ug/L		85
81) 1,4-Dichlorobenzene	12.281	146	460	0.12	ug/L	#	1
82) n-Butylbenzene	12.476	91	402	0.10	ug/L		73
83) 1,2-Dichlorobenzene	12.616	146	327	0.10	ug/L		90
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
85) Hexachlorobutadiene	13.811	223	12	0.03	ug/L	#	5
86) 1,2,4-Trichlorobenzene	13.872	180	99	0.06	ug/L	#	60
87) Naphthalene	14.189	128	291	0.96	ug/L		79
88) 1,2,3-Trichlorobenzene	14.366	180	41	0.02	ug/L	#	62

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042805.D
Acq On : 28 Apr 2020 3:49 pm
Operator : PS
Sample : 0D28059-CAL1
Misc : 1X 5mL 0.1 PPB VOCRO
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 29 14:35:56 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042806.D
Acq On : 28 Apr 2020 4:16 pm
Operator : PS
Sample : 0D28059-CAL2
Misc : 1X 5mL 0.2 PPB VOCRO
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 14:38:18 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	Qion	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	125854	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	351200	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	147833	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	126891	54.00	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	415901	55.06	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	494085	53.56	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	122178	48.89	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	527	0.23	ug/L		97
3) Chloromethane	1.984	50	787	0.33	ug/L		86
4) Vinyl Chloride	2.094	62	651	0.26	ug/L		75
5) Bromomethane	2.533	96	645	0.40	ug/L		94
6) Chloroethane	2.716	64	472	0.27	ug/L		89
7) Trichlorofluoromethane	2.911	101	715	0.22	ug/L		84
8) Ethanol	3.612	45	941	16.39	ug/L		87
9) 1,1-Dichloroethene	3.563	61	711	0.22	ug/L		91
10) Carbon Disulfide	3.563	76	850	0.20	ug/L		78
11) Freon 113	3.649	101	435	0.21	ug/L		91
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	0.000		0	N.D.	d		
14) Methylene Chloride	4.301	84	5057	2.21	ug/L		98
15) Acetone	4.392	43	1950	1.65	ug/L		98
16) t-1,2-Dichloroethene	4.490	61	652	0.22	ug/L		96
17) n-Hexane	4.588	86	27	0.10	ug/L	#	19
18) Methyl-tert-butyl-ether	4.642	73	917	0.18	ug/L		88
19) tert-Butanol (TBA)	4.801	59	4291	12.63	ug/L	#	42
20) Diisopropyl ether (DIPE)	5.100	45	271	0.05	ug/L		58
21) 1,1-Dichloroethane	5.185	63	879	0.22	ug/L		81
22) Acrylonitrile	0.000		0	N.D.	d		
23) Vinyl Acetate	0.000		0	N.D.	d		
24) Ethyl-tert-butyl ether...	0.000		0	N.D.	d		
25) c-1,2-Dichloroethene	5.807	61	606	0.21	ug/L		85
26) 2,2-Dichloropropane	5.910	77	410	0.24	ug/L		69
27) Bromochloromethane	6.014	49	526	0.27	ug/L		85
28) Chloroform	6.112	83	849	0.22	ug/L		95
29) Carbon Tetrachloride	6.234	117	279	0.13	ug/L		83
30) Tetrahydrofuran	6.301	42	176	0.16	ug/L	#	64
31) 1,1,1-Trichloroethane	6.313	97	542	0.19	ug/L		82
33) 1,1-Dichloropropene	6.453	75	553	0.21	ug/L		82
34) 2-Butanone (MEK)	0.000		0	N.D.	d		
35) Benzene	6.727	78	1916	0.22	ug/L		93
36) tert-Amyl methyl ether...	0.000		0	N.D.	d		
37) 1,2-Dichloroethane (EDC)	6.965	62	715	0.22	ug/L		83
38) iso-Butyl Alcohol	7.038	43	824m	3.96	ug/L		
40) Trichloroethene (TCE)	7.386	130	572	0.22	ug/L		82
41) tert-Amyl ethyl ether ...	7.660	59	92	0.03	ug/L		90
42) Dibromomethane	7.861	93	297	0.20	ug/L	#	59
43) 1,2-Dichloropropane	7.971	63	510	0.22	ug/L		81
44) Bromodichloromethane	8.050	83	496	0.20	ug/L		90
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.	d		
47) c-1,3-Dichloropropene	8.782	75	475	0.18	ug/L		80
49) Toluene	8.920	91	1	0.23	ug/L		95

4/30/2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042806.D
Acq On : 28 Apr 2020 4:16 pm
Operator : PS
Sample : 0D28059-CAL2
Misc : 1X 5mL 0.2 PPB VOCRO
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 14:38:18 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

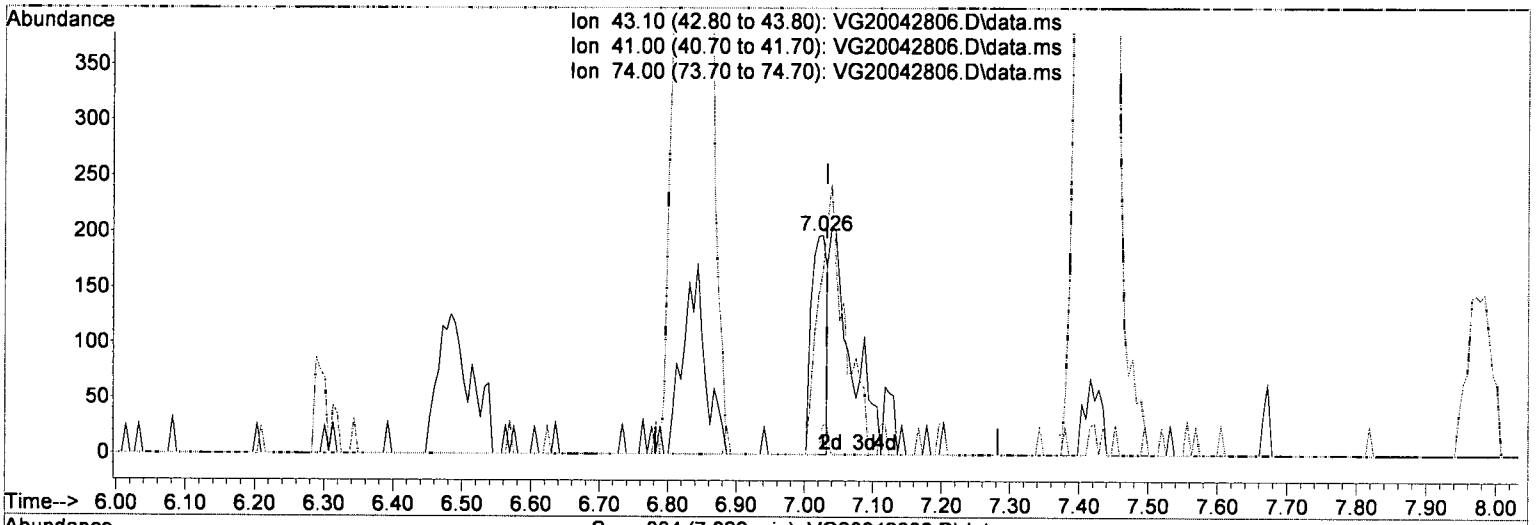
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	432	0.16	ug/L		80
51) 4-Methyl-2-Pentanone (...	9.428	43	1009	0.29	ug/L		91
52) t-1,3-Dichloropropene	9.459	75	262	0.43	ug/L		72
53) 1,1,2-Trichloroethane	9.605	97	483	0.21	ug/L		87
54) Dibromochloromethane	9.776	129	285	0.30	ug/L		88
55) 1,3-Dichloropropane	9.861	76	668	0.18	ug/L		83
56) 1,2-Dibromoethane (EDB)	9.983	107	377	0.16	ug/L		74
57) 2-Hexanone	10.202	43	490	0.18	ug/L		70
58) Chlorobenzene	10.440	112	1372	0.20	ug/L	#	1
59) Ethylbenzene	10.471	91	1953	0.18	ug/L		94
60) 1,1,1,2-Tetrachloroethane	10.501	131	402	0.20	ug/L	#	52
61) m,p-Xylenes (2)	10.592	91	2530	0.38	ug/L		91
62) o-Xylene	10.952	91	1046	0.20	ug/L		91
63) Styrene	11.007	104	645	0.44	ug/L		90
64) Bromoform	11.025	173	181	0.44	ug/L		87
65) Isopropylbenzene	11.208	105	1157	0.41	ug/L		87
68) Bromobenzene	11.507	156	477	0.19	ug/L	#	72
69) n-Propylbenzene	11.525	91	1758	0.19	ug/L		91
70) 1,1,2,2-Tetrachloroethane	11.586	83	560	0.22	ug/L		94
71) 2-Chlorotoluene	11.653	126	365	0.18	ug/L		83
72) 1,3,5-Trimethylbenzene	11.672	105	901	0.15	ug/L		95
73) 1,2,3-Trichloropropane	11.696	110	184	0.21	ug/L	#	63
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.	d		
75) 4-Chlorotoluene	11.787	91	1076	0.19	ug/L		93
76) tert-Butylbenzene	11.915	91	592	0.19	ug/L	#	65
77) 1,2,4-Trimethylbenzene	11.970	105	860	0.15	ug/L		94
78) sec-Butylbenzene	12.050	105	1055	0.16	ug/L		95
79) 4-Isopropyltoluene	12.147	119	770	0.27	ug/L		98
80) 1,3-Dichlorobenzene	12.226	146	720	0.19	ug/L		79
81) 1,4-Dichlorobenzene	12.287	146	974	0.22	ug/L	#	70
82) n-Butylbenzene	12.476	91	781	0.17	ug/L		86
83) 1,2-Dichlorobenzene	12.616	146	615	0.16	ug/L		83
84) 1,2-Dibromo-3-Chloropr...	13.269	157	62	0.10	ug/L	#	15
85) Hexachlorobutadiene	13.811	223	70	0.14	ug/L	#	17
86) 1,2,4-Trichlorobenzene	13.860	180	239	0.12	ug/L	#	61
87) Naphthalene	14.189	128	494	0.98	ug/L		79
88) 1,2,3-Trichlorobenzene	14.372	180	236	0.12	ug/L		80

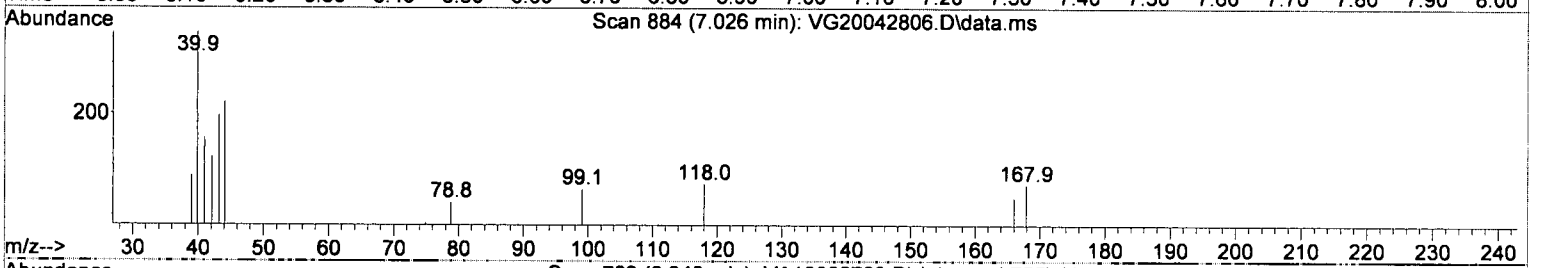
(#) = qualifier out of range (m) = manual integration (+) = signals summed

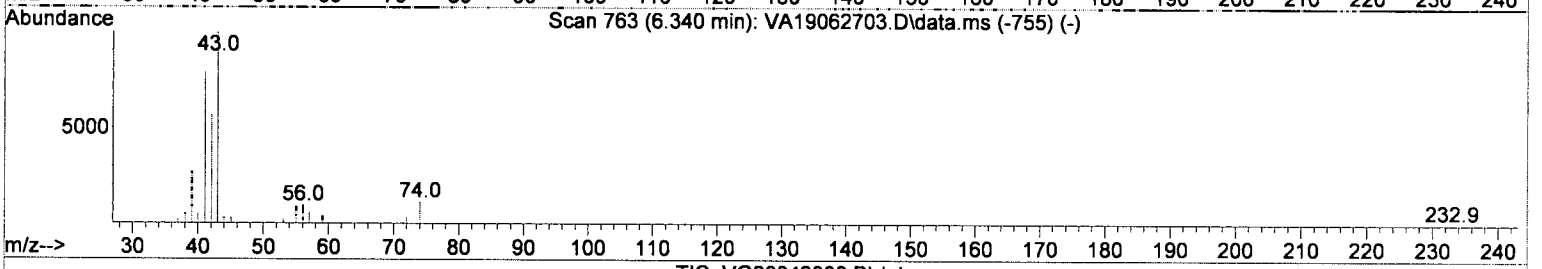
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042806.D
Acq On : 28 Apr 2020 4:16 pm
Operator : PS
Sample : 0D28059-CAL2
Misc : 1X 5mL 0.2 PPB VOCRO
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 14:27:17 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration







TIC: VG20042806.D\data.ms

(38) iso-Butyl Alcohol

7.026min (-0.006) 1.53 ug/L

response 319

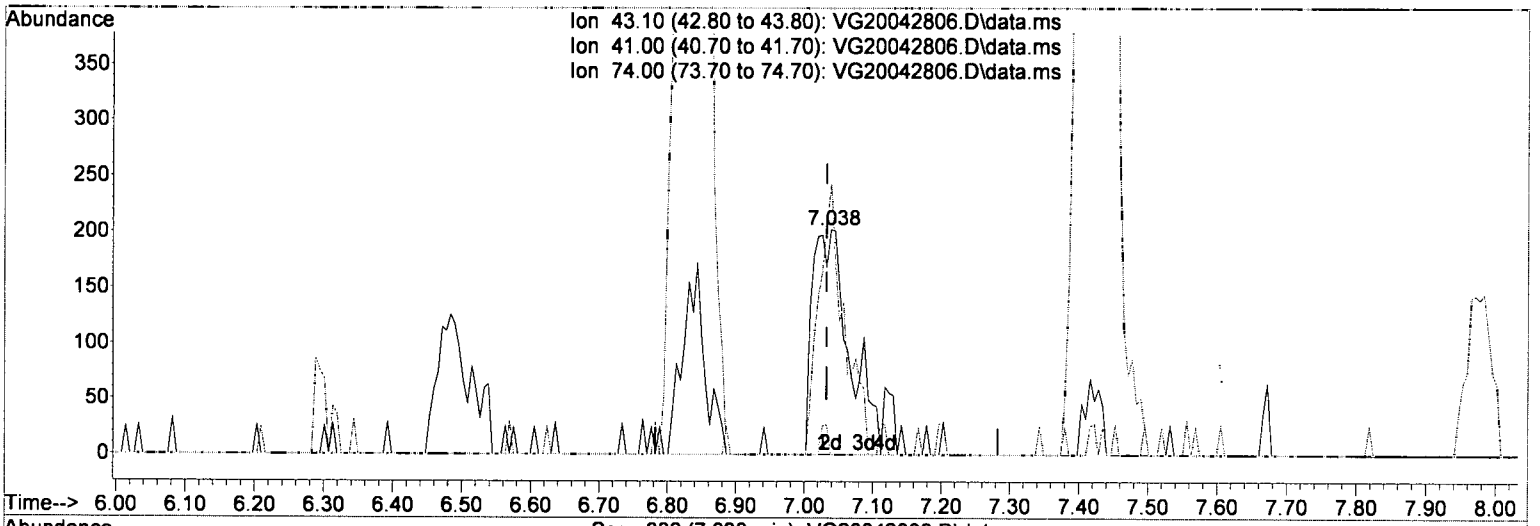
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	83.25
74.00	11.60	13.20
0.00	0.00	0.00

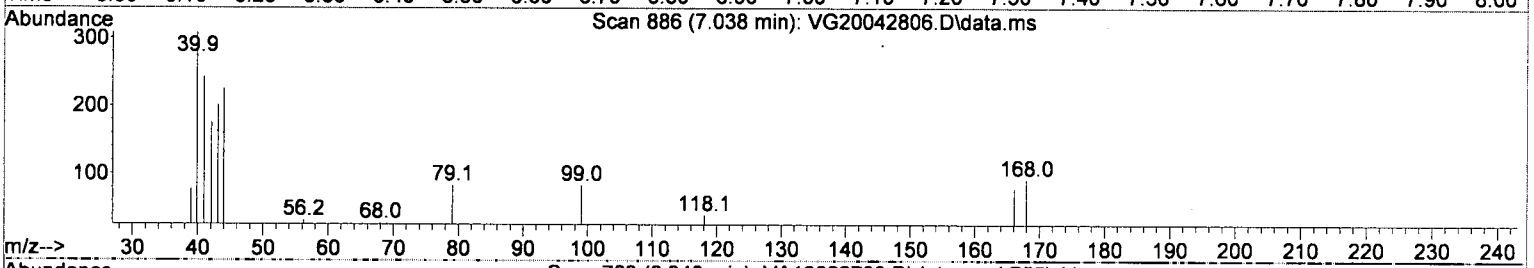
(ME) 4/30/2020

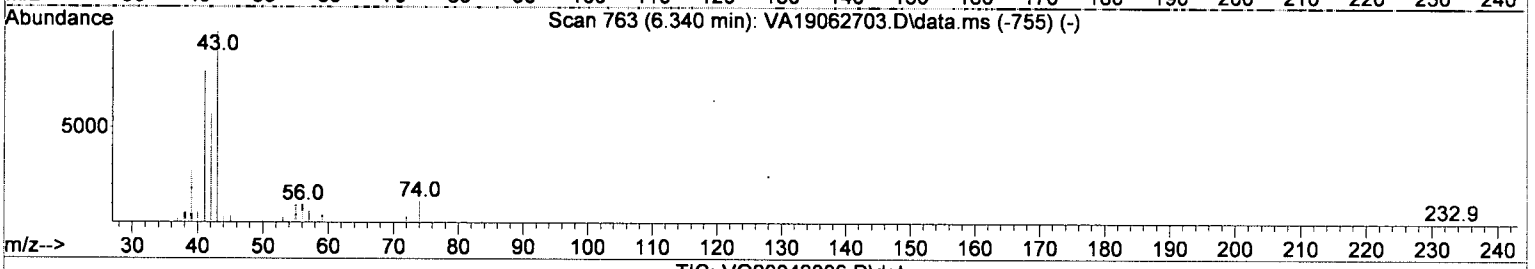
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042806.D
Acq On : 28 Apr 2020 4:16 pm
Operator : PS
Sample : 0D28059-CAL2
Misc : 1X 5mL 0.2 PPB VOCRO
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 14:27:17 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration







TIC: VG20042806.D\data.ms

(38) iso-Butyl Alcohol

7.038min (+ 0.006) 3.96 ug/L m

response 824

Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	120.30#
74.00	11.60	0.00
0.00	0.00	0.00

4/30/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042806.D
Acq On : 28 Apr 2020 4:16 pm
Operator : PS
Sample : 0D28059-CAL2
Misc : 1X 5mL 0.2 PPB VOCRO
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 14:27:17 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	125854	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	351200	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	147833	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	126891	54.00	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	415901	55.06	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	494085	53.56	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	122178	48.89	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	527	0.23	ug/L		97
3) Chloromethane	1.984	50	787	0.33	ug/L		86
4) Vinyl Chloride	2.094	62	651	0.26	ug/L		75
5) Bromomethane	2.533	96	645	0.40	ug/L		94
6) Chloroethane	2.716	64	472	0.27	ug/L		89
7) Trichlorofluoromethane	2.911	101	715	0.22	ug/L		84
8) Ethanol	3.612	45	941	16.39	ug/L		87
9) 1,1-Dichloroethene	3.563	61	711	0.22	ug/L		91
10) Carbon Disulfide	3.563	76	850	0.20	ug/L		78
11) Freon 113	3.649	101	435	0.21	ug/L		91
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	4.015	56	45	0.09	ug/L		82
14) Methylene Chloride	4.301	84	5057	2.21	ug/L		98
15) Acetone	4.392	43	1950	1.65	ug/L		98
16) t-1,2-Dichloroethene	4.490	61	652	0.22	ug/L		96
17) n-Hexane	4.588	86	27	0.10	ug/L	#	19
18) Methyl-tert-butyl-ether	4.642	73	917	0.18	ug/L		88
19) tert-Butanol (TBA)	4.801	59	4291	12.63	ug/L	#	42
20) Diisopropyl ether (DIPE)	5.100	45	271	0.05	ug/L		58
21) 1,1-Dichloroethane	5.185	63	879	0.22	ug/L		81
22) Acrylonitrile	5.289	53	64	0.05	ug/L		91
23) Vinyl Acetate	5.557	43	55	0.63	ug/L		74
24) Ethyl-tert-butyl ether...	5.484	59	160	0.04	ug/L	#	56
25) c-1,2-Dichloroethene	5.807	61	606	0.21	ug/L		85
26) 2,2-Dichloropropane	5.910	77	410	0.24	ug/L		69
27) Bromochloromethane	6.014	49	526	0.27	ug/L		85
28) Chloroform	6.112	83	849	0.22	ug/L		95
29) Carbon Tetrachloride	6.234	117	279	0.13	ug/L		83
30) Tetrahydrofuran	6.301	42	176	0.16	ug/L	#	64
31) 1,1,1-Trichloroethane	6.313	97	542	0.19	ug/L		82
33) 1,1-Dichloropropene	6.453	75	553	0.21	ug/L		82
34) 2-Butanone (MEK)	6.484	43	308	0.18	ug/L		52
35) Benzene	6.727	78	1916	0.22	ug/L		93
36) tert-Amyl methyl ether...	6.849	73	459	0.11	ug/L	#	1
37) 1,2-Dichloroethane (EDC)	6.965	62	715	0.22	ug/L		83
38) iso-Butyl Alcohol	7.026	43	319	1.53	ug/L		88
40) Trichloroethene (TCE)	7.386	130	572	0.22	ug/L		82
41) tert-Amyl ethyl ether ...	7.660	59	92	0.03	ug/L		90
42) Dibromomethane	7.861	93	297	0.20	ug/L	#	59
43) 1,2-Dichloropropane	7.971	63	510	0.22	ug/L		81
44) Bromodichloromethane	8.050	83	496	0.20	ug/L		90
46) 2-Chloroethyl Vinyl Ether	8.745	63	32	0.02	ug/L	#	1
47) c-1,3-Dichloropropene	8.782	75	475	0.18	ug/L		80
49) Toluene	8.920	91	2257	0.23	ug/L		95

4/29/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042806.D
Acq On : 28 Apr 2020 4:16 pm
Operator : PS
Sample : 0D28059-CAL2
Misc : 1X 5mL 0.2 PPB VOCRO
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 14:27:17 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

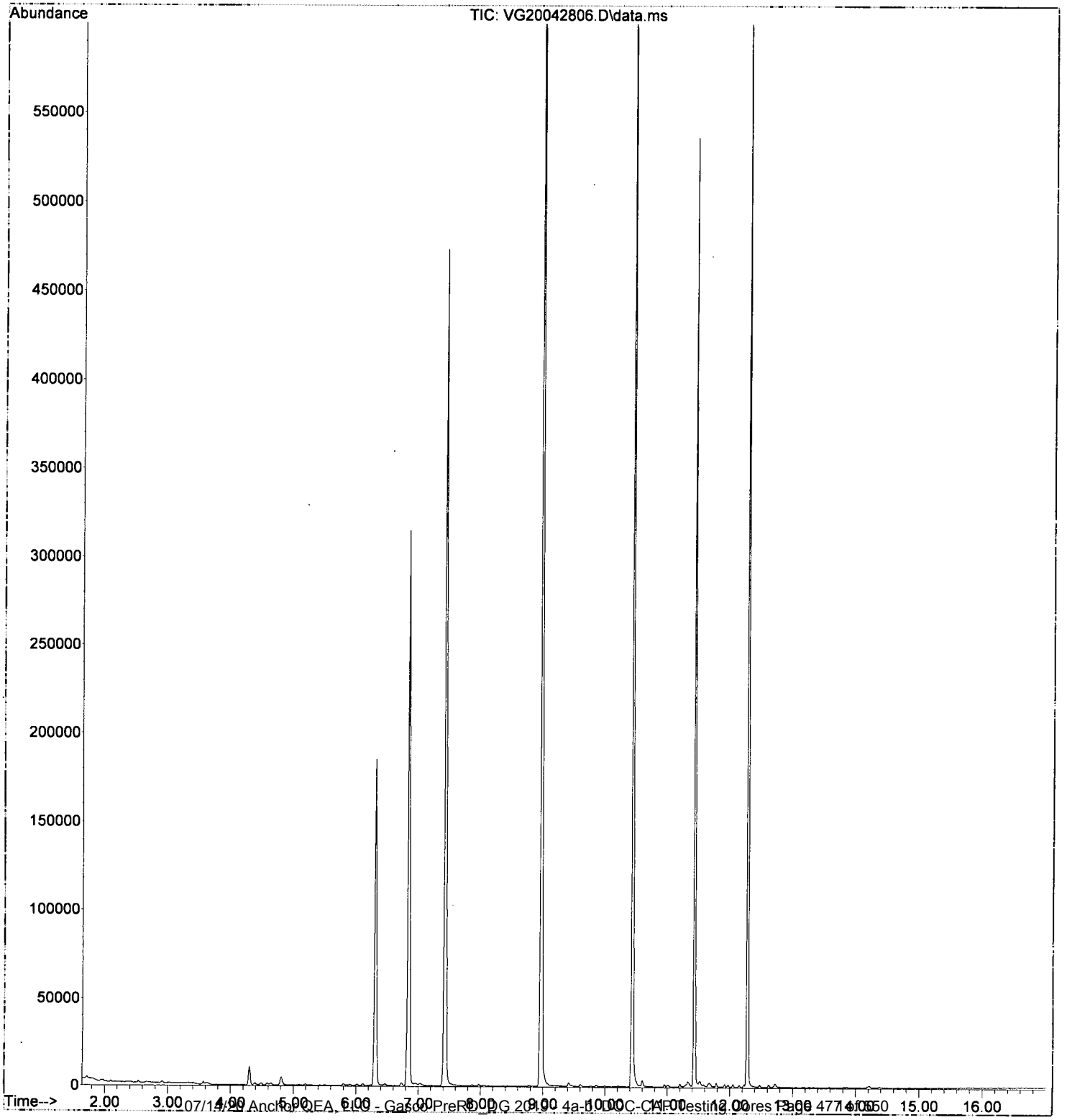
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	432	0.16	ug/L		80
51) 4-Methyl-2-Pentanone (...	9.428	43	1009	0.29	ug/L		91
52) t-1,3-Dichloropropene	9.459	75	262	0.43	ug/L		72
53) 1,1,2-Trichloroethane	9.605	97	483	0.21	ug/L		87
54) Dibromochloromethane	9.776	129	285	0.30	ug/L		88
55) 1,3-Dichloropropane	9.861	76	668	0.18	ug/L		83
56) 1,2-Dibromoethane (EDB)	9.983	107	377	0.16	ug/L		74
57) 2-Hexanone	10.202	43	490	0.13	ug/L		70
58) Chlorobenzene	10.440	112	1372	0.20	ug/L	#	1
59) Ethylbenzene	10.471	91	1953	0.18	ug/L		94
60) 1,1,1,2-Tetrachloroethane	10.501	131	402	0.20	ug/L	#	52
61) m,p-Xylenes (2)	10.592	91	2530	0.38	ug/L		91
62) o-Xylene	10.952	91	1046	0.20	ug/L		91
63) Styrene	11.007	104	645	0.44	ug/L		90
64) Bromoform	11.025	173	181	0.44	ug/L		87
65) Isopropylbenzene	11.208	105	1157	0.41	ug/L		87
68) Bromobenzene	11.507	156	477	0.19	ug/L	#	72
69) n-Propylbenzene	11.525	91	1758	0.19	ug/L		91
70) 1,1,2,2-Tetrachloroethane	11.586	83	560	0.22	ug/L		94
71) 2-Chlorotoluene	11.653	126	365	0.18	ug/L		83
72) 1,3,5-Trimethylbenzene	11.672	105	901	0.15	ug/L		95
73) 1,2,3-Trichloropropane	11.696	110	184	0.21	ug/L	#	63
74) t-1,4-Dichloro-2-butene	11.629	88	10	1.24	ug/L	#	1
75) 4-Chlorotoluene	11.787	91	1076	0.19	ug/L		93
76) tert-Butylbenzene	11.915	91	592	0.19	ug/L	#	65
77) 1,2,4-Trimethylbenzene	11.970	105	860	0.15	ug/L		94
78) sec-Butylbenzene	12.050	105	1055	0.16	ug/L		95
79) 4-Isopropyltoluene	12.147	119	770	0.27	ug/L		98
80) 1,3-Dichlorobenzene	12.226	146	720	0.19	ug/L		79
81) 1,4-Dichlorobenzene	12.287	146	974	0.22	ug/L	#	70
82) n-Butylbenzene	12.476	91	781	0.17	ug/L		86
83) 1,2-Dichlorobenzene	12.616	146	615	0.16	ug/L		83
84) 1,2-Dibromo-3-Chloropr...	13.269	157	62	0.10	ug/L	#	15
85) Hexachlorobutadiene	13.811	223	70	0.14	ug/L	#	17
86) 1,2,4-Trichlorobenzene	13.860	180	239	0.12	ug/L	#	61
87) Naphthalene	14.189	128	494	0.98	ug/L		79
88) 1,2,3-Trichlorobenzene	14.372	180	236	0.12	ug/L		80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042806.D
Acq On : 28 Apr 2020 4:16 pm
Operator : PS
Sample : 0D28059-CAL2
Misc : 1X 5mL 0.2 PPB VOCRO
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 14:38:18 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 29 14:40:36 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	130111	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	361683	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	152333	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	129856	53.45	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	427126	54.70	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	501453	52.79	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	126405	49.09	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	1133	0.47	ug/L		100
3) Chloromethane	1.978	50	1524	0.63	ug/L		93
4) Vinyl Chloride	2.100	62	1260	0.48	ug/L		84
5) Bromomethane	2.533	96	1137	0.69	ug/L		97
6) Chloroethane	2.710	64	872	0.66	ug/L		88
7) Trichlorofluoromethane	2.911	101	1409	0.42	ug/L		94
8) Ethanol	3.606	45	1862	31.37	ug/L		76
9) 1,1-Dichloroethene	3.569	61	1450	0.44	ug/L		95
10) Carbon Disulfide	3.569	76	1760	0.41	ug/L		98
11) Freon 113	3.643	101	969	0.46	ug/L		84
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	4.014	56	172	0.35	ug/L		80
14) Methylene Chloride	4.295	84	4387	1.86	ug/L		91
15) Acetone	4.386	43	2217	1.82	ug/L		100
16) t-1,2-Dichloroethene	4.490	61	1351	0.44	ug/L		93
17) n-Hexane	4.575	86	75	0.27	ug/L	#	36
18) Methyl-tert-butyl-ether	4.649	73	2007	0.39	ug/L		91
19) tert-Butanol (TBA)	4.807	59	7948	22.62	ug/L	#	48
20) Diisopropyl ether (DIPE)	5.087	45	602	0.10	ug/L		94
21) 1,1-Dichloroethane	5.191	63	1856	0.46	ug/L		92
22) Acrylonitrile	0.000		0	N.D.	d		
23) Vinyl Acetate	0.000		0	N.D.	d		
24) Ethyl-tert-butyl ether...	5.484	59	425m	0.09	ug/L		
25) c-1,2-Dichloroethene	5.801	61	1211	0.41	ug/L		84
26) 2,2-Dichloropropane	5.904	77	753	0.44	ug/L	#	67
27) Bromochloromethane	6.014	49	1078	0.53	ug/L		83
28) Chloroform	6.112	83	1724	0.43	ug/L		87
29) Carbon Tetrachloride	6.240	117	619	0.29	ug/L		85
30) Tetrahydrofuran	6.295	42	390	0.35	ug/L		85
31) 1,1,1-Trichloroethane	6.313	97	1239	0.41	ug/L		94
33) 1,1-Dichloropropene	6.459	75	1041	0.38	ug/L		84
34) 2-Butanone (MEK)	6.490	43	1046	0.59	ug/L		79
35) Benzene	6.733	78	3614	0.40	ug/L		97
36) tert-Amyl methyl ether...	6.837	73	229	0.05	ug/L	#	1
37) 1,2-Dichloroethane (EDC)	6.959	62	1349	0.41	ug/L		94
38) iso-Butyl Alcohol	7.032	43	1632	7.58	ug/L		74
40) Trichloroethene (TCE)	7.386	130	1209	0.44	ug/L		87
41) tert-Amyl ethyl ether ...	7.666	59	340	0.12	ug/L	#	62
42) Dibromomethane	7.861	93	686	0.44	ug/L		75
43) 1,2-Dichloropropane	7.971	63	1082	0.45	ug/L		89
44) Bromodichloromethane	8.050	83	1003	0.39	ug/L		86
46) 2-Chloroethyl Vinyl Ether	8.745	63	119	0.08	ug/L	#	1
47) c-1,3-Dichloropropene	8.782	75	977	0.36	ug/L		87
49) Toluene	9.020	91	4633	0.44	ug/L		97

4/30/2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 29 14:40:36 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

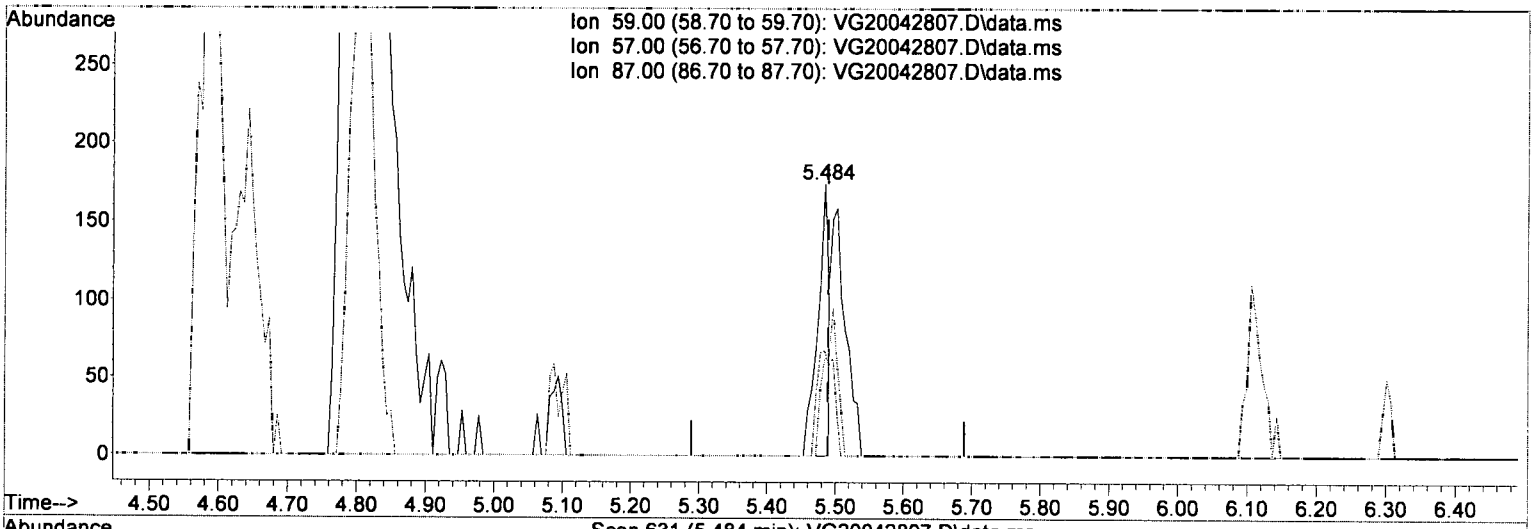
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.416	166	1014	0.37	ug/L		96
51) 4-Methyl-2-Pentanone (...	9.428	43	2070	0.57	ug/L		83
52) t-1,3-Dichloropropene	9.459	75	712	0.58	ug/L		91
53) 1,1,2-Trichloroethane	9.611	97	1003	0.42	ug/L		94
54) Dibromochloromethane	9.769	129	627	0.44	ug/L		80
55) 1,3-Dichloropropane	9.861	76	1557	0.42	ug/L		93
56) 1,2-Dibromoethane (EDB)	9.989	107	856	0.35	ug/L		90
57) 2-Hexanone	10.202	43	1203m	0.44	ug/L		
58) Chlorobenzene	10.446	112	2815	0.40	ug/L		75
59) Ethylbenzene	10.471	91	4039	0.37	ug/L		97
60) 1,1,1,2-Tetrachloroethane	10.501	131	700	0.34	ug/L	#	60
61) m,p-Xylenes (2)	10.599	91	4861	0.65	ug/L		95
62) o-Xylene	10.952	91	2184	0.34	ug/L		96
63) Styrene	11.001	104	1543	0.57	ug/L		87
64) Bromoform	11.019	173	411	0.57	ug/L		83
65) Isopropylbenzene	11.202	105	2263	0.52	ug/L		94
68) Bromobenzene	11.513	156	1011	0.38	ug/L		90
69) n-Propylbenzene	11.525	91	3735	0.40	ug/L		96
70) 1,1,2,2-Tetrachloroethane	11.586	83	1213	0.46	ug/L		92
71) 2-Chlorotoluene	11.653	126	753	0.37	ug/L	#	81
72) 1,3,5-Trimethylbenzene	11.672	105	2046	0.34	ug/L		97
73) 1,2,3-Trichloropropane	11.690	110	379	0.41	ug/L	#	74
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
75) 4-Chlorotoluene	11.781	91	2118	0.37	ug/L		95
76) tert-Butylbenzene	11.909	91	1103	0.34	ug/L		82
77) 1,2,4-Trimethylbenzene	11.970	105	1738	0.29	ug/L		99
78) sec-Butylbenzene	12.050	105	2369	0.35	ug/L		93
79) 4-Isopropyltoluene	12.147	119	1664	0.42	ug/L		82
80) 1,3-Dichlorobenzene	12.226	146	1456	0.36	ug/L		92
81) 1,4-Dichlorobenzene	12.287	146	1856	0.41	ug/L	#	69
82) n-Butylbenzene	12.470	91	1571	0.33	ug/L		96
83) 1,2-Dichlorobenzene	12.616	146	1407	0.36	ug/L		95
84) 1,2-Dibromo-3-Chloropr...	13.263	157	156	0.25	ug/L	#	55
85) Hexachlorobutadiene	13.811	223	185	0.35	ug/L	#	72
86) 1,2,4-Trichlorobenzene	13.860	180	554	0.27	ug/L		96
87) Naphthalene	14.189	128	1138	1.07	ug/L		79
88) 1,2,3-Trichlorobenzene	14.378	180	532	0.26	ug/L		77

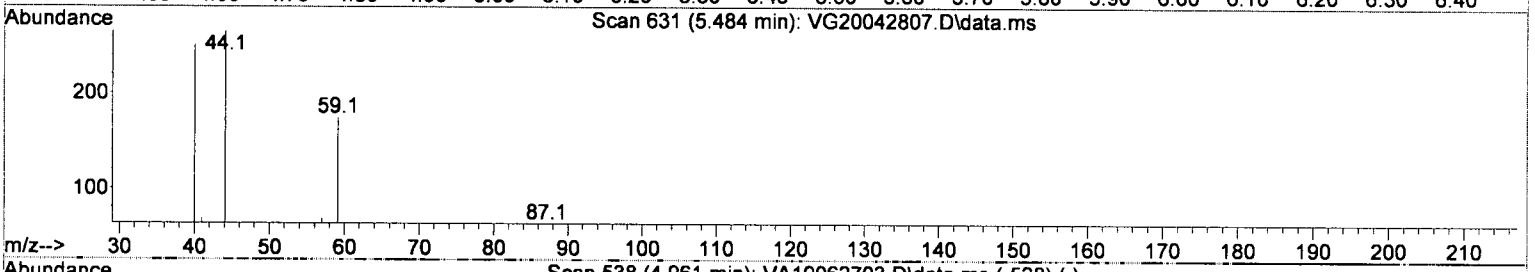
(#) = qualifier out of range (m) = manual integration (+) = signals summed

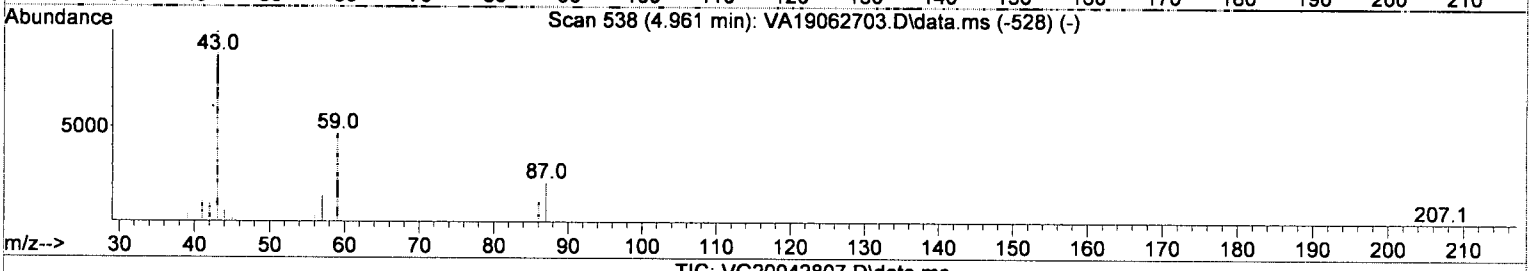
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 29 14:27:20 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration







TIC: VG20042807.D\data.ms

(24) Ethyl-tert-butyl ether (ETBE)

5.484min (-0.005) 0.04 ug/L

response 194

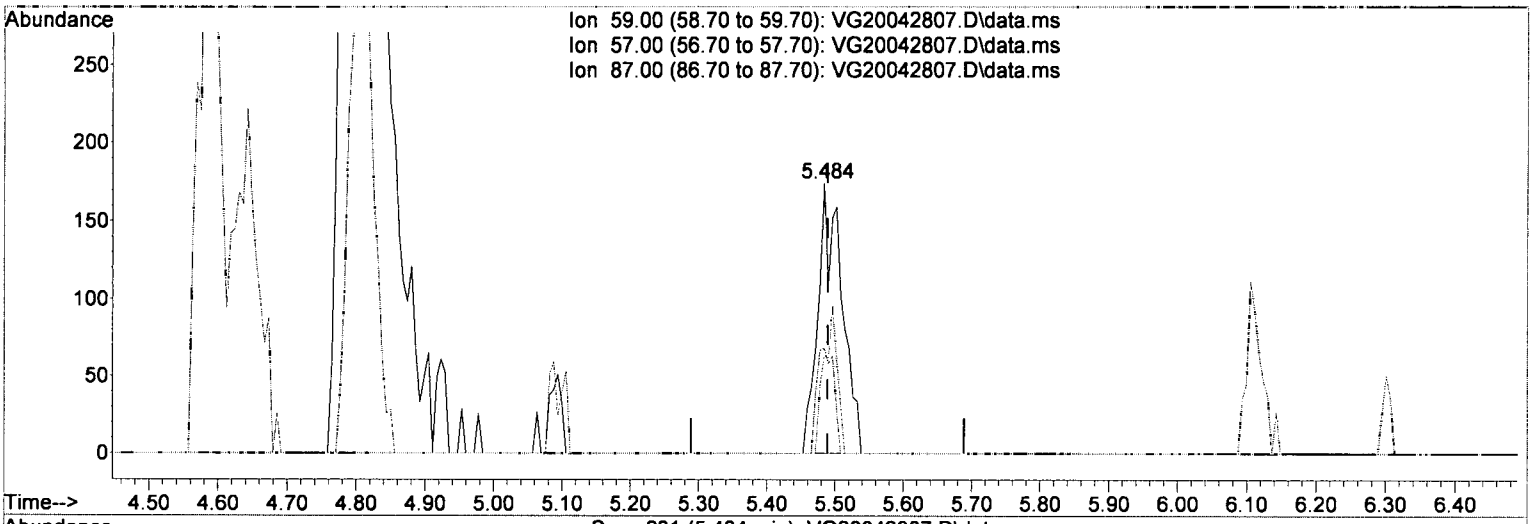
Ion	Exp%	Act%
59.00	100.00	100.00
57.00	30.40	39.08
87.00	42.80	36.21
0.00	0.00	0.00

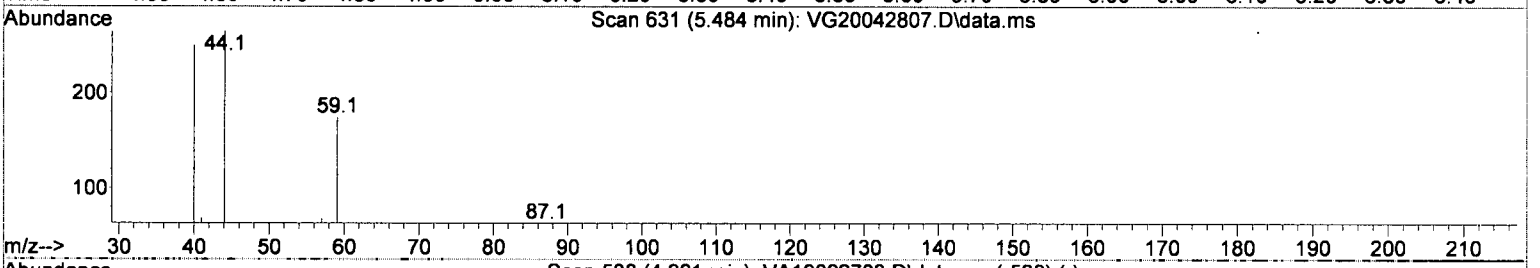
ME 4/30/2020

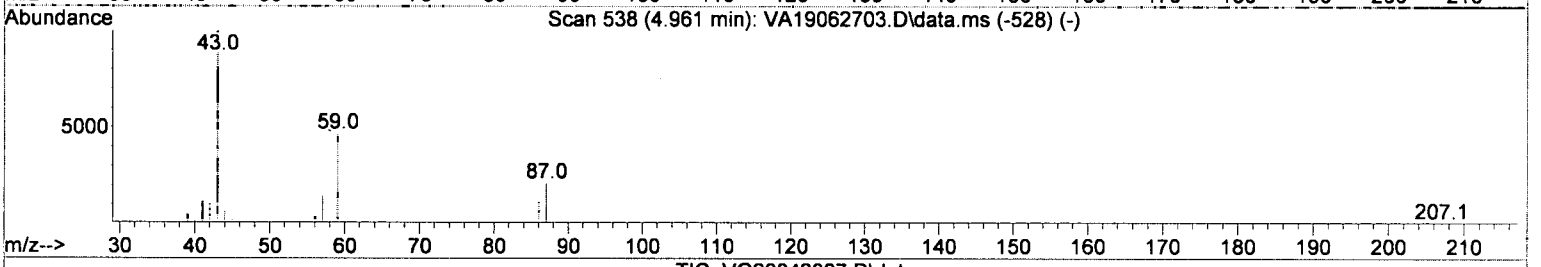
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 29 14:27:20 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration







TIC: VG20042807.D\data.ms

(24) Ethyl-tert-butyl ether (ETBE)

5.484min (-0.005) 0.09 ug/L m

response 425

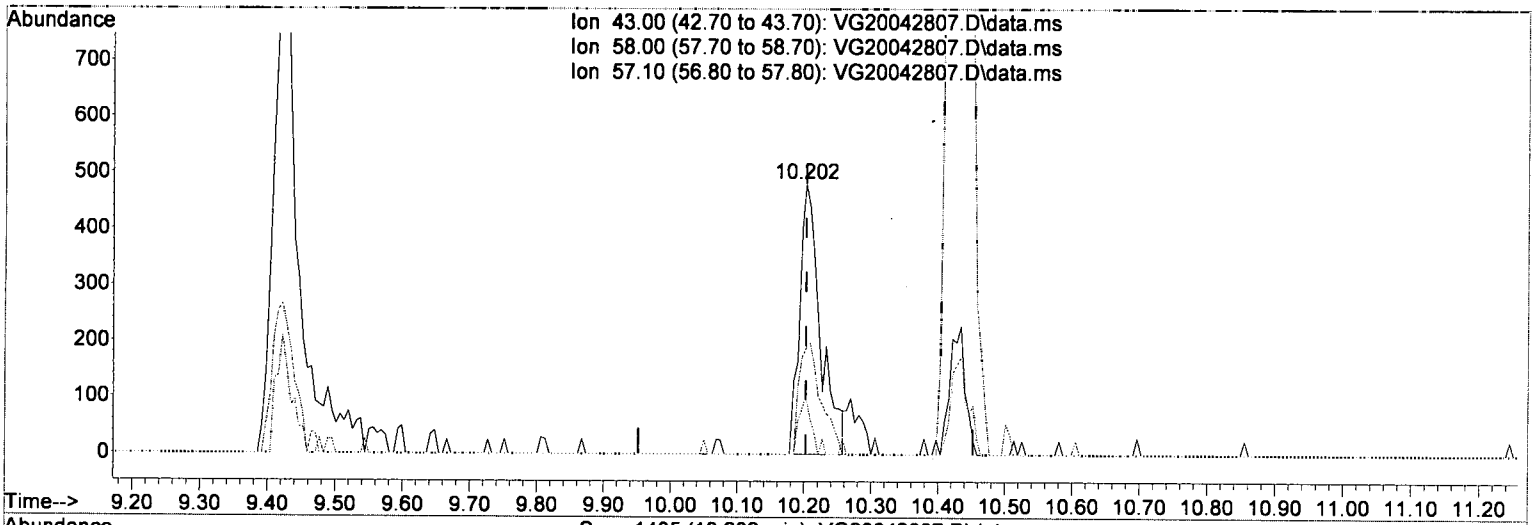
Ion	Exp%	Act%
59.00	100.00	100.00
57.00	30.40	39.08
87.00	42.80	36.21
0.00	0.00	0.00

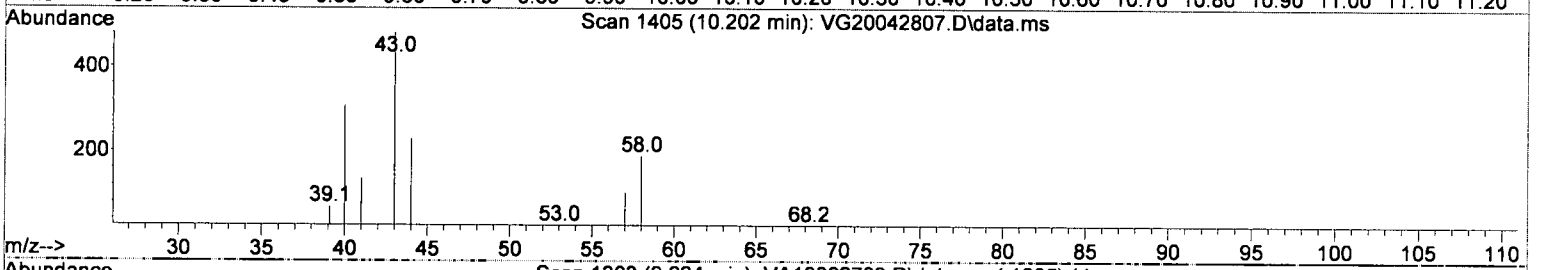
4/30/2020

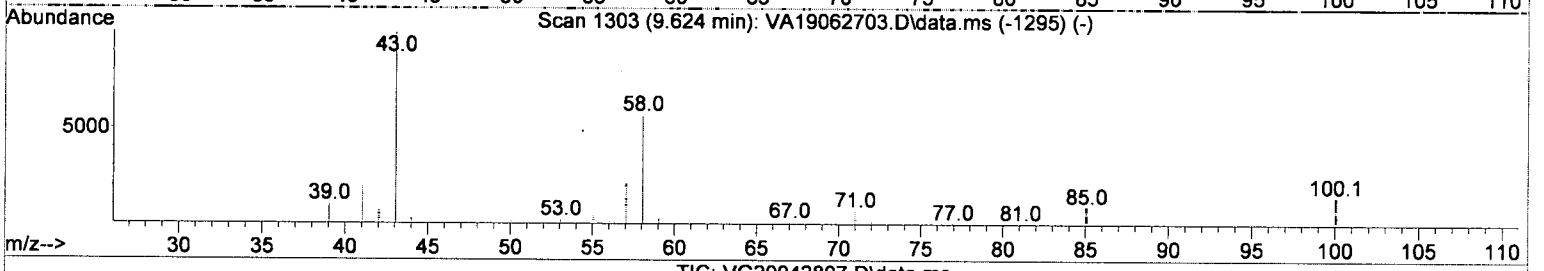
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 29 14:27:20 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration







TIC: VG20042807.D\data.ms

(57) 2-Hexanone

10.202min (+ 0.000) 0.38 ug/L

response 1046

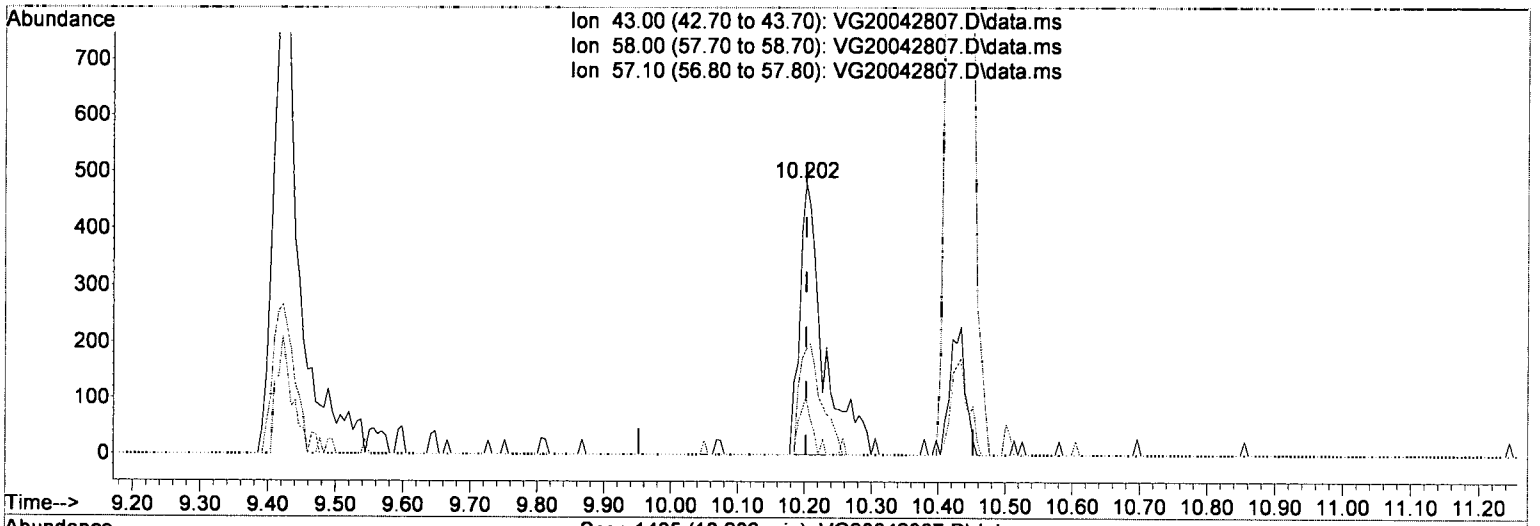
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	55.80	39.29
57.10	18.50	21.41
0.00	0.00	0.00

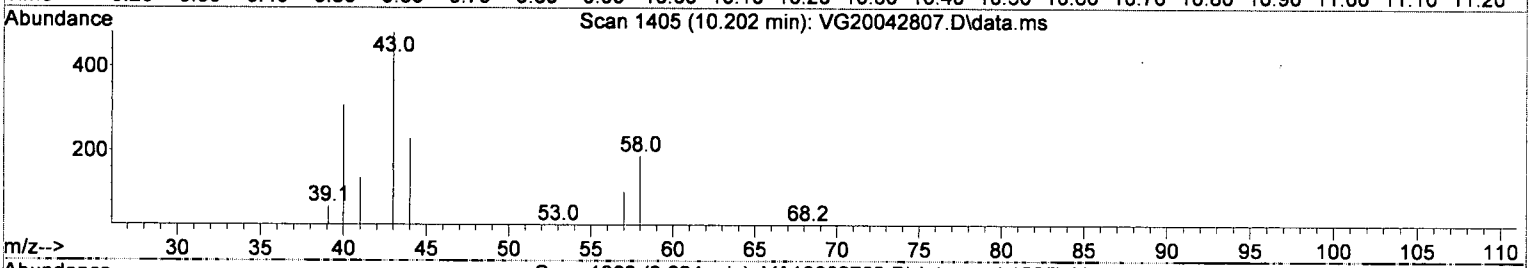
ML 4/30/2020

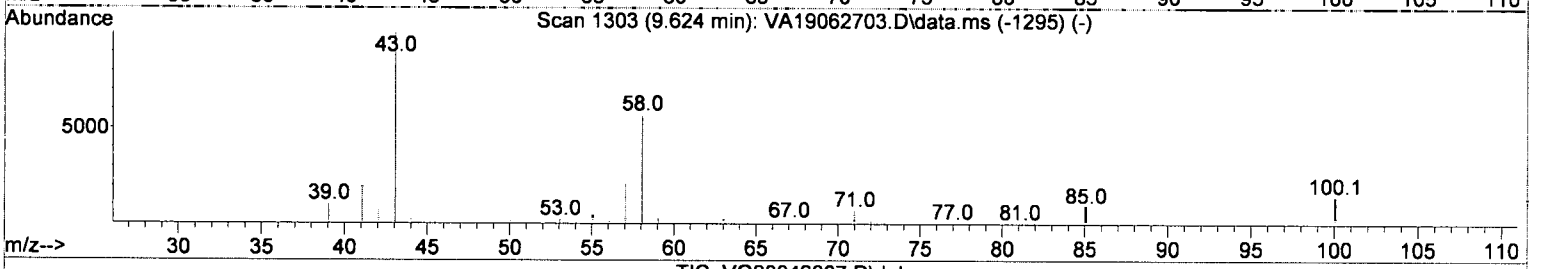
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 29 14:27:20 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration







TIC: VG20042807.D\data.ms

(57) 2-Hexanone

10.202min (+ 0.000) 0.44 ug/L m

response 1203

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	55.80	39.29
57.10	18.50	21.41
0.00	0.00	0.00

4/30/20 MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 29 14:27:20 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

4/29/20 mf

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	130111	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	361683	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	152333	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	129856	53.45	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	427126	54.70	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	501453	52.79	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	126405	49.09	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	1133	0.47	ug/L		100
3) Chloromethane	1.978	50	1524	0.63	ug/L		93
4) Vinyl Chloride	2.100	62	1260	0.48	ug/L		84
5) Bromomethane	2.533	96	1137	0.69	ug/L		97
6) Chloroethane	2.710	64	872	0.66	ug/L		88
7) Trichlorofluoromethane	2.911	101	1409	0.42	ug/L		94
8) Ethanol	3.606	45	1862	31.37	ug/L		76
9) 1,1-Dichloroethene	3.569	61	1450	0.44	ug/L		95
10) Carbon Disulfide	3.569	76	1760	0.41	ug/L		98
11) Freon 113	3.643	101	969	0.46	ug/L		84
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	4.014	56	172	0.35	ug/L		80
14) Methylene Chloride	4.295	84	4387	1.86	ug/L		91
15) Acetone	4.386	43	2217	1.82	ug/L		100
16) t-1,2-Dichloroethene	4.490	61	1351	0.44	ug/L		93
17) n-Hexane	4.575	86	75	0.27	ug/L	#	36
18) Methyl-tert-butyl-ether	4.649	73	2007	0.39	ug/L		91
19) tert-Butanol (TBA)	4.807	59	7948	22.62	ug/L	#	48
20) Diisopropyl ether (DIPE)	5.087	45	602	0.10	ug/L		94
21) 1,1-Dichloroethane	5.191	63	1856	0.46	ug/L		92
22) Acrylonitrile	5.240	53	10	0.01	ug/L	#	14
23) Vinyl Acetate	5.490	43	10	0.61	ug/L	#	1
24) Ethyl-tert-butyl ether...	5.484	59	194	0.04	ug/L		87
25) c-1,2-Dichloroethene	5.801	61	1211	0.41	ug/L		84
26) 2,2-Dichloropropane	5.904	77	753	0.44	ug/L	#	67
27) Bromochloromethane	6.014	49	1078	0.53	ug/L		83
28) Chloroform	6.112	83	1724	0.43	ug/L		87
29) Carbon Tetrachloride	6.240	117	619	0.29	ug/L		85
30) Tetrahydrofuran	6.295	42	390	0.35	ug/L		85
31) 1,1,1-Trichloroethane	6.313	97	1239	0.41	ug/L		94
33) 1,1-Dichloropropene	6.459	75	1041	0.38	ug/L		84
34) 2-Butanone (MEK)	6.490	43	1046	0.59	ug/L		79
35) Benzene	6.733	78	3614	0.40	ug/L		97
36) tert-Amyl methyl ether...	6.837	73	229	0.05	ug/L	#	1
37) 1,2-Dichloroethane (EDC)	6.959	62	1349	0.41	ug/L		94
38) iso-Butyl Alcohol	7.032	43	1632	7.58	ug/L		74
40) Trichloroethene (TCE)	7.386	130	1209	0.44	ug/L		87
41) tert-Amyl ethyl ether ...	7.666	59	340	0.12	ug/L	#	62
42) Dibromomethane	7.861	93	686	0.44	ug/L		75
43) 1,2-Dichloropropane	7.971	63	1082	0.45	ug/L		89
44) Bromodichloromethane	8.050	83	1003	0.39	ug/L		86
46) 2-Chloroethyl Vinyl Ether	8.745	63	119	0.08	ug/L	#	1
47) c-1,3-Dichloropropene	8.782	75	977	0.36	ug/L		87
49) Toluene	9.020	91	3	0.44	ug/L		97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 29 14:27:20 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

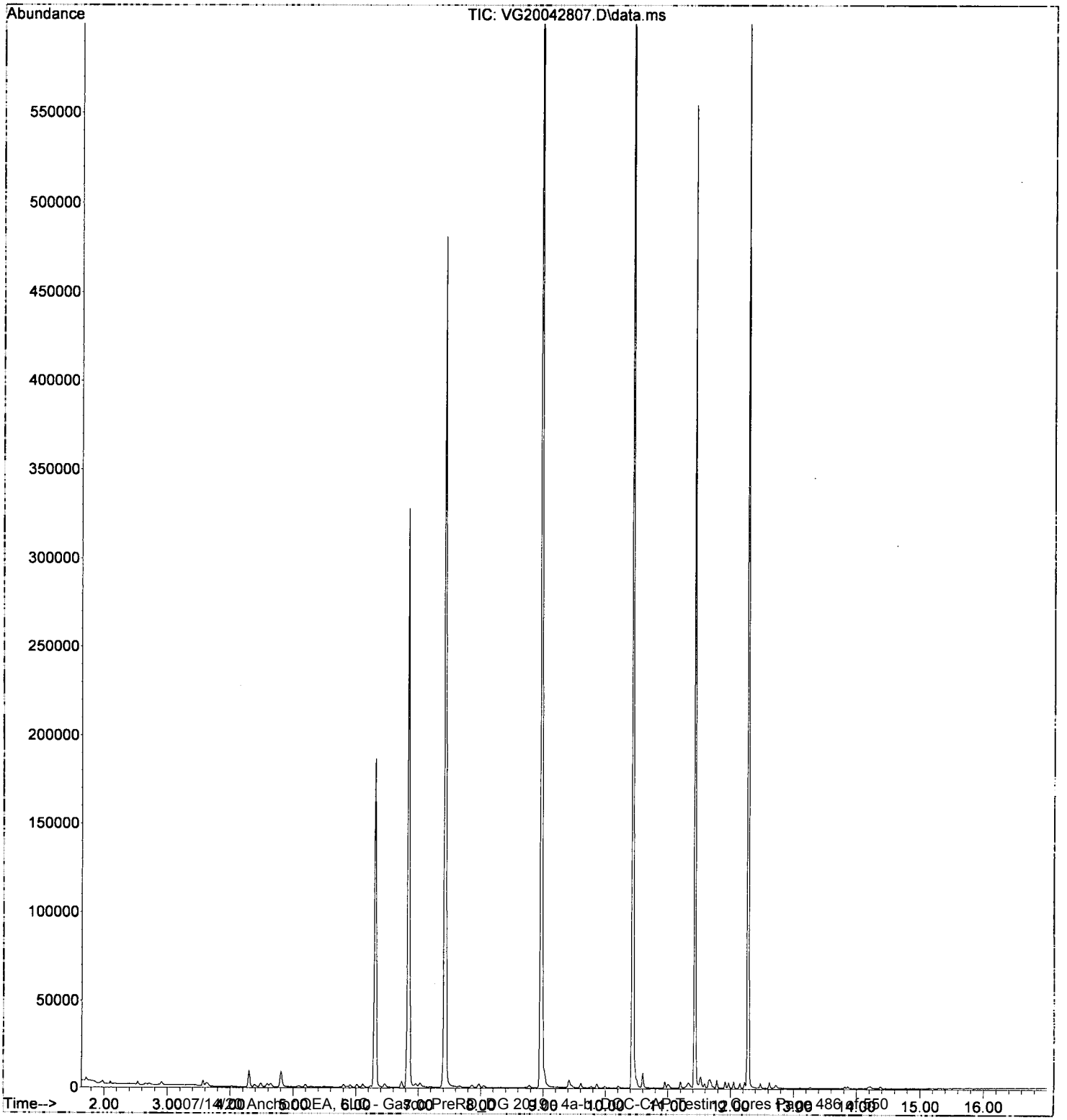
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.416	166	1014	0.37	ug/L		96
51) 4-Methyl-2-Pentanone (...	9.428	43	2070	0.57	ug/L		83
52) t-1,3-Dichloropropene	9.459	75	712	0.58	ug/L		91
53) 1,1,2-Trichloroethane	9.611	97	1003	0.42	ug/L		94
54) Dibromochloromethane	9.769	129	627	0.44	ug/L		80
55) 1,3-Dichloropropane	9.861	76	1557	0.42	ug/L		93
56) 1,2-Dibromoethane (EDB)	9.989	107	856	0.35	ug/L		90
57) 2-Hexanone	10.202	43	1046	0.38	ug/L		81
58) Chlorobenzene	10.446	112	2815	0.40	ug/L		75
59) Ethylbenzene	10.471	91	4039	0.37	ug/L		97
60) 1,1,1,2-Tetrachloroethane	10.501	131	700	0.34	ug/L	#	60
61) m,p-Xylenes (2)	10.599	91	4861	0.65	ug/L		95
62) o-Xylene	10.952	91	2184	0.34	ug/L		96
63) Styrene	11.001	104	1543	0.57	ug/L		87
64) Bromoform	11.019	173	411	0.57	ug/L		83
65) Isopropylbenzene	11.202	105	2263	0.52	ug/L		94
68) Bromobenzene	11.513	156	1011	0.38	ug/L		90
69) n-Propylbenzene	11.525	91	3735	0.40	ug/L		96
70) 1,1,2,2-Tetrachloroethane	11.586	83	1213	0.46	ug/L		92
71) 2-Chlorotoluene	11.653	126	753	0.37	ug/L	#	81
72) 1,3,5-Trimethylbenzene	11.672	105	2046	0.34	ug/L		97
73) 1,2,3-Trichloropropane	11.690	110	379	0.41	ug/L	#	74
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
75) 4-Chlorotoluene	11.781	91	2118	0.37	ug/L		95
76) tert-Butylbenzene	11.909	91	1103	0.34	ug/L		82
77) 1,2,4-Trimethylbenzene	11.970	105	1738	0.29	ug/L		99
78) sec-Butylbenzene	12.050	105	2369	0.35	ug/L		93
79) 4-Isopropyltoluene	12.147	119	1664	0.42	ug/L		82
80) 1,3-Dichlorobenzene	12.226	146	1456	0.36	ug/L		92
81) 1,4-Dichlorobenzene	12.287	146	1856	0.41	ug/L	#	69
82) n-Butylbenzene	12.470	91	1571	0.33	ug/L		96
83) 1,2-Dichlorobenzene	12.616	146	1407	0.36	ug/L		95
84) 1,2-Dibromo-3-Chloropr...	13.263	157	156	0.25	ug/L	#	55
85) Hexachlorobutadiene	13.811	223	185	0.35	ug/L	#	72
86) 1,2,4-Trichlorobenzene	13.860	180	554	0.27	ug/L		96
87) Naphthalene	14.189	128	1138	1.07	ug/L		79
88) 1,2,3-Trichlorobenzene	14.378	180	532	0.26	ug/L		77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042807.D
Acq On : 28 Apr 2020 4:43 pm
Operator : PS
Sample : 0D28059-CAL3
Misc : 1X 5mL 0.4 PPB VOCRO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 29 14:40:36 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042808.D
Acq On : 28 Apr 2020 5:10 pm
Operator : PS
Sample : 0D28059-CAL4
Misc : 1X 5mL 1 PPB VOCRO
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 14:44:04 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	139239	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	384850	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	167927	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	138115	53.13	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	455553	54.51	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	534043	52.83	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.427	174	138403	48.76	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	2775	1.07	ug/L		93
3) Chloromethane	1.978	50	3403	1.31	ug/L		97
4) Vinyl Chloride	2.100	62	3373	1.19	ug/L		98
5) Bromomethane	2.533	96	2726	1.54	ug/L		90
6) Chloroethane	2.716	64	1901	1.59	ug/L		98
7) Trichlorofluoromethane	2.911	101	3593	1.00	ug/L		91
8) Ethanol	3.612	45	4341	68.35	ug/L		90
9) 1,1-Dichloroethene	3.563	61	3806	1.07	ug/L		89
10) Carbon Disulfide	3.569	76	4285	0.93	ug/L		99
11) Freon 113	3.636	101	2465	1.09	ug/L		88
12) Iodomethane	0.000		0	N.D.	d		
13) Acrolein	4.014	56	625	1.18	ug/L		96
14) Methylene Chloride	4.295	84	8586	3.40	ug/L		97
15) Acetone	4.386	43	3885	2.97	ug/L		100
16) t-1,2-Dichloroethene	4.490	61	3488	1.06	ug/L		95
17) n-Hexane	4.581	86	247	0.84	ug/L	#	32
18) Methyl-tert-butyl-ether	4.642	73	5292	0.96	ug/L		99
19) tert-Butanol (TBA)	4.801	59	21639	57.55	ug/L	#	51
20) Diisopropyl ether (DIPE)	5.093	45	1686	0.27	ug/L		87
21) 1,1-Dichloroethane	5.191	63	5006	1.15	ug/L		96
22) Acrylonitrile	5.276	53	1352	1.02	ug/L		75
23) Vinyl Acetate	5.520	43	2053	1.16	ug/L		85
24) Ethyl-tert-butyl ether...	5.484	59	1189	0.25	ug/L		97
25) c-1,2-Dichloroethene	5.801	61	3375	1.07	ug/L		97
26) 2,2-Dichloropropane	5.904	77	1967	1.06	ug/L	#	66
27) Bromochloromethane	6.014	49	2726	1.26	ug/L		92
28) Chloroform	6.111	83	4654	1.08	ug/L		95
29) Carbon Tetrachloride	6.233	117	1929	0.84	ug/L		98
30) Tetrahydrofuran	6.294	42	1160	0.97	ug/L		94
31) 1,1,1-Trichloroethane	6.313	97	3173	0.99	ug/L		85
33) 1,1-Dichloropropene	6.453	75	2829	0.96	ug/L		86
34) 2-Butanone (MEK)	6.465	43	3339	1.76	ug/L		95
35) Benzene	6.727	78	10086	1.05	ug/L		98
36) tert-Amyl methyl ether...	6.873	73	1431	0.31	ug/L	#	40
37) 1,2-Dichloroethane (EDC)	6.959	62	3642	1.03	ug/L		99
38) iso-Butyl Alcohol	7.020	43	4875	21.16	ug/L		93
40) Trichloroethene (TCE)	7.379	130	2892	0.98	ug/L		94
41) tert-Amyl ethyl ether ...	7.666	59	800	0.27	ug/L		87
42) Dibromomethane	7.855	93	1817	1.10	ug/L	#	79
43) 1,2-Dichloropropane	7.971	63	2853	1.11	ug/L		90
44) Bromodichloromethane	8.056	83	2789	1.01	ug/L		93
46) 2-Chloroethyl Vinyl Ether	8.721	63	712	0.47	ug/L	#	1
47) c-1,3-Dichloropropene	8.776	75	2416	0.83	ug/L		82
49) Toluene	9.019	92	1459	1.04	ug/L		79

4/30/2020 MJ

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042808.D
Acq On : 28 Apr 2020 5:10 pm
Operator : PS
Sample : 0D28059-CAL4
Misc : 1X 5mL 1 PPB VOCRO
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 14:44:04 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	2420	0.84 ug/L	82
51) 4-Methyl-2-Pentanone (...	9.416	43	5821	1.51 ug/L	93
52) t-1,3-Dichloropropene	9.452	75	2195	1.06 ug/L	99
53) 1,1,2-Trichloroethane	9.605	97	2686	1.05 ug/L	97
54) Dibromochloromethane	9.769	129	1804	0.89 ug/L	90
55) 1,3-Dichloropropane	9.861	76	4282	1.08 ug/L	94
56) 1,2-Dibromoethane (EDB)	9.989	107	2229	0.86 ug/L	99
57) 2-Hexanone	10.196	43	3387	1.16 ug/L	92
58) Chlorobenzene	10.446	112	7377	0.98 ug/L	92
59) Ethylbenzene	10.470	91	11594	0.99 ug/L	97
60) 1,1,1,2-Tetrachloroethane	10.501	131	1901	0.87 ug/L #	76
61) m,p-Xylenes (2)	10.592	91	14033	1.66 ug/L	94
62) o-Xylene	10.952	91	6116	0.77 ug/L	95
63) Styrene	10.995	104	4390	0.95 ug/L	97
64) Bromoform	11.019	173	1185	0.97 ug/L	88
65) Isopropylbenzene	11.202	105	7045	0.96 ug/L	99
68) Bromobenzene	11.513	156	2856	0.98 ug/L	83
69) n-Propylbenzene	11.525	91	9809	0.96 ug/L	91
70) 1,1,2,2-Tetrachloroethane	11.586	83	3424	1.19 ug/L	99
71) 2-Chlorotoluene	11.653	126	2065	0.91 ug/L	93
72) 1,3,5-Trimethylbenzene	11.671	105	5426	0.81 ug/L	95
73) 1,2,3-Trichloropropane	11.690	110	1181	1.16 ug/L	97
74) t-1,4-Dichloro-2-butene	11.720	88	228	1.87 ug/L #	41
75) 4-Chlorotoluene	11.781	91	5937	0.93 ug/L	94
76) tert-Butylbenzene	11.915	91	3171	0.88 ug/L	95
77) 1,2,4-Trimethylbenzene	11.970	105	5139	0.78 ug/L	94
78) sec-Butylbenzene	12.049	105	6597	0.89 ug/L	94
79) 4-Isopropyltoluene	12.147	119	4567	0.84 ug/L	96
80) 1,3-Dichlorobenzene	12.220	146	4061	0.92 ug/L	94
81) 1,4-Dichlorobenzene	12.287	146	4946	1.00 ug/L	88
82) n-Butylbenzene	12.470	91	4814	0.92 ug/L	90
83) 1,2-Dichlorobenzene	12.616	146	3752	0.86 ug/L	94
84) 1,2-Dibromo-3-Chloropr...	13.269	157	408	0.60 ug/L #	33
85) Hexachlorobutadiene	13.811	223	477	0.82 ug/L	98
86) 1,2,4-Trichlorobenzene	13.860	180	1599	0.70 ug/L	95
87) Naphthalene	14.183	128	3600	1.38 ug/L	97
88) 1,2,3-Trichlorobenzene	14.378	180	1517	0.67 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042808.D
Acq On : 28 Apr 2020 5:10 pm
Operator : PS
Sample : 0D28059-CAL4
Misc : 1X 5mL 1 PPB VOCRO
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 14:27:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

04/29/2020

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	139239	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	384850	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	167927	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	138115	53.13	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	455553	54.51	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	534043	52.83	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.427	174	138403	48.76	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	2775	1.07	ug/L		93
3) Chloromethane	1.978	50	3403	1.31	ug/L		97
4) Vinyl Chloride	2.100	62	3373	1.19	ug/L		98
5) Bromomethane	2.533	96	2726	1.54	ug/L		90
6) Chloroethane	2.716	64	1901	1.59	ug/L		98
7) Trichlorofluoromethane	2.911	101	3593	1.00	ug/L		91
8) Ethanol	3.612	45	4341	68.35	ug/L		90
9) 1,1-Dichloroethene	3.563	61	3806	1.07	ug/L		89
10) Carbon Disulfide	3.569	76	4285	0.93	ug/L		99
11) Freon 113	3.636	101	2465	1.09	ug/L		88
12) Iodomethane	3.728	142	95	4.21	ug/L	#	47
13) Acrolein	4.014	56	625	1.18	ug/L		96
14) Methylene Chloride	4.295	84	8586	3.40	ug/L		97
15) Acetone	4.386	43	3885	2.97	ug/L		100
16) t-1,2-Dichloroethene	4.490	61	3488	1.06	ug/L		95
17) n-Hexane	4.581	86	247	0.84	ug/L	#	32
18) Methyl-tert-butyl-ether	4.642	73	5292	0.96	ug/L		99
19) tert-Butanol (TBA)	4.801	59	21639	57.55	ug/L	#	51
20) Diisopropyl ether (DIPE)	5.093	45	1686	0.27	ug/L		87
21) 1,1-Dichloroethane	5.191	63	5006	1.15	ug/L		96
22) Acrylonitrile	5.276	53	1352	1.02	ug/L		75
23) Vinyl Acetate	5.520	43	2053	1.16	ug/L		85
24) Ethyl-tert-butyl ether...	5.484	59	1189	0.25	ug/L		97
25) c-1,2-Dichloroethene	5.801	61	3375	1.07	ug/L		97
26) 2,2-Dichloropropane	5.904	77	1967	1.06	ug/L	#	66
27) Bromochloromethane	6.014	49	2726	1.26	ug/L		92
28) Chloroform	6.111	83	4654	1.08	ug/L		95
29) Carbon Tetrachloride	6.233	117	1929	0.84	ug/L		98
30) Tetrahydrofuran	6.294	42	1160	0.97	ug/L		94
31) 1,1,1-Trichloroethane	6.313	97	3173	0.99	ug/L		85
33) 1,1-Dichloropropene	6.453	75	2829	0.96	ug/L		86
34) 2-Butanone (MEK)	6.465	43	3339	1.76	ug/L		95
35) Benzene	6.727	78	10086	1.05	ug/L		98
36) tert-Amyl methyl ether...	6.873	73	1431	0.31	ug/L	#	40
37) 1,2-Dichloroethane (EDC)	6.959	62	3642	1.03	ug/L		99
38) iso-Butyl Alcohol	7.020	43	4875	21.16	ug/L		93
40) Trichloroethene (TCE)	7.379	130	2892	0.98	ug/L		94
41) tert-Amyl ethyl ether ...	7.666	59	800	0.27	ug/L		87
42) Dibromomethane	7.855	93	1817	1.10	ug/L	#	79
43) 1,2-Dichloropropane	7.971	63	2853	1.11	ug/L		90
44) Bromodichloromethane	8.056	83	2789	1.01	ug/L		93
46) 2-Chloroethyl Vinyl Ether	8.721	63	712	0.47	ug/L	#	1
47) c-1,3-Dichloropropene	8.776	75	2416	0.83	ug/L		82
49) Toluene	9.019	92	9116	1.15	ug/L		98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042808.D
Acq On : 28 Apr 2020 5:10 pm
Operator : PS
Sample : 0D28059-CAL4
Misc : 1X 5mL 1 PPB VOCRO
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 14:27:23 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

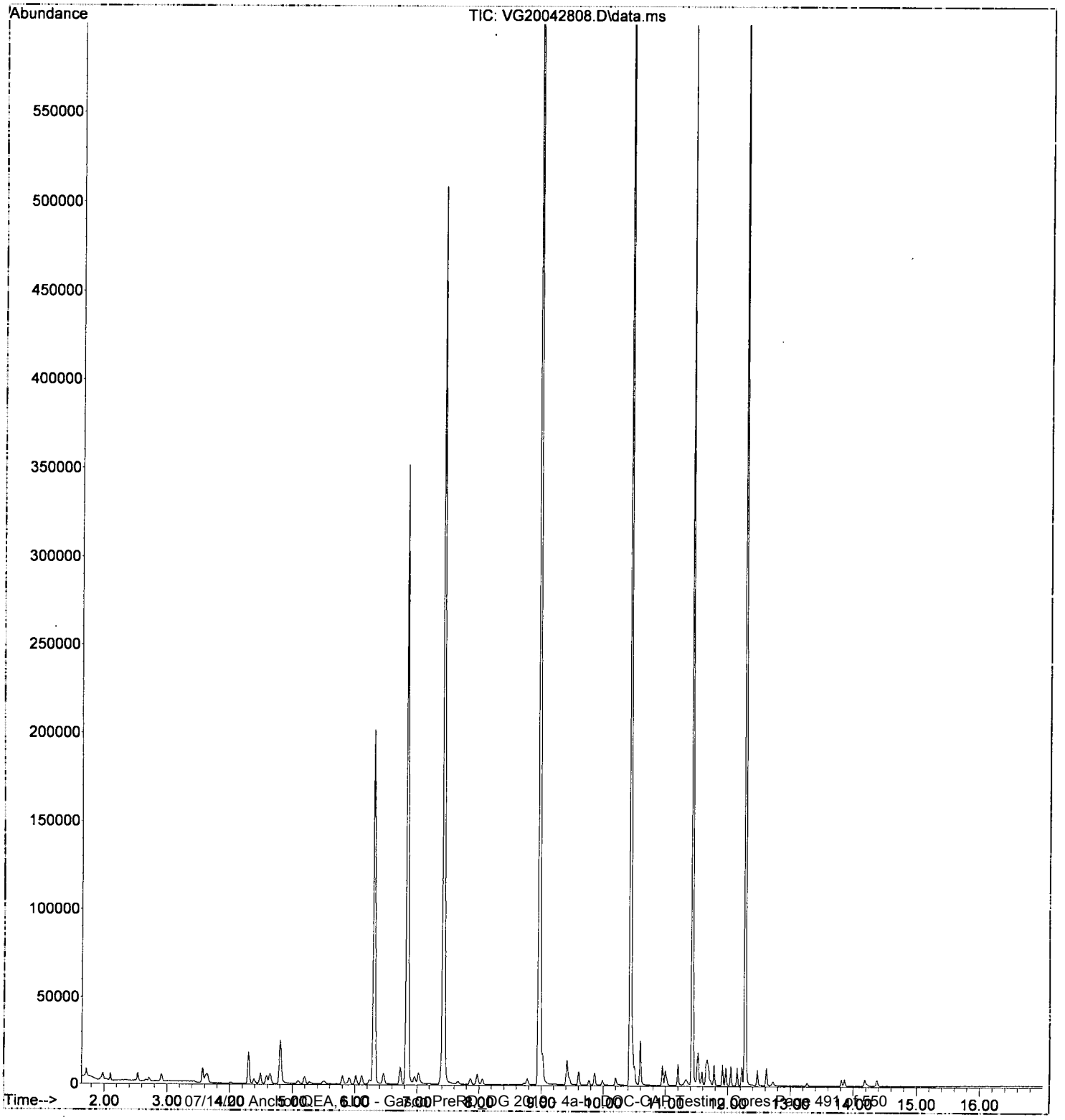
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	2420	0.84	ug/L		82
51) 4-Methyl-2-Pentanone (...	9.416	43	5821	1.51	ug/L		93
52) t-1,3-Dichloropropene	9.452	75	2195	1.06	ug/L		99
53) 1,1,2-Trichloroethane	9.605	97	2686	1.05	ug/L		97
54) Dibromochloromethane	9.769	129	1804	0.89	ug/L		90
55) 1,3-Dichloropropane	9.861	76	4282	1.08	ug/L		94
56) 1,2-Dibromoethane (EDB)	9.989	107	2229	0.86	ug/L		99
57) 2-Hexanone	10.196	43	3387	1.16	ug/L		92
58) Chlorobenzene	10.446	112	7377	0.98	ug/L		92
59) Ethylbenzene	10.470	91	11594	0.99	ug/L		97
60) 1,1,1,2-Tetrachloroethane	10.501	131	1901	0.87	ug/L	#	76
61) m,p-Xylenes (2)	10.592	91	14033	1.66	ug/L		94
62) o-Xylene	10.952	91	6116	0.77	ug/L		95
63) Styrene	10.995	104	4390	0.95	ug/L		97
64) Bromoform	11.019	173	1185	0.97	ug/L		88
65) Isopropylbenzene	11.202	105	7045	0.96	ug/L		99
68) Bromobenzene	11.513	156	2856	0.98	ug/L		83
69) n-Propylbenzene	11.525	91	9809	0.96	ug/L		91
70) 1,1,2,2-Tetrachloroethane	11.586	83	3424	1.19	ug/L		99
71) 2-Chlorotoluene	11.653	126	2065	0.91	ug/L		93
72) 1,3,5-Trimethylbenzene	11.671	105	5426	0.81	ug/L		95
73) 1,2,3-Trichloropropane	11.690	110	1181	1.16	ug/L		97
74) t-1,4-Dichloro-2-butene	11.720	88	228	1.87	ug/L	#	41
75) 4-Chlorotoluene	11.781	91	5937	0.93	ug/L		94
76) tert-Butylbenzene	11.915	91	3171	0.88	ug/L		95
77) 1,2,4-Trimethylbenzene	11.970	105	5139	0.78	ug/L		94
78) sec-Butylbenzene	12.049	105	6597	0.89	ug/L		94
79) 4-Isopropyltoluene	12.147	119	4567	0.84	ug/L		96
80) 1,3-Dichlorobenzene	12.220	146	4061	0.92	ug/L		94
81) 1,4-Dichlorobenzene	12.287	146	4946	1.00	ug/L		88
82) n-Butylbenzene	12.470	91	4814	0.92	ug/L		90
83) 1,2-Dichlorobenzene	12.616	146	3752	0.86	ug/L		94
84) 1,2-Dibromo-3-Chloropr...	13.269	157	408	0.50	ug/L	#	33
85) Hexachlorobutadiene	13.811	223	477	0.82	ug/L		98
86) 1,2,4-Trichlorobenzene	13.860	180	1599	0.70	ug/L		95
87) Naphthalene	14.183	128	3600	1.38	ug/L		97
88) 1,2,3-Trichlorobenzene	14.378	180	1517	0.67	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042808.D
Acq On : 28 Apr 2020 5:10 pm
Operator : PS
Sample : 0D28059-CAL4
Misc : 1X 5mL 1 PPB VOCRO
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 14:44:04 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042809.D
Acq On : 28 Apr 2020 5:37 pm
Operator : PS
Sample : 0D28059-CAL5
Misc : 1X 5mL 2 PPB VOCRO
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 29 14:27:26 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

4/29/2020

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	127296	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	349304	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	151641	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	125797	52.93	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	410702	53.76	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	486856	53.06	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	124756	48.67	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	5002	2.12	ug/L		99
3) Chloromethane	1.978	50	6051	2.54	ug/L		96
4) Vinyl Chloride	2.100	62	5945	2.30	ug/L		97
5) Bromomethane	2.533	96	4637	2.86	ug/L		89
6) Chloroethane	2.716	64	3098	3.03	ug/L		93
7) Trichlorofluoromethane	2.911	101	6259	1.91	ug/L		94
8) Ethanol	3.612	45	8126	139.94	ug/L		83
9) 1,1-Dichloroethene	3.569	61	6691	2.06	ug/L		93
10) Carbon Disulfide	3.569	76	7686	1.82	ug/L		99
11) Freon 113	3.636	101	4428	2.15	ug/L		87
12) Iodomethane	3.740	142	271	4.39	ug/L	#	47
13) Acrolein	4.014	56	1033	2.14	ug/L		92
14) Methylene Chloride	4.295	84	10556	4.57	ug/L		96
15) Acetone	4.380	43	6410	5.37	ug/L		96
16) t-1,2-Dichloroethene	4.484	61	6491	2.16	ug/L		87
17) n-Hexane	4.587	86	496	1.85	ug/L	#	43
18) Methyl-tert-butyl-ether	4.642	73	9858	1.96	ug/L		93
19) tert-Butanol (TBA)	4.801	59	42680	124.16	ug/L	#	51
20) Diisopropyl ether (DIPE)	5.093	45	2905	0.50	ug/L		88
21) 1,1-Dichloroethane	5.191	63	8898	2.24	ug/L		99
22) Acrylonitrile	5.270	53	2442	2.01	ug/L		98
23) Vinyl Acetate	5.514	43	4151	1.83	ug/L		87
24) Ethyl-tert-butyl ether...	5.496	59	2194	0.50	ug/L		94
25) c-1,2-Dichloroethene	5.801	61	6218	2.17	ug/L		90
26) 2,2-Dichloropropane	5.910	77	3460	2.04	ug/L	#	64
27) Bromochloromethane	6.014	49	4897	2.47	ug/L		82
28) Chloroform	6.112	83	8523	2.16	ug/L		96
29) Carbon Tetrachloride	6.233	117	3781	1.80	ug/L		99
30) Tetrahydrofuran	6.294	42	2041	1.86	ug/L		89
31) 1,1,1-Trichloroethane	6.313	97	5630	1.92	ug/L		91
33) 1,1-Dichloropropene	6.459	75	4996	1.85	ug/L		97
34) 2-Butanone (MEK)	6.459	43	6424	3.71	ug/L		99
35) Benzene	6.727	78	18474	2.10	ug/L		98
36) tert-Amyl methyl ether...	6.874	73	2276	0.54	ug/L	#	52
37) 1,2-Dichloroethane (EDC)	6.959	62	6699	2.08	ug/L		95
38) iso-Butyl Alcohol	7.020	43	9183	43.60	ug/L		93
40) Trichloroethene (TCE)	7.380	130	5135	1.91	ug/L		95
41) tert-Amyl ethyl ether ...	7.666	59	1547	0.57	ug/L		92
42) Dibromomethane	7.855	93	3205	2.11	ug/L		87
43) 1,2-Dichloropropane	7.971	63	5295	2.26	ug/L		98
44) Bromodichloromethane	8.050	83	4745	1.87	ug/L		100
46) 2-Chloroethyl Vinyl Ether	8.721	63	1396	1.02	ug/L	#	1
47) c-1,3-Dichloropropene	8.776	75	4719	1.79	ug/L		98
49) Toluene	9.019	91	20457	2.02	ug/L		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042809.D
Acq On : 28 Apr 2020 5:37 pm
Operator : PS
Sample : 0D28059-CAL5
Misc : 1X 5mL 2 PPB VOCRO
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 29 14:27:26 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	4099	1.56	ug/L		86
51) 4-Methyl-2-Pentanone (...	9.416	43	11635	3.31	ug/L		97
52) t-1,3-Dichloropropene	9.452	75	3895	1.75	ug/L		96
53) 1,1,2-Trichloroethane	9.605	97	4815	2.07	ug/L		95
54) Dibromochloromethane	9.769	129	3292	1.62	ug/L		96
55) 1,3-Dichloropropane	9.861	76	7446	2.07	ug/L		96
56) 1,2-Dibromoethane (EDB)	9.983	107	4307	1.84	ug/L		90
57) 2-Hexanone	10.190	43	7344	2.77	ug/L		91
58) Chlorobenzene	10.446	112	13084	1.92	ug/L		90
59) Ethylbenzene	10.470	91	20551	1.94	ug/L		96
60) 1,1,1,2-Tetrachloroethane	10.501	131	3453	1.74	ug/L		90
61) m,p-Xylenes (2)	10.592	91	25600	3.28	ug/L		96
62) o-Xylene	10.946	91	11482	1.52	ug/L		96
63) Styrene	10.995	104	8265	1.60	ug/L		96
64) Bromoform	11.019	173	2032	1.52	ug/L		89
65) Isopropylbenzene	11.202	105	12996	1.66	ug/L		96
68) Bromobenzene	11.513	156	4698	1.79	ug/L	#	78
69) n-Propylbenzene	11.525	91	17637	1.91	ug/L		94
70) 1,1,2,2-Tetrachloroethane	11.580	83	5938	2.29	ug/L		90
71) 2-Chlorotoluene	11.653	126	3818	1.87	ug/L		98
72) 1,3,5-Trimethylbenzene	11.671	105	10389	1.73	ug/L		93
73) 1,2,3-Trichloropropane	11.690	110	1959	2.14	ug/L	#	71
74) t-1,4-Dichloro-2-butene	11.720	88	427	2.58	ug/L	#	70
75) 4-Chlorotoluene	11.775	91	11046	1.92	ug/L		93
76) tert-Butylbenzene	11.915	91	5969	1.84	ug/L		90
77) 1,2,4-Trimethylbenzene	11.964	105	9775	1.64	ug/L		95
78) sec-Butylbenzene	12.043	105	12245	1.83	ug/L		92
79) 4-Isopropyltoluene	12.147	119	8900	1.65	ug/L		95
80) 1,3-Dichlorobenzene	12.220	146	7077	1.78	ug/L		96
81) 1,4-Dichlorobenzene	12.287	146	8207	1.84	ug/L		89
82) n-Butylbenzene	12.470	91	8803	1.85	ug/L		90
83) 1,2-Dichlorobenzene	12.616	146	7179	1.83	ug/L		95
84) 1,2-Dibromo-3-Chloropr...	13.263	157	855	1.40	ug/L	#	62
85) Hexachlorobutadiene	13.811	223	894	1.71	ug/L		93
86) 1,2,4-Trichlorobenzene	13.860	180	2821	1.36	ug/L		93
87) Naphthalene	14.177	128	6717	1.88	ug/L		95
88) 1,2,3-Trichlorobenzene	14.372	180	2840	1.38	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042809.D
Acq On : 28 Apr 2020 5:37 pm
Operator : PS
Sample : 0D28059-CAL5
Misc : 1X 5mL 2 PPB VOCRO
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 29 14:27:26 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	127296	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	349304	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	151641	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	125797	52.98	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	410702	53.76	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	486856	53.06	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	124756	48.67	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	5002	2.12	ug/L		99
3) Chloromethane	1.978	50	6051	2.54	ug/L		96
4) Vinyl Chloride	2.100	62	5945	2.30	ug/L		97
5) Bromomethane	2.533	96	4637	2.86	ug/L		89
6) Chloroethane	2.716	64	3098	3.03	ug/L		93
7) Trichlorofluoromethane	2.911	101	6259	1.91	ug/L		94
8) Ethanol	3.612	45	8126	139.94	ug/L		83
9) 1,1-Dichloroethene	3.569	61	6691	2.06	ug/L		93
10) Carbon Disulfide	3.569	76	7686	1.82	ug/L		99
11) Freon 113	3.636	101	4428	2.15	ug/L		87
12) Iodomethane	3.740	142	271	4.39	ug/L	#	47
13) Acrolein	4.014	56	1033	2.14	ug/L		92
14) Methylene Chloride	4.295	84	10556	4.57	ug/L		96
15) Acetone	4.380	43	6410	5.37	ug/L		96
16) t-1,2-Dichloroethene	4.484	61	6491	2.16	ug/L		87
17) n-Hexane	4.587	86	496	1.85	ug/L	#	43
18) Methyl-tert-butyl-ether	4.642	73	9858	1.96	ug/L		93
19) tert-Butanol (TBA)	4.801	59	42680	124.16	ug/L	#	51
20) Diisopropyl ether (DIPE)	5.093	45	2905	0.50	ug/L		88
21) 1,1-Dichloroethane	5.191	63	8898	2.24	ug/L		99
22) Acrylonitrile	5.270	53	2442	2.01	ug/L		98
23) Vinyl Acetate	5.514	43	4151	1.83	ug/L		87
24) Ethyl-tert-butyl ether...	5.496	59	2194	0.50	ug/L		94
25) c-1,2-Dichloroethene	5.801	61	6218	2.17	ug/L		90
26) 2,2-Dichloropropane	5.910	77	3460	2.04	ug/L	#	64
27) Bromochloromethane	6.014	49	4897	2.47	ug/L		82
28) Chloroform	6.112	83	8523	2.16	ug/L		96
29) Carbon Tetrachloride	6.233	117	3781	1.80	ug/L		99
30) Tetrahydrofuran	6.294	42	2041	1.86	ug/L		89
31) 1,1,1-Trichloroethane	6.313	97	5630	1.92	ug/L		91
33) 1,1-Dichloropropene	6.459	75	4996	1.85	ug/L		97
34) 2-Butanone (MEK)	6.459	43	6424	3.71	ug/L		99
35) Benzene	6.727	78	18474	2.10	ug/L		98
36) tert-Amyl methyl ether...	6.874	73	2276	0.54	ug/L	#	52
37) 1,2-Dichloroethane (EDC)	6.959	62	6699	2.08	ug/L		95
38) iso-Butyl Alcohol	7.020	43	9183	43.60	ug/L		93
40) Trichloroethene (TCE)	7.380	130	5135	1.91	ug/L		95
41) tert-Amyl ethyl ether ...	7.666	59	1547	0.57	ug/L		92
42) Dibromomethane	7.855	93	3205	2.11	ug/L		87
43) 1,2-Dichloropropane	7.971	63	5295	2.26	ug/L		98
44) Bromodichloromethane	8.050	83	4745	1.87	ug/L		100
46) 2-Chloroethyl Vinyl Ether	8.721	63	1396	1.02	ug/L	#	1
47) c-1,3-Dichloropropene	8.776	75	4719	1.79	ug/L		98
49) Toluene	8.919	92	12445	2.32	ug/L		99

4/30/2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042809.D
Acq On : 28 Apr 2020 5:37 pm
Operator : PS
Sample : 0D28059-CAL5
Misc : 1X 5mL 2 PPB VOCRO
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 29 14:27:26 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

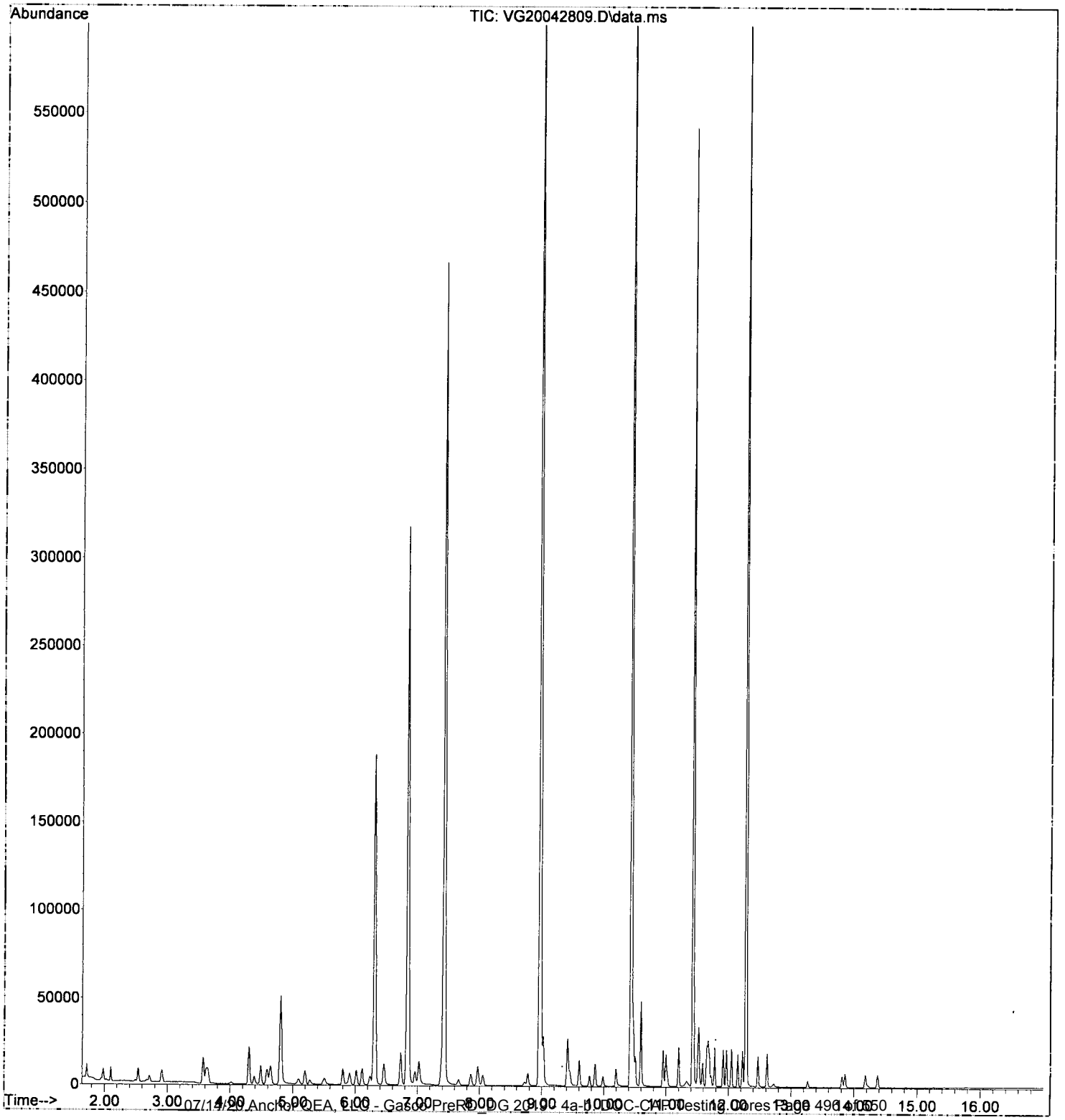
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	4099	1.56	ug/L		86
51) 4-Methyl-2-Pentanone (...	9.416	43	11635	3.31	ug/L		97
52) t-1,3-Dichloropropene	9.452	75	3895	1.75	ug/L		96
53) 1,1,2-Trichloroethane	9.605	97	4815	2.07	ug/L		95
54) Dibromochloromethane	9.769	129	3292	1.62	ug/L		96
55) 1,3-Dichloropropane	9.861	76	7446	2.07	ug/L		96
56) 1,2-Dibromoethane (EDB)	9.983	107	4307	1.84	ug/L		90
57) 2-Hexanone	10.190	43	7344	2.77	ug/L		91
58) Chlorobenzene	10.446	112	13084	1.92	ug/L		90
59) Ethylbenzene	10.470	91	20551	1.94	ug/L		96
60) 1,1,1,2-Tetrachloroethane	10.501	131	3453	1.74	ug/L		90
61) m,p-Xylenes (2)	10.592	91	25600	3.28	ug/L		96
62) o-Xylene	10.946	91	11482	1.52	ug/L		96
63) Styrene	10.995	104	8265	1.60	ug/L		96
64) Bromoform	11.019	173	2032	1.52	ug/L		89
65) Isopropylbenzene	11.202	105	12996	1.66	ug/L		96
68) Bromobenzene	11.513	156	4698	1.79	ug/L	#	78
69) n-Propylbenzene	11.525	91	17637	1.91	ug/L		94
70) 1,1,2,2-Tetrachloroethane	11.580	83	5938	2.29	ug/L		90
71) 2-Chlorotoluene	11.653	126	3818	1.87	ug/L		98
72) 1,3,5-Trimethylbenzene	11.671	105	10389	1.73	ug/L		93
73) 1,2,3-Trichloropropane	11.690	110	1959	2.14	ug/L	#	71
74) t-1,4-Dichloro-2-butene	11.720	88	427	2.58	ug/L	#	70
75) 4-Chlorotoluene	11.775	91	11046	1.92	ug/L		93
76) tert-Butylbenzene	11.915	91	5969	1.84	ug/L		90
77) 1,2,4-Trimethylbenzene	11.964	105	9775	1.64	ug/L		95
78) sec-Butylbenzene	12.043	105	12245	1.83	ug/L		92
79) 4-Isopropyltoluene	12.147	119	8900	1.65	ug/L		95
80) 1,3-Dichlorobenzene	12.220	146	7077	1.78	ug/L		96
81) 1,4-Dichlorobenzene	12.287	146	8207	1.84	ug/L		89
82) n-Butylbenzene	12.470	91	8803	1.85	ug/L		90
83) 1,2-Dichlorobenzene	12.616	146	7179	1.83	ug/L		95
84) 1,2-Dibromo-3-Chloropr...	13.263	157	855	1.40	ug/L	#	62
85) Hexachlorobutadiene	13.811	223	894	1.71	ug/L		93
86) 1,2,4-Trichlorobenzene	13.860	180	2821	1.36	ug/L		93
87) Naphthalene	14.177	128	6717	1.88	ug/L		95
88) 1,2,3-Trichlorobenzene	14.372	180	2840	1.38	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042809.D
Acq On : 28 Apr 2020 5:37 pm
Operator : PS
Sample : 0D28059-CAL5
Misc : 1X 5mL 2 PPB VOCRO
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 29 14:27:26 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042810.D
Acq On : 28 Apr 2020 6:04 pm
Operator : PS
Sample : 0D28059-CAL6
Misc : 1X 5mL 5 PPB VOCRO
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 29 14:27:29 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	142812	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.428	117	395555	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	179946	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	141206	52.96	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	454891	53.07	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	541718	52.14	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	144745	47.59	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	13847	5.22	ug/L		99
3) Chloromethane	1.978	50	16598	6.21	ug/L		98
4) Vinyl Chloride	2.100	62	16642	5.75	ug/L		95
5) Bromomethane	2.533	96	12504	6.88	ug/L		99
6) Chloroethane	2.710	64	8320	7.62	ug/L		96
7) Trichlorofluoromethane	2.905	101	17523	4.78	ug/L		98
8) Ethanol	3.612	45	21364	327.95	ug/L		86
9) 1,1-Dichloroethene	3.563	61	18814	5.17	ug/L		94
10) Carbon Disulfide	3.563	76	22924	4.84	ug/L		98
11) Freon 113	3.636	101	12599	5.45	ug/L		89
12) Iodomethane	3.728	142	1498	5.40	ug/L		84
13) Acrolein	4.014	56	3041	5.61	ug/L		94
14) Methylene Chloride	4.295	84	19953	7.70	ug/L		98
15) Acetone	4.380	43	14762	11.02	ug/L		96
16) t-1,2-Dichloroethene	4.484	61	18330	5.43	ug/L		97
17) n-Hexane	4.588	86	1711	5.70	ug/L	#	43
18) Methyl-tert-butyl-ether	4.642	73	30062	5.33	ug/L		98
19) tert-Butanol (TBA)	4.801	59	124783	323.57	ug/L	#	56
20) Diisopropyl ether (DIPE)	5.087	45	8551	1.32	ug/L		96
21) 1,1-Dichloroethane	5.191	63	24878	5.58	ug/L		99
22) Acrylonitrile	5.264	53	7632	5.59	ug/L		96
23) Vinyl Acetate	5.508	43	14594	4.43	ug/L		94
24) Ethyl-tert-butyl ether...	5.490	59	6468	1.30	ug/L		87
25) c-1,2-Dichloroethene	5.795	61	18232	5.66	ug/L		98
26) 2,2-Dichloropropane	5.904	77	10290	5.42	ug/L	#	62
27) Bromochloromethane	6.014	49	13719	6.16	ug/L		90
28) Chloroform	6.106	83	24289	5.49	ug/L		97
29) Carbon Tetrachloride	6.234	117	11732	4.98	ug/L		92
30) Tetrahydrofuran	6.282	42	6128	4.99	ug/L		93
31) 1,1,1-Trichloroethane	6.313	97	17241	5.25	ug/L		92
33) 1,1-Dichloropropene	6.453	75	16001	5.29	ug/L		97
34) 2-Butanone (MEK)	6.453	43	19945	10.25	ug/L		98
35) Benzene	6.727	78	55897	5.66	ug/L		99
36) tert-Amyl methyl ether...	6.868	73	6406	1.34	ug/L	#	58
37) 1,2-Dichloroethane (EDC)	6.959	62	19078	5.27	ug/L		99
38) iso-Butyl Alcohol	7.014	43	27429	116.07	ug/L		87
40) Trichloroethene (TCE)	7.380	130	15099	5.01	ug/L		95
41) tert-Amyl ethyl ether ...	7.654	59	4150	1.36	ug/L		89
42) Dibromomethane	7.855	93	9153	5.38	ug/L		88
43) 1,2-Dichloropropane	7.965	63	14723	5.61	ug/L		94
44) Bromodichloromethane	8.050	83	14828	5.21	ug/L		98
46) 2-Chloroethyl Vinyl Ether	8.715	63	4421	2.85	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	14490	4.86	ug/L		96
49) Toluene	8.920	91	60036	5.24	ug/L		99

4/30/2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042810.D
Acq On : 28 Apr 2020 6:04 pm
Operator : PS
Sample : 0D28059-CAL6
Misc : 1X 5mL 5 PPB VOCRO
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 29 14:27:29 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	13173	4.43 ug/L	94
51) 4-Methyl-2-Pentanone (...	9.416	43	35418	8.91 ug/L	98
52) t-1,3-Dichloropropene	9.446	75	13049	4.51 ug/L	97
53) 1,1,2-Trichloroethane	9.599	97	14251	5.41 ug/L	92
54) Dibromochloromethane	9.763	129	10229	4.12 ug/L	99
55) 1,3-Dichloropropane	9.855	76	22206	5.46 ug/L	96
56) 1,2-Dibromoethane (EDB)	9.983	107	12948	4.87 ug/L	95
57) 2-Hexanone	10.190	43	22555	7.50 ug/L	93
58) Chlorobenzene	10.446	112	38442	4.98 ug/L	98
59) Ethylbenzene	10.471	91	60457	5.04 ug/L	100
60) 1,1,1,2-Tetrachloroethane	10.501	131	10701	4.77 ug/L	93
61) m,p-Xylenes (2)	10.592	91	82936	9.24 ug/L	98
62) o-Xylene	10.946	91	37475	4.25 ug/L	94
63) Styrene	10.995	104	29377	4.31 ug/L	100
64) Bromoform	11.019	173	6855	3.86 ug/L	96
65) Isopropylbenzene	11.196	105	43279	4.34 ug/L	96
68) Bromobenzene	11.507	156	14510	4.65 ug/L #	82
69) n-Propylbenzene	11.525	91	55551	5.06 ug/L	96
70) 1,1,2,2-Tetrachloroethane	11.586	83	17506	5.68 ug/L	98
71) 2-Chlorotoluene	11.647	126	11788	4.85 ug/L #	85
72) 1,3,5-Trimethylbenzene	11.672	105	35877	5.02 ug/L	95
73) 1,2,3-Trichloropropane	11.690	110	5738	5.27 ug/L #	69
74) t-1,4-Dichloro-2-butene	11.720	88	1351	4.88 ug/L #	70
75) 4-Chlorotoluene	11.775	91	34971	5.13 ug/L	95
76) tert-Butylbenzene	11.915	91	18795	4.87 ug/L	96
77) 1,2,4-Trimethylbenzene	11.964	105	35221	4.98 ug/L	97
78) sec-Butylbenzene	12.043	105	41621	5.23 ug/L	93
79) 4-Isopropyltoluene	12.147	119	30863	4.54 ug/L	98
80) 1,3-Dichlorobenzene	12.220	146	23270	4.92 ug/L	97
81) 1,4-Dichlorobenzene	12.287	146	25459	4.81 ug/L	94
82) n-Butylbenzene	12.470	91	29620	5.26 ug/L	94
83) 1,2-Dichlorobenzene	12.616	146	22390	4.81 ug/L	98
84) 1,2-Dibromo-3-Chloropr...	13.263	157	2995	4.13 ug/L	81
85) Hexachlorobutadiene	13.811	223	2853	4.59 ug/L	97
86) 1,2,4-Trichlorobenzene	13.854	180	9612	3.92 ug/L	98
87) Naphthalene	14.177	128	23409	3.76 ug/L	99
88) 1,2,3-Trichlorobenzene	14.372	180	9690	3.97 ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042810.D
Acq On : 28 Apr 2020 6:04 pm
Operator : PS
Sample : 0D28059-CAL6
Misc : 1X 5mL 5 PPB VOCRO
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 29 14:27:29 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

4/29/20 tml

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	142812	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.428	117	395555	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	179946	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	141206	52.96	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	454891	53.07	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	541718	52.14	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	144745	47.59	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	13847	5.22	ug/L		99
3) Chloromethane	1.978	50	16598	6.21	ug/L		98
4) Vinyl Chloride	2.100	62	16642	5.75	ug/L		95
5) Bromomethane	2.533	96	12504	6.88	ug/L		99
6) Chloroethane	2.710	64	8320	7.62	ug/L		96
7) Trichlorofluoromethane	2.905	101	17523	4.78	ug/L		98
8) Ethanol	3.612	45	21364	327.95	ug/L		86
9) 1,1-Dichloroethene	3.563	61	18814	5.17	ug/L		94
10) Carbon Disulfide	3.563	76	22924	4.84	ug/L		98
11) Freon 113	3.636	101	12599	5.45	ug/L		89
12) Iodomethane	3.728	142	1498	5.40	ug/L		84
13) Acrolein	4.014	56	3041	5.61	ug/L		94
14) Methylene Chloride	4.295	84	19953	7.70	ug/L		98
15) Acetone	4.380	43	14762	11.02	ug/L		96
16) t-1,2-Dichloroethene	4.484	61	18330	5.43	ug/L		97
17) n-Hexane	4.588	86	1711	5.70	ug/L	#	43
18) Methyl-tert-butyl-ether	4.642	73	30062	5.33	ug/L		98
19) tert-Butanol (TBA)	4.801	59	124783	323.57	ug/L	#	56
20) Diisopropyl ether (DIPE)	5.087	45	8551	1.32	ug/L		96
21) 1,1-Dichloroethane	5.191	63	24878	5.58	ug/L		99
22) Acrylonitrile	5.264	53	7632	5.59	ug/L		96
23) Vinyl Acetate	5.508	43	14594	4.43	ug/L		94
24) Ethyl-tert-butyl ether...	5.490	59	6468	1.30	ug/L		87
25) c-1,2-Dichloroethene	5.795	61	18232	5.66	ug/L		98
26) 2,2-Dichloropropane	5.904	77	10290	5.42	ug/L	#	62
27) Bromochloromethane	6.014	49	13719	6.16	ug/L		90
28) Chloroform	6.106	83	24289	5.49	ug/L		97
29) Carbon Tetrachloride	6.234	117	11732	4.98	ug/L		92
30) Tetrahydrofuran	6.282	42	6128	4.99	ug/L		93
31) 1,1,1-Trichloroethane	6.313	97	17241	5.25	ug/L		92
33) 1,1-Dichloropropene	6.453	75	16001	5.29	ug/L		97
34) 2-Butanone (MEK)	6.453	43	19945	10.25	ug/L		98
35) Benzene	6.727	78	55897	5.66	ug/L		99
36) tert-Amyl methyl ether...	6.868	73	6406	1.34	ug/L	#	58
37) 1,2-Dichloroethane (EDC)	6.959	62	19078	5.27	ug/L		99
38) iso-Butyl Alcohol	7.014	43	27429	116.07	ug/L		87
40) Trichloroethene (TCE)	7.380	130	15099	5.01	ug/L		95
41) tert-Amyl ethyl ether ...	7.654	59	4150	1.36	ug/L		89
42) Dibromomethane	7.855	93	9153	5.38	ug/L		88
43) 1,2-Dichloropropane	7.965	63	14723	5.61	ug/L		94
44) Bromodichloromethane	8.050	83	14828	5.21	ug/L		98
46) 2-Chloroethyl Vinyl Ether	8.715	63	4421	2.85	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	14490	4.86	ug/L		96
49) Toluene	8.920	91	36036	5.24	ug/L		99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042810.D
Acq On : 28 Apr 2020 6:04 pm
Operator : PS
Sample : 0D28059-CAL6
Misc : 1X 5mL 5 PPB VOCRO
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 29 14:27:29 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

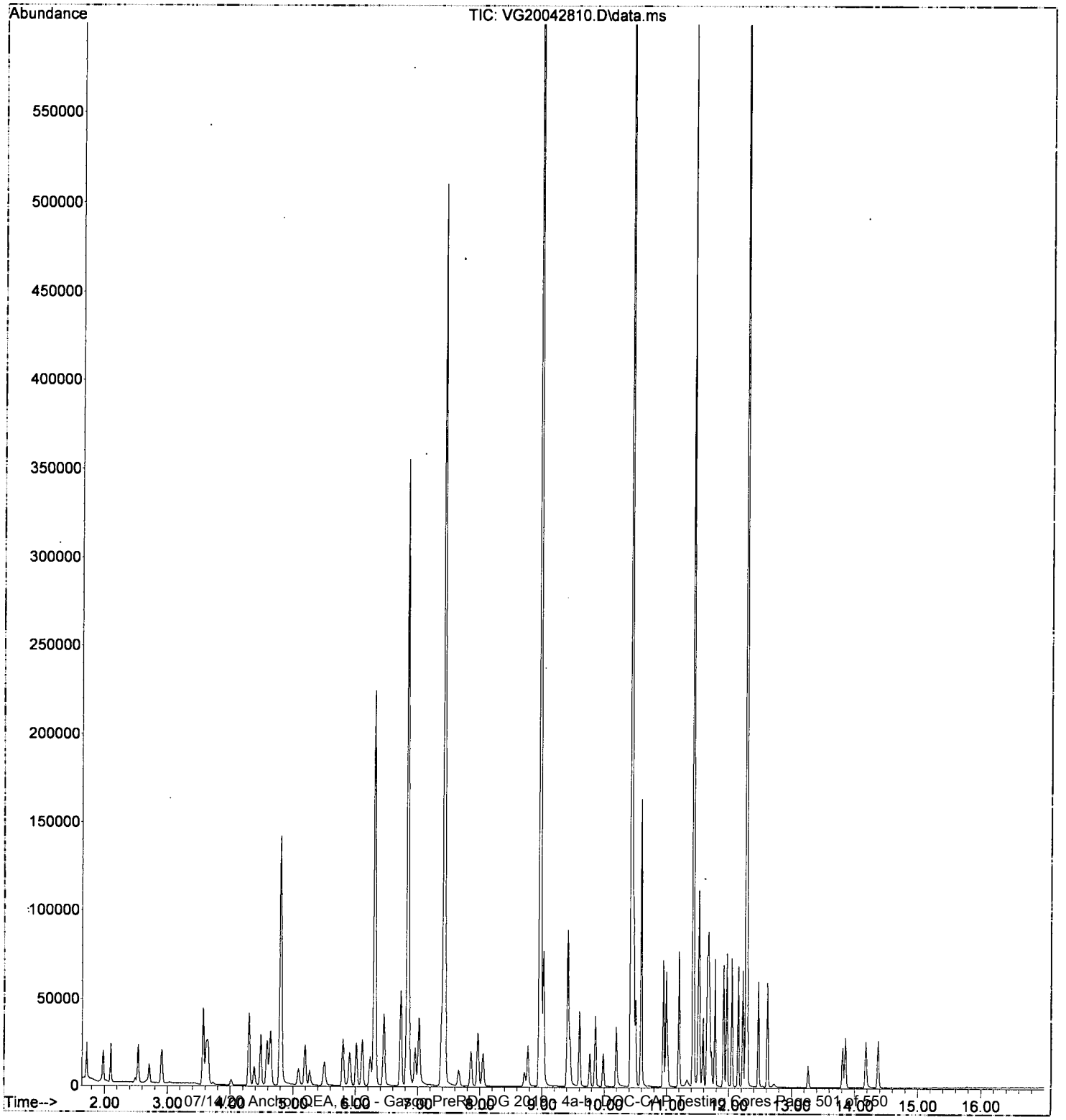
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	13173	4.43	ug/L		94
51) 4-Methyl-2-Pentanone (...	9.416	43	35418	8.91	ug/L		98
52) t-1,3-Dichloropropene	9.446	75	13049	4.51	ug/L		97
53) 1,1,2-Trichloroethane	9.599	97	14251	5.41	ug/L		92
54) Dibromochloromethane	9.763	129	10229	4.12	ug/L		99
55) 1,3-Dichloropropane	9.855	76	22206	5.46	ug/L		96
56) 1,2-Dibromoethane (EDB)	9.983	107	12948	4.87	ug/L		95
57) 2-Hexanone	10.190	43	22555	7.50	ug/L		93
58) Chlorobenzene	10.446	112	38442	4.98	ug/L		98
59) Ethylbenzene	10.471	91	60457	5.04	ug/L		100
60) 1,1,1,2-Tetrachloroethane	10.501	131	10701	4.77	ug/L		93
61) m,p-Xylenes (2)	10.592	91	82936	9.24	ug/L		98
62) o-Xylene	10.946	91	37475	4.25	ug/L		94
63) Styrene	10.995	104	29377	4.31	ug/L		100
64) Bromoform	11.019	173	6855	3.86	ug/L		96
65) Isopropylbenzene	11.196	105	43279	4.34	ug/L		96
68) Bromobenzene	11.507	156	14510	4.65	ug/L	#	82
69) n-Propylbenzene	11.525	91	55551	5.06	ug/L		96
70) 1,1,2,2-Tetrachloroethane	11.586	83	17506	5.68	ug/L		98
71) 2-Chlorotoluene	11.647	126	11788	4.85	ug/L	#	85
72) 1,3,5-Trimethylbenzene	11.672	105	35877	5.02	ug/L		95
73) 1,2,3-Trichloropropane	11.690	110	5738	5.27	ug/L	#	69
74) t-1,4-Dichloro-2-butene	11.720	88	1351	4.88	ug/L	#	70
75) 4-Chlorotoluene	11.775	91	34971	5.13	ug/L		95
76) tert-Butylbenzene	11.915	91	18795	4.87	ug/L		96
77) 1,2,4-Trimethylbenzene	11.964	105	35221	4.93	ug/L		97
78) sec-Butylbenzene	12.043	105	41621	5.23	ug/L		93
79) 4-Isopropyltoluene	12.147	119	30863	4.54	ug/L		98
80) 1,3-Dichlorobenzene	12.220	146	23270	4.92	ug/L		97
81) 1,4-Dichlorobenzene	12.287	146	25459	4.81	ug/L		94
82) n-Butylbenzene	12.470	91	29620	5.26	ug/L		94
83) 1,2-Dichlorobenzene	12.616	146	22390	4.81	ug/L		98
84) 1,2-Dibromo-3-Chloropr...	13.263	157	2995	4.13	ug/L		81
85) Hexachlorobutadiene	13.811	223	2853	4.59	ug/L		97
86) 1,2,4-Trichlorobenzene	13.854	180	9612	3.92	ug/L		98
87) Naphthalene	14.177	128	23409	3.76	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	9690	3.97	ug/L		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042810.D
Acq On : 28 Apr 2020 6:04 pm
Operator : PS
Sample : 0D28059-CAL6
Misc : 1X 5mL 5 PPB VOCRO
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 29 14:27:29 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042811.D
Acq On : 28 Apr 2020 6:31 pm
Operator : PS
Sample : 0D28059-CAL7
Misc : 1X 5mL 10 PPB VOCRO
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 29 14:27:32 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	139423	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	383963	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	178553	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	136574	52.47	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	439924	52.57	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	522720	51.83	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	142580	47.24	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	26239	10.13	ug/L		98
3) Chloromethane	1.978	50	31411	12.03	ug/L		98
4) Vinyl Chloride	2.100	62	32203	11.39	ug/L		94
5) Bromomethane	2.533	96	22785	12.84	ug/L		97
6) Chloroethane	2.710	64	11336	10.77	ug/L		88
7) Trichlorofluoromethane	2.905	101	32312	9.02	ug/L		98
8) Ethanol	3.612	45	44890	705.83	ug/L		83
9) 1,1-Dichloroethene	3.563	61	37076	10.44	ug/L		93
10) Carbon Disulfide	3.563	76	45558	9.84	ug/L		99
11) Freon 113	3.636	101	23367	10.36	ug/L		94
12) Iodomethane	3.728	142	4602	8.10	ug/L		93
13) Acrolein	4.008	56	6310	11.93	ug/L		98
14) Methylene Chloride	4.295	84	33896	13.39	ug/L		93
15) Acetone	4.380	43	28163	21.54	ug/L		95
16) t-1,2-Dichloroethene	4.484	61	36259	11.01	ug/L		96
17) n-Hexane	4.581	86	3233	11.03	ug/L	#	28
18) Methyl-tert-butyl-ether	4.636	73	62513	11.36	ug/L		100
19) tert-Butanol (TBA)	4.801	59	272405	723.53	ug/L	#	64
20) Diisopropyl ether (DIPE)	5.087	45	17898	2.84	ug/L		94
21) 1,1-Dichloroethane	5.191	63	49091	11.27	ug/L		99
22) Acrylonitrile	5.264	53	16003	12.00	ug/L		95
23) Vinyl Acetate	5.508	43	33186	9.43	ug/L		94
24) Ethyl-tert-butyl ether...	5.496	59	13478	2.78	ug/L		92
25) c-1,2-Dichloroethene	5.795	61	36783	11.69	ug/L		92
26) 2,2-Dichloropropane	5.910	77	19999	10.79	ug/L	#	55
27) Bromochloromethane	6.014	49	26657	12.27	ug/L		86
28) Chloroform	6.105	83	47467	10.99	ug/L		97
29) Carbon Tetrachloride	6.233	117	24278	10.56	ug/L		94
30) Tetrahydrofuran	6.282	42	13399	11.17	ug/L		94
31) 1,1,1-Trichloroethane	6.313	97	33372	10.41	ug/L		91
33) 1,1-Dichloropropene	6.453	75	32463	10.99	ug/L		95
34) 2-Butanone (MEK)	6.453	43	41809	22.02	ug/L		97
35) Benzene	6.727	78	111329	11.54	ug/L		99
36) tert-Amyl methyl ether...	6.874	73	12901	2.77	ug/L		72
37) 1,2-Dichloroethane (EDC)	6.959	62	37364	10.58	ug/L		98
38) iso-Butyl Alcohol	7.020	43	59903	259.65	ug/L		90
40) Trichloroethene (TCE)	7.380	130	28530	9.70	ug/L		97
41) tert-Amyl ethyl ether ...	7.660	59	8864	2.97	ug/L		86
42) Dibromomethane	7.855	93	18454	11.11	ug/L		90
43) 1,2-Dichloropropane	7.965	63	29839	11.64	ug/L		91
44) Bromodichloromethane	8.050	83	29724	10.70	ug/L		96
46) 2-Chloroethyl Vinyl Ether	8.715	63	9597	6.38	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	31828	11.00	ug/L		97
49) Toluene	9.019	91	11-6159	10.44	ug/L		100

4/30/2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042811.D
Acq On : 28 Apr 2020 6:31 pm
Operator : PS
Sample : 0D28059-CAL7
Misc : 1X 5mL 10 PPB VOCRO
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 29 14:27:32 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	24546	8.51	ug/L		93
51) 4-Methyl-2-Pentanone (...	9.416	43	78447	20.33	ug/L		99
52) t-1,3-Dichloropropene	9.446	75	28464	9.65	ug/L		99
53) 1,1,2-Trichloroethane	9.599	97	27495	10.74	ug/L		93
54) Dibromochloromethane	9.769	129	21974	8.86	ug/L		99
55) 1,3-Dichloropropane	9.855	76	44749	11.33	ug/L		94
56) 1,2-Dibromoethane (EDB)	9.983	107	25910	10.04	ug/L		97
57) 2-Hexanone	10.190	43	54460	18.66	ug/L		94
58) Chlorobenzene	10.446	112	73524	9.82	ug/L		96
59) Ethylbenzene	10.470	91	120072	10.31	ug/L		99
60) 1,1,1,2-Tetrachloroethane	10.501	131	21231	9.75	ug/L		94
61) m,p-Xylenes (2)	10.592	91	172596	19.69	ug/L		97
62) o-Xylene	10.946	91	80619	9.29	ug/L		94
63) Styrene	10.995	104	65789	9.47	ug/L		98
64) Bromoform	11.019	173	14508	7.95	ug/L		98
65) Isopropylbenzene	11.196	105	93386	9.26	ug/L		96
68) Bromobenzene	11.513	156	28215	9.11	ug/L		87
69) n-Propylbenzene	11.525	91	115790	10.63	ug/L		95
70) 1,1,2,2-Tetrachloroethane	11.586	83	35152	11.49	ug/L		96
71) 2-Chlorotoluene	11.647	126	24180	10.04	ug/L		93
72) 1,3,5-Trimethylbenzene	11.671	105	77814	10.98	ug/L		93
73) 1,2,3-Trichloropropane	11.690	110	11646	10.78	ug/L	#	76
74) t-1,4-Dichloro-2-butene	11.720	88	3230	10.01	ug/L	#	70
75) 4-Chlorotoluene	11.775	91	74114	10.95	ug/L		95
76) tert-Butylbenzene	11.915	91	39548	10.33	ug/L		92
77) 1,2,4-Trimethylbenzene	11.964	105	77201	11.01	ug/L		95
78) sec-Butylbenzene	12.043	105	88075	11.15	ug/L		94
79) 4-Isopropyltoluene	12.147	119	66417	9.64	ug/L		98
80) 1,3-Dichlorobenzene	12.220	146	47228	10.06	ug/L		98
81) 1,4-Dichlorobenzene	12.287	146	50096	9.55	ug/L		97
82) n-Butylbenzene	12.470	91	63004	11.27	ug/L		94
83) 1,2-Dichlorobenzene	12.616	146	45442	9.84	ug/L		98
84) 1,2-Dibromo-3-Chloropr...	13.263	157	6172	8.57	ug/L		72
85) Hexachlorobutadiene	13.811	223	5547	9.00	ug/L		94
86) 1,2,4-Trichlorobenzene	13.854	180	21662	8.89	ug/L		95
87) Naphthalene	14.177	128	61073	8.39	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	22187	9.17	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042811.D
Acq On : 28 Apr 2020 6:31 pm
Operator : PS
Sample : 0D28059-CAL7
Misc : 1X 5mL 10 PPB VOCRO
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 29 14:27:32 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

4/29/20 tnl

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	139423	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	383963	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	178553	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	136574	52.47	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	439924	52.57	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	522720	51.83	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	142580	47.24	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	26239	10.13	ug/L		98
3) Chloromethane	1.978	50	31411	12.03	ug/L		98
4) Vinyl Chloride	2.100	62	32203	11.39	ug/L		94
5) Bromomethane	2.533	96	22785	12.84	ug/L		97
6) Chloroethane	2.710	64	11336	10.77	ug/L		88
7) Trichlorofluoromethane	2.905	101	32312	9.02	ug/L		98
8) Ethanol	3.612	45	44890	705.83	ug/L		83
9) 1,1-Dichloroethene	3.563	61	37076	10.44	ug/L		93
10) Carbon Disulfide	3.563	76	45558	9.84	ug/L		99
11) Freon 113	3.636	101	23367	10.35	ug/L		94
12) Iodomethane	3.728	142	4602	8.10	ug/L		93
13) Acrolein	4.008	56	6310	11.93	ug/L		98
14) Methylene Chloride	4.295	84	33896	13.39	ug/L		93
15) Acetone	4.380	43	28163	21.54	ug/L		95
16) t-1,2-Dichloroethene	4.484	61	36259	11.01	ug/L		96
17) n-Hexane	4.581	86	3233	11.03	ug/L	#	28
18) Methyl-tert-butyl-ether	4.636	73	62513	11.36	ug/L		100
19) tert-Butanol (TBA)	4.801	59	272405	723.53	ug/L	#	64
20) Diisopropyl ether (DIPE)	5.087	45	17898	2.84	ug/L		94
21) 1,1-Dichloroethane	5.191	63	49091	11.27	ug/L		99
22) Acrylonitrile	5.264	53	16003	12.00	ug/L		95
23) Vinyl Acetate	5.508	43	33186	9.43	ug/L		94
24) Ethyl-tert-butyl ether...	5.496	59	13478	2.78	ug/L		92
25) c-1,2-Dichloroethene	5.795	61	36783	11.69	ug/L		92
26) 2,2-Dichloropropane	5.910	77	19999	10.79	ug/L	#	55
27) Bromochloromethane	6.014	49	26657	12.27	ug/L		86
28) Chloroform	6.105	83	47467	10.99	ug/L		97
29) Carbon Tetrachloride	6.233	117	24278	10.56	ug/L		94
30) Tetrahydrofuran	6.282	42	13399	11.17	ug/L		94
31) 1,1,1-Trichloroethane	6.313	97	33372	10.41	ug/L		91
33) 1,1-Dichloropropene	6.453	75	32463	10.99	ug/L		95
34) 2-Butanone (MEK)	6.453	43	41809	22.02	ug/L		97
35) Benzene	6.727	78	111329	11.54	ug/L		99
36) tert-Amyl methyl ether...	6.874	73	12901	2.77	ug/L		72
37) 1,2-Dichloroethane (EDC)	6.959	62	37364	10.58	ug/L		98
38) iso-Butyl Alcohol	7.020	43	59903	259.65	ug/L		90
40) Trichloroethene (TCE)	7.380	130	28530	9.70	ug/L		97
41) tert-Amyl ethyl ether ...	7.660	59	8864	2.97	ug/L		86
42) Dibromomethane	7.855	93	18454	11.11	ug/L		90
43) 1,2-Dichloropropane	7.965	63	29839	11.64	ug/L		91
44) Bromodichloromethane	8.050	83	29724	10.70	ug/L		96
46) 2-Chloroethyl Vinyl Ether	8.715	63	9597	6.38	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	31828	11.00	ug/L		97
49) Toluene	9.019	92	116159	10.44	ug/L		100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042811.D
Acq On : 28 Apr 2020 6:31 pm
Operator : PS
Sample : 0D28059-CAL7
Misc : 1X 5mL 10 PPB VOCRO
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 29 14:27:32 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

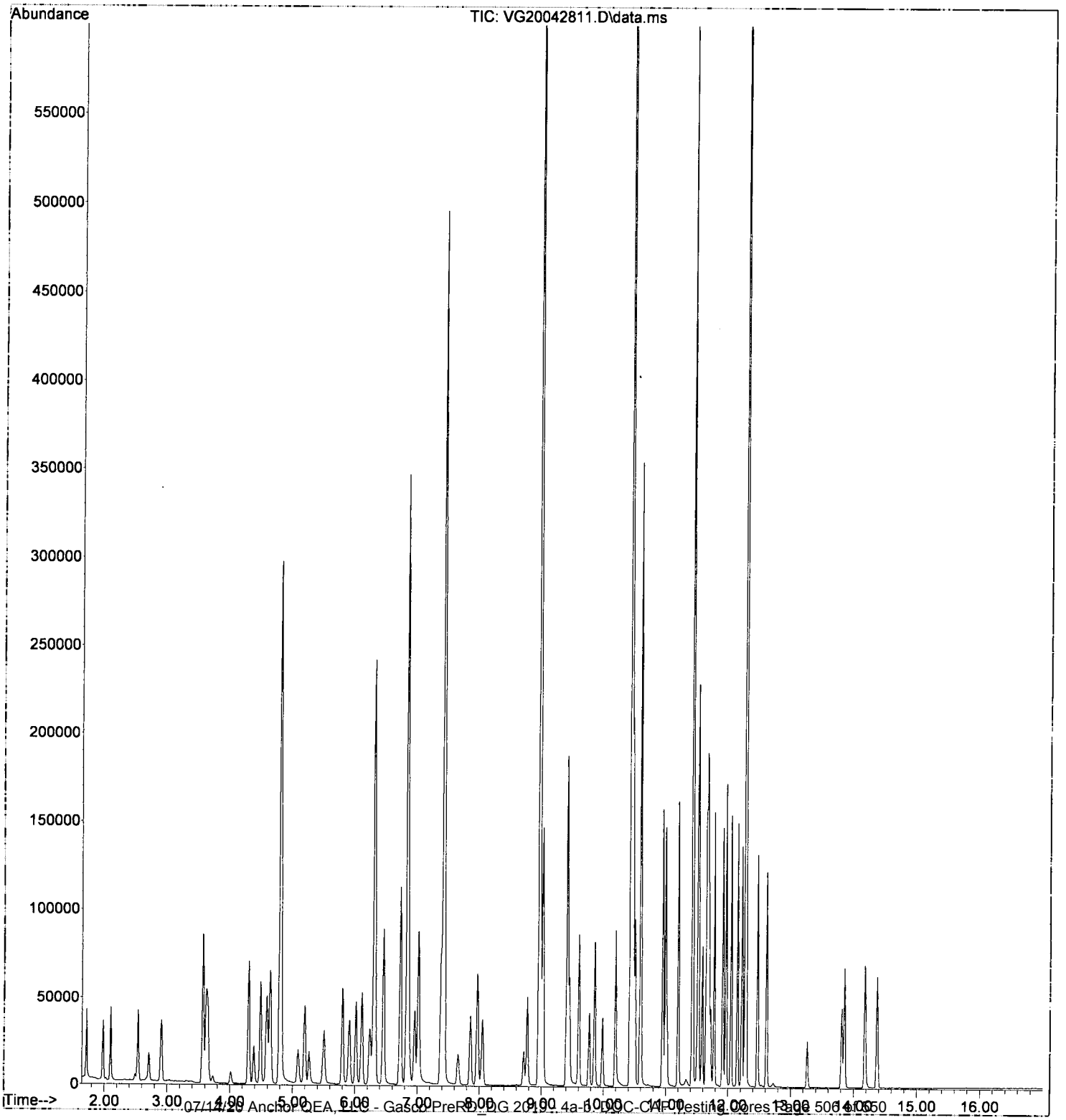
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	24546	8.51	ug/L		93
51) 4-Methyl-2-Pentanone (...	9.416	43	78447	20.33	ug/L		99
52) t-1,3-Dichloropropene	9.446	75	28464	9.65	ug/L		99
53) 1,1,2-Trichloroethane	9.599	97	27495	10.74	ug/L		93
54) Dibromochloromethane	9.769	129	21974	8.86	ug/L		99
55) 1,3-Dichloropropane	9.855	76	44749	11.33	ug/L		94
56) 1,2-Dibromoethane (EDB)	9.983	107	25910	10.04	ug/L		97
57) 2-Hexanone	10.190	43	54460	18.66	ug/L		94
58) Chlorobenzene	10.446	112	73524	9.82	ug/L		96
59) Ethylbenzene	10.470	91	120072	10.31	ug/L		99
60) 1,1,1,2-Tetrachloroethane	10.501	131	21231	9.75	ug/L		94
61) m,p-Xylenes (2)	10.592	91	172596	19.69	ug/L		97
62) o-Xylene	10.946	91	80619	9.29	ug/L		94
63) Styrene	10.995	104	65789	9.47	ug/L		98
64) Bromoform	11.019	173	14508	7.95	ug/L		98
65) Isopropylbenzene	11.196	105	93386	9.26	ug/L		96
68) Bromobenzene	11.513	156	28215	9.11	ug/L		87
69) n-Propylbenzene	11.525	91	115790	10.63	ug/L		95
70) 1,1,2,2-Tetrachloroethane	11.586	83	35152	11.49	ug/L		96
71) 2-Chlorotoluene	11.647	126	24180	10.04	ug/L		93
72) 1,3,5-Trimethylbenzene	11.671	105	77814	10.98	ug/L		93
73) 1,2,3-Trichloropropane	11.690	110	11646	10.78	ug/L	#	76
74) t-1,4-Dichloro-2-butene	11.720	88	3230	10.01	ug/L	#	70
75) 4-Chlorotoluene	11.775	91	74114	10.95	ug/L		95
76) tert-Butylbenzene	11.915	91	39548	10.33	ug/L		92
77) 1,2,4-Trimethylbenzene	11.964	105	77201	11.01	ug/L		95
78) sec-Butylbenzene	12.043	105	88075	11.15	ug/L		94
79) 4-Isopropyltoluene	12.147	119	66417	9.64	ug/L		98
80) 1,3-Dichlorobenzene	12.220	146	47228	10.06	ug/L		98
81) 1,4-Dichlorobenzene	12.287	146	50096	9.55	ug/L		97
82) n-Butylbenzene	12.470	91	63004	11.27	ug/L		94
83) 1,2-Dichlorobenzene	12.616	146	45442	9.84	ug/L		98
84) 1,2-Dibromo-3-Chloropr...	13.263	157	6172	8.57	ug/L		72
85) Hexachlorobutadiene	13.811	223	5547	9.00	ug/L		94
86) 1,2,4-Trichlorobenzene	13.854	180	21662	8.89	ug/L		95
87) Naphthalene	14.177	128	61073	8.39	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	22187	9.17	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042811.D
Acq On : 28 Apr 2020 6:31 pm
Operator : PS
Sample : 0D28059-CAL7
Misc : 1X 5mL 10 PPB VOCRO
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 29 14:27:32 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042812.D
Acq On : 28 Apr 2020 6:58 pm
Operator : PS
Sample : 0D28059-CAL8
Misc : 1X 5mL 20 PPB VOCRO
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 29 14:27:35 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	145168	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	402229	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	194144	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	142690	52.65	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	457229	52.48	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	543124	51.41	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	151710	46.23	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	57105	21.18	ug/L		98
3) Chloromethane	1.978	50	68020	25.02	ug/L		99
4) Vinyl Chloride	2.100	62	69809	23.72	ug/L		96
5) Bromomethane	2.533	96	44234	23.93	ug/L		98
6) Chloroethane	2.704	64	21007	19.59	ug/L		96
7) Trichlorofluoromethane	2.899	101	70026	18.78	ug/L		99
8) Ethanol	3.618	45	95124	1436.50	ug/L		84
9) 1,1-Dichloroethene	3.563	61	82498	22.30	ug/L		95
10) Carbon Disulfide	3.563	76	107913	22.40	ug/L		98
11) Freon 113	3.636	101	50999	21.69	ug/L		92
12) Iodomethane	3.728	142	15447	16.58	ug/L		92
13) Acrolein	4.008	56	14426	26.20	ug/L		96
14) Methylene Chloride	4.295	84	66422	25.21	ug/L		94
15) Acetone	4.380	43	59628	43.79	ug/L		97
16) t-1,2-Dichloroethene	4.484	61	80067	23.34	ug/L		98
17) n-Hexane	4.581	86	7464	24.45	ug/L	#	28
18) Methyl-tert-butyl-ether	4.636	73	143781	25.09	ug/L		98
19) tert-Butanol (TBA)	4.801	59	633758	1616.70	ug/L	#	74
20) Diisopropyl ether (DIPE)	5.087	45	39213	5.97	ug/L		95
21) 1,1-Dichloroethane	5.191	63	107573	23.72	ug/L		100
22) Acrylonitrile	5.264	53	36134	26.03	ug/L		95
23) Vinyl Acetate	5.502	43	83858	21.58	ug/L		95
24) Ethyl-tert-butyl ether...	5.490	59	30757	6.10	ug/L		93
25) c-1,2-Dichloroethene	5.795	61	81309	24.83	ug/L		96
26) 2,2-Dichloropropane	5.904	77	46097	23.88	ug/L	#	66
27) Bromochloromethane	6.014	49	56728	25.08	ug/L		90
28) Chloroform	6.106	83	101369	22.53	ug/L		96
29) Carbon Tetrachloride	6.234	117	56466	23.59	ug/L		98
30) Tetrahydrofuran	6.282	42	29915	23.95	ug/L		96
31) 1,1,1-Trichloroethane	6.313	97	75474	22.61	ug/L		94
33) 1,1-Dichloropropene	6.453	75	75641	24.60	ug/L		97
34) 2-Butanone (MEK)	6.453	43	96125	48.62	ug/L		98
35) Benzene	6.727	78	246984	24.59	ug/L		99
36) tert-Amyl methyl ether...	6.868	73	28625	5.90	ug/L		76
37) 1,2-Dichloroethane (EDC)	6.959	62	80002	21.75	ug/L		98
38) iso-Butyl Alcohol	7.014	43	141129	587.52	ug/L		93
40) Trichloroethene (TCE)	7.380	130	63379	20.70	ug/L		95
41) tert-Amyl ethyl ether ...	7.654	59	20211	6.51	ug/L		89
42) Dibromomethane	7.855	93	39871	23.05	ug/L		88
43) 1,2-Dichloropropane	7.965	63	64553	24.18	ug/L		92
44) Bromodichloromethane	8.050	83	68001	23.51	ug/L		100
46) 2-Chloroethyl Vinyl Ether	8.715	63	25300	16.05	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	76593	25.27	ug/L		96
49) Toluene	8.820	91	254446	21.86	ug/L		98

4/30/2024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042812.D
Acq On : 28 Apr 2020 6:58 pm
Operator : PS
Sample : 0D28059-CAL8
Misc : 1X 5mL 20 PPB VOCRO
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 29 14:27:35 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	55366	18.33	ug/L		93
51) 4-Methyl-2-Pentanone (...	9.410	43	181192	44.83	ug/L		99
52) t-1,3-Dichloropropene	9.446	75	69258	21.65	ug/L		95
53) 1,1,2-Trichloroethane	9.599	97	59774	22.30	ug/L		97
54) Dibromochloromethane	9.769	129	51693	19.44	ug/L		99
55) 1,3-Dichloropropane	9.855	76	97867	23.65	ug/L		97
56) 1,2-Dibromoethane (EDB)	9.983	107	59469	22.01	ug/L		98
57) 2-Hexanone	10.190	43	131124	42.89	ug/L		98
58) Chlorobenzene	10.446	112	161648	20.60	ug/L		100
59) Ethylbenzene	10.464	91	267924	21.95	ug/L		98
60) 1,1,1,2-Tetrachloroethane	10.501	131	48948	21.45	ug/L		95
61) m,p-Xylenes (2)	10.592	91	395642	42.79	ug/L		97
62) o-Xylene	10.946	91	192167	20.90	ug/L		97
63) Styrene	10.989	104	155824	20.85	ug/L		99
64) Bromoform	11.019	173	35427	17.79	ug/L		97
65) Isopropylbenzene	11.196	105	224839	20.78	ug/L		96
68) Bromobenzene	11.513	156	64696	19.21	ug/L		87
69) n-Propylbenzene	11.519	91	270477	22.83	ug/L		95
70) 1,1,2,2-Tetrachloroethane	11.586	83	78508	23.61	ug/L		96
71) 2-Chlorotoluene	11.647	126	56094	21.41	ug/L		93
72) 1,3,5-Trimethylbenzene	11.672	105	183706	23.83	ug/L		94
73) 1,2,3-Trichloropropane	11.690	110	25712	21.89	ug/L	#	80
74) t-1,4-Dichloro-2-butene	11.720	88	8122	21.34	ug/L	#	79
75) 4-Chlorotoluene	11.775	91	171897	23.37	ug/L		95
76) tert-Butylbenzene	11.909	91	93619	22.49	ug/L		87
77) 1,2,4-Trimethylbenzene	11.964	105	181278	23.78	ug/L		97
78) sec-Butylbenzene	12.043	105	208931	24.34	ug/L		94
79) 4-Isopropyltoluene	12.147	119	162974	21.42	ug/L		98
80) 1,3-Dichlorobenzene	12.220	146	108348	21.23	ug/L		97
81) 1,4-Dichlorobenzene	12.287	146	112685	19.75	ug/L		96
82) n-Butylbenzene	12.470	91	150042	24.68	ug/L		96
83) 1,2-Dichlorobenzene	12.610	146	105171	20.95	ug/L		97
84) 1,2-Dibromo-3-Chloropr...	13.263	157	15323	19.57	ug/L		76
85) Hexachlorobutadiene	13.811	223	12746	19.01	ug/L		97
86) 1,2,4-Trichlorobenzene	13.854	180	54807	20.69	ug/L		97
87) Naphthalene	14.177	128	176300	20.67	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	55471	21.09	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042812.D
Acq On : 28 Apr 2020 6:58 pm
Operator : PS
Sample : 0D28059-CAL8
Misc : 1X 5mL 20 PPB VOCRO
ALS Vial : 12 Sample Multiplier: 1

4/29/2020

Quant Time: Apr 29 14:27:35 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	145168	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	402229	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	194144	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	142690	52.65	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	457229	52.48	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	543124	51.41	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	151710	46.23	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	57105	21.18	ug/L		98
3) Chloromethane	1.978	50	68020	25.02	ug/L		99
4) Vinyl Chloride	2.100	62	69809	23.72	ug/L		96
5) Bromomethane	2.533	96	44234	23.93	ug/L		98
6) Chloroethane	2.704	64	21007	19.59	ug/L		96
7) Trichlorofluoromethane	2.899	101	70026	18.78	ug/L		99
8) Ethanol	3.618	45	95124	1436.50	ug/L		84
9) 1,1-Dichloroethene	3.563	61	82498	22.30	ug/L		95
10) Carbon Disulfide	3.563	76	107913	22.40	ug/L		98
11) Freon 113	3.636	101	50999	21.69	ug/L		92
12) Iodomethane	3.728	142	15447	16.58	ug/L		92
13) Acrolein	4.008	56	14426	26.20	ug/L		96
14) Methylene Chloride	4.295	84	66422	25.21	ug/L		94
15) Acetone	4.380	43	59628	43.79	ug/L		97
16) t-1,2-Dichloroethene	4.484	61	80067	23.34	ug/L		98
17) n-Hexane	4.581	86	7464	24.45	ug/L	#	28
18) Methyl-tert-butyl-ether	4.636	73	143781	25.09	ug/L		98
19) tert-Butanol (TBA)	4.801	59	633758	1616.70	ug/L	#	74
20) Diisopropyl ether (DIPE)	5.087	45	39213	5.97	ug/L		95
21) 1,1-Dichloroethane	5.191	63	107573	23.72	ug/L		100
22) Acrylonitrile	5.264	53	36134	26.03	ug/L		95
23) Vinyl Acetate	5.502	43	83858	21.58	ug/L		95
24) Ethyl-tert-butyl ether...	5.490	59	30757	6.10	ug/L		93
25) c-1,2-Dichloroethene	5.795	61	81309	24.83	ug/L		96
26) 2,2-Dichloropropane	5.904	77	46097	23.88	ug/L	#	66
27) Bromochloromethane	6.014	49	56728	25.08	ug/L		90
28) Chloroform	6.106	83	101369	22.53	ug/L		96
29) Carbon Tetrachloride	6.234	117	56466	23.59	ug/L		98
30) Tetrahydrofuran	6.282	42	29915	23.95	ug/L		96
31) 1,1,1-Trichloroethane	6.313	97	75474	22.61	ug/L		94
33) 1,1-Dichloropropene	6.453	75	75641	24.60	ug/L		97
34) 2-Butanone (MEK)	6.453	43	96125	48.62	ug/L		98
35) Benzene	6.727	78	246984	24.59	ug/L		99
36) tert-Amyl methyl ether...	6.868	73	28625	5.90	ug/L		76
37) 1,2-Dichloroethane (EDC)	6.959	62	80002	21.75	ug/L		98
38) iso-Butyl Alcohol	7.014	43	141129	587.52	ug/L		93
40) Trichloroethene (TCE)	7.380	130	63379	20.70	ug/L		95
41) tert-Amyl ethyl ether ...	7.654	59	20211	6.51	ug/L		89
42) Dibromomethane	7.855	93	39871	23.05	ug/L		88
43) 1,2-Dichloropropane	7.965	63	64553	24.18	ug/L		92
44) Bromodichloromethane	8.050	83	68001	23.51	ug/L		100
46) 2-Chloroethyl Vinyl Ether	8.715	63	25300	16.05	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	76593	25.27	ug/L		96
49) Toluene	9.020	91	254746	21.88	ug/L		98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042812.D
Acq On : 28 Apr 2020 6:58 pm
Operator : PS
Sample : 0D28059-CAL8
Misc : 1X 5mL 20 PPB VOCRO
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 29 14:27:35 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

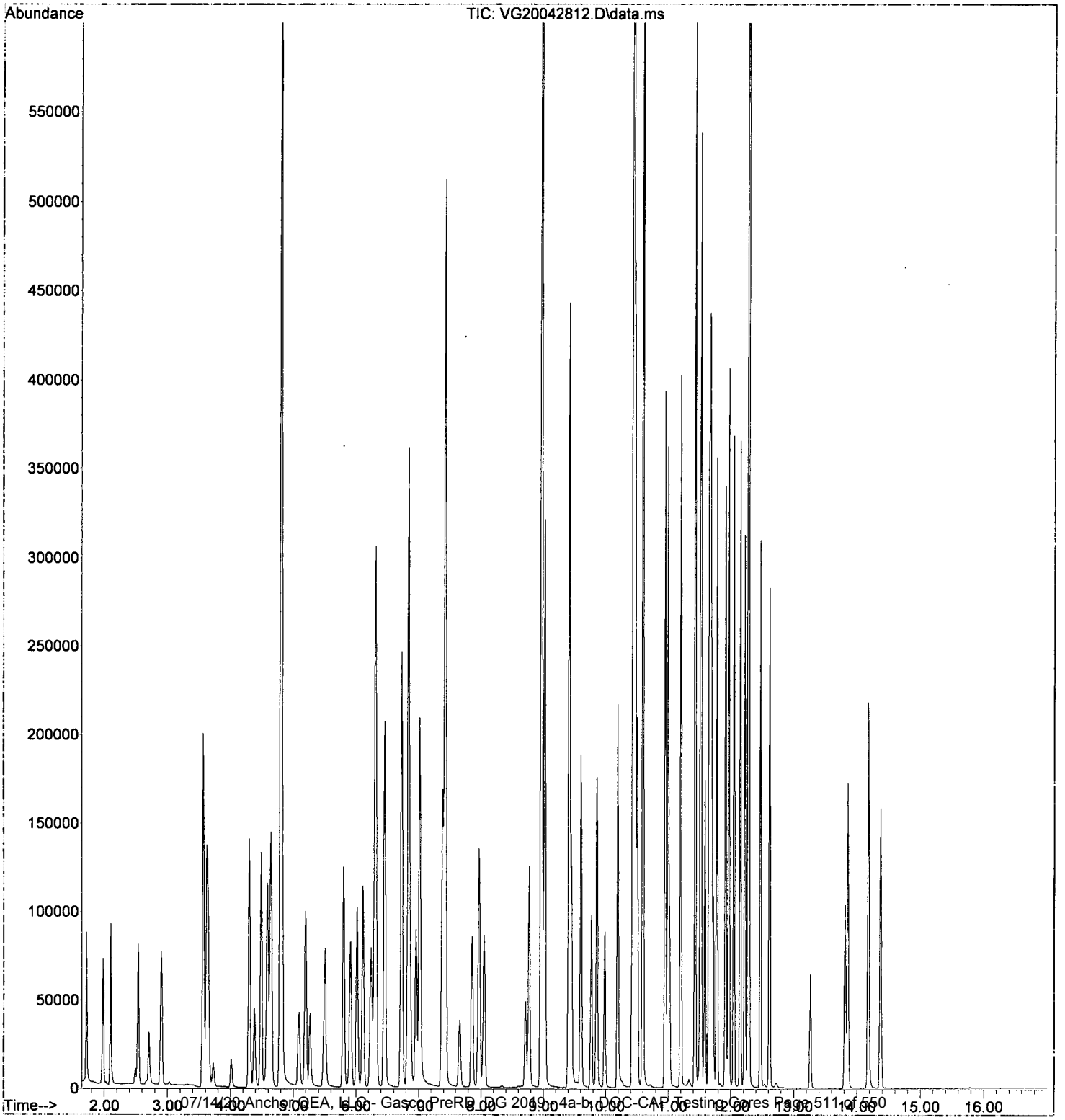
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	55366	18.33	ug/L		93
51) 4-Methyl-2-Pentanone (...	9.410	43	181192	44.83	ug/L		99
52) t-1,3-Dichloropropene	9.446	75	69258	21.65	ug/L		95
53) 1,1,2-Trichloroethane	9.599	97	59774	22.30	ug/L		97
54) Dibromochloromethane	9.769	129	51693	19.44	ug/L		99
55) 1,3-Dichloropropane	9.855	76	97867	23.68	ug/L		97
56) 1,2-Dibromoethane (EDB)	9.983	107	59469	22.01	ug/L		98
57) 2-Hexanone	10.190	43	131124	42.89	ug/L		98
58) Chlorobenzene	10.446	112	161648	20.60	ug/L		100
59) Ethylbenzene	10.464	91	267924	21.95	ug/L		98
60) 1,1,1,2-Tetrachloroethane	10.501	131	48948	21.45	ug/L		95
61) m,p-Xylenes (2)	10.592	91	395642	42.79	ug/L		97
62) o-Xylene	10.946	91	192167	20.90	ug/L		97
63) Styrene	10.989	104	155824	20.85	ug/L		99
64) Bromoform	11.019	173	35427	17.79	ug/L		97
65) Isopropylbenzene	11.196	105	224839	20.78	ug/L		96
68) Bromobenzene	11.513	156	64696	19.21	ug/L		87
69) n-Propylbenzene	11.519	91	270477	22.83	ug/L		95
70) 1,1,2,2-Tetrachloroethane	11.586	83	78508	23.61	ug/L		96
71) 2-Chlorotoluene	11.647	126	56094	21.41	ug/L		93
72) 1,3,5-Trimethylbenzene	11.672	105	183706	23.83	ug/L		94
73) 1,2,3-Trichloropropane	11.690	110	25712	21.89	ug/L	#	80
74) t-1,4-Dichloro-2-butene	11.720	88	8122	21.34	ug/L	#	79
75) 4-Chlorotoluene	11.775	91	171897	23.37	ug/L		95
76) tert-Butylbenzene	11.909	91	93619	22.49	ug/L		87
77) 1,2,4-Trimethylbenzene	11.964	105	181278	23.78	ug/L		97
78) sec-Butylbenzene	12.043	105	208931	24.34	ug/L		94
79) 4-Isopropyltoluene	12.147	119	162974	21.42	ug/L		98
80) 1,3-Dichlorobenzene	12.220	146	108348	21.23	ug/L		97
81) 1,4-Dichlorobenzene	12.287	146	112685	19.75	ug/L		96
82) n-Butylbenzene	12.470	91	150042	24.68	ug/L		96
83) 1,2-Dichlorobenzene	12.610	146	105171	20.95	ug/L		97
84) 1,2-Dibromo-3-Chloropr...	13.263	157	15323	19.57	ug/L		76
85) Hexachlorobutadiene	13.811	223	12746	19.01	ug/L		97
86) 1,2,4-Trichlorobenzene	13.854	180	54807	20.69	ug/L		97
87) Naphthalene	14.177	128	176300	20.67	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	55471	21.09	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042812.D
Acq On : 28 Apr 2020 6:58 pm
Operator : PS
Sample : 0D28059-CAL8
Misc : 1X 5mL 20 PPB VOCRO
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 29 14:27:35 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042813.D
Acq On : 28 Apr 2020 7:25 pm
Operator : PS
Sample : 0D28059-CAL9
Misc : 1X 5mL 50 PPB VOCRO
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 29 14:27:38 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	155943	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	433790	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	218062	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	153880	52.85	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	494278	52.81	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	579127	50.83	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	167491	45.44	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	168157	58.05	ug/L		99
3) Chloromethane	1.978	50	188663	64.61	ug/L		100
4) Vinyl Chloride	2.100	62	203097	64.23	ug/L		95
5) Bromomethane	2.533	96	110130	55.47	ug/L		99
6) Chloroethane	2.710	64	56347	51.46	ug/L		95
7) Trichlorofluoromethane	2.905	101	188165	46.98	ug/L		98
8) Ethanol	3.612	45	204153	2869.95	ug/L		85
9) 1,1-Dichloroethene	3.563	61	219956	55.35	ug/L		96
10) Carbon Disulfide	3.563	76	325731	62.93	ug/L		99
11) Freon 113	3.642	101	132348	52.39	ug/L		93
12) Iodomethane	3.728	142	70400	51.40	ug/L		93
13) Acrolein	4.008	56	40730	68.87	ug/L		94
14) Methylene Chloride	4.295	84	166231	58.73	ug/L		95
15) Acetone	4.374	43	147679	100.97	ug/L		98
16) t-1,2-Dichloroethene	4.484	61	216769	58.83	ug/L		97
17) n-Hexane	4.581	86	21842	66.61	ug/L	#	25
18) Methyl-tert-butyl-ether	4.636	73	389222	63.22	ug/L		99
19) tert-Butanol (TBA)	4.801	59	1397478	3318.62	ug/L	#	84
20) Diisopropyl ether (DIPE)	5.087	45	85733	12.15	ug/L		95
21) 1,1-Dichloroethane	5.191	63	283431	58.18	ug/L		99
22) Acrylonitrile	5.264	53	93340	62.60	ug/L		97
23) Vinyl Acetate	5.502	43	304318	66.41	ug/L		96
24) Ethyl-tert-butyl ether...	5.490	59	70095	12.94	ug/L		95
25) c-1,2-Dichloroethene	5.794	61	221030	62.83	ug/L		98
26) 2,2-Dichloropropane	5.910	77	127143	61.30	ug/L		72
27) Bromochloromethane	6.014	49	145300	59.79	ug/L		91
28) Chloroform	6.105	83	267420	55.34	ug/L		98
29) Carbon Tetrachloride	6.233	117	159439	62.00	ug/L		95
30) Tetrahydrofuran	6.276	42	82643	61.59	ug/L		97
31) 1,1,1-Trichloroethane	6.313	97	205435	57.29	ug/L		95
33) 1,1-Dichloropropene	6.453	75	206166	62.41	ug/L		97
34) 2-Butanone (MEK)	6.447	43	254544	119.85	ug/L		98
35) Benzene	6.727	78	657475	60.93	ug/L		98
36) tert-Amyl methyl ether...	6.867	73	61641	11.83	ug/L		80
37) 1,2-Dichloroethane (EDC)	6.953	62	207503	52.51	ug/L		98
38) iso-Butyl Alcohol	7.014	43	390505	1513.34	ug/L		98
40) Trichloroethene (TCE)	7.380	130	165009	50.17	ug/L		96
41) tert-Amyl ethyl ether ...	7.660	59	45170	13.54	ug/L		88
42) Dibromomethane	7.855	93	106537	57.33	ug/L		89
43) 1,2-Dichloropropane	7.965	63	174417	60.81	ug/L		91
44) Bromodichloromethane	8.050	83	188929	60.82	ug/L		97
46) 2-Chloroethyl Vinyl Ether	8.709	63	75399	44.35	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	224852	68.80	ug/L		95
49) Toluene	9.019	92	497362	55.89	ug/L		99

4/30/2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042813.D
Acq On : 28 Apr 2020 7:25 pm
Operator : PS
Sample : 0D28059-CAL9
Misc : 1X 5mL 50 PPB VOCRO
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 29 14:27:38 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	148064	45.45	ug/L		92
51) 4-Methyl-2-Pentanone (...	9.410	43	494983	113.55	ug/L		99
52) t-1,3-Dichloropropene	9.446	75	202313	55.72	ug/L		97
53) 1,1,2-Trichloroethane	9.599	97	160242	55.42	ug/L		96
54) Dibromochloromethane	9.769	129	151282	50.65	ug/L		99
55) 1,3-Dichloropropane	9.855	76	264551	59.29	ug/L		99
56) 1,2-Dibromoethane (EDB)	9.983	107	162144	55.64	ug/L		98
57) 2-Hexanone	10.184	43	365112	110.75	ug/L		98
58) Chlorobenzene	10.446	112	430146	50.84	ug/L		99
59) Ethylbenzene	10.464	91	723698	54.99	ug/L		98
60) 1,1,1,2-Tetrachloroethane	10.501	131	135859	55.21	ug/L		96
61) m,p-Xylenes (2)	10.592	91	1089425	107.58	ug/L		99
62) o-Xylene	10.946	91	545910	53.79	ug/L		97
63) Styrene	10.989	104	443946	53.60	ug/L		100
64) Bromoform	11.019	173	109913	48.08	ug/L		97
65) Isopropylbenzene	11.196	105	634097	52.84	ug/L		98
68) Bromobenzene	11.507	156	178576	47.20	ug/L	#	83
69) n-Propylbenzene	11.519	91	753971	56.67	ug/L		95
70) 1,1,2,2-Tetrachloroethane	11.580	83	218708	58.56	ug/L		97
71) 2-Chlorotoluene	11.647	126	158246	53.78	ug/L		96
72) 1,3,5-Trimethylbenzene	11.671	105	514083	59.37	ug/L		95
73) 1,2,3-Trichloropropane	11.690	110	67976	51.53	ug/L	#	80
74) t-1,4-Dichloro-2-butene	11.720	88	24353	53.32	ug/L	#	91
75) 4-Chlorotoluene	11.775	91	475089	57.50	ug/L		96
76) tert-Butylbenzene	11.909	91	266112	56.93	ug/L		90
77) 1,2,4-Trimethylbenzene	11.964	105	509496	59.50	ug/L		97
78) sec-Butylbenzene	12.043	105	590118	61.20	ug/L		96
79) 4-Isopropyltoluene	12.147	119	475738	54.26	ug/L		99
80) 1,3-Dichlorobenzene	12.220	146	304760	53.16	ug/L		98
81) 1,4-Dichlorobenzene	12.287	146	311097	48.54	ug/L		96
82) n-Butylbenzene	12.464	91	421761	61.76	ug/L		95
83) 1,2-Dichlorobenzene	12.610	146	294861	52.28	ug/L		98
84) 1,2-Dibromo-3-Chloropr...	13.263	157	45658	51.91	ug/L		86
85) Hexachlorobutadiene	13.811	223	32798	43.56	ug/L		96
86) 1,2,4-Trichlorobenzene	13.854	180	150152	50.48	ug/L		97
87) Naphthalene	14.177	128	510381	51.15	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	144488	48.91	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042813.D
Acq On : 28 Apr 2020 7:25 pm
Operator : PS
Sample : 0D28059-CAL9
Misc : 1X 5mL 50 PPB VOCRO
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 29 14:27:38 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	155943	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	433790	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	218062	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	153880	52.85	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	494278	52.81	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	579127	50.83	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	167491	45.44	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	168157	58.05	ug/L		99
3) Chloromethane	1.978	50	188663	64.61	ug/L		100
4) Vinyl Chloride	2.100	62	203097	64.23	ug/L		95
5) Bromomethane	2.533	96	110130	55.47	ug/L		99
6) Chloroethane	2.710	64	56347	51.46	ug/L		95
7) Trichlorofluoromethane	2.905	101	188165	46.98	ug/L		98
8) Ethanol	3.612	45	204153	2869.95	ug/L		85
9) 1,1-Dichloroethene	3.563	61	219956	55.35	ug/L		96
10) Carbon Disulfide	3.563	76	325731	62.93	ug/L		99
11) Freon 113	3.642	101	132348	52.39	ug/L		93
12) Iodomethane	3.728	142	70400	51.40	ug/L		93
13) Acrolein	4.008	56	40730	68.87	ug/L		94
14) Methylene Chloride	4.295	84	166231	58.73	ug/L		95
15) Acetone	4.374	43	147679	100.97	ug/L		98
16) t-1,2-Dichloroethene	4.484	61	216769	58.83	ug/L		97
17) n-Hexane	4.581	86	21842	66.61	ug/L	#	25
18) Methyl-tert-butyl-ether	4.636	73	389222	63.22	ug/L		99
19) tert-Butanol (TBA)	4.801	59	1397478	3318.62	ug/L	#	84
20) Diisopropyl ether (DIPE)	5.087	45	85733	12.15	ug/L		95
21) 1,1-Dichloroethane	5.191	63	283431	58.18	ug/L		99
22) Acrylonitrile	5.264	53	93340	62.60	ug/L		97
23) Vinyl Acetate	5.502	43	304318	66.41	ug/L		96
24) Ethyl-tert-butyl ether...	5.490	59	70095	12.94	ug/L		95
25) c-1,2-Dichloroethene	5.794	61	221030	62.83	ug/L		98
26) 2,2-Dichloropropane	5.910	77	127143	61.30	ug/L		72
27) Bromochloromethane	6.014	49	145300	59.79	ug/L		91
28) Chloroform	6.105	83	267420	55.34	ug/L		98
29) Carbon Tetrachloride	6.233	117	159439	62.00	ug/L		95
30) Tetrahydrofuran	6.276	42	82643	61.59	ug/L		97
31) 1,1,1-Trichloroethane	6.313	97	205435	57.29	ug/L		95
33) 1,1-Dichloropropene	6.453	75	206166	62.41	ug/L		97
34) 2-Butanone (MEK)	6.447	43	254544	119.85	ug/L		98
35) Benzene	6.727	78	657475	60.93	ug/L		98
36) tert-Amyl methyl ether...	6.867	73	61641	11.83	ug/L		80
37) 1,2-Dichloroethane (EDC)	6.953	62	207503	52.51	ug/L		98
38) iso-Butyl Alcohol	7.014	43	390505	1513.34	ug/L		98
40) Trichloroethene (TCE)	7.380	130	165009	50.17	ug/L		96
41) tert-Amyl ethyl ether ...	7.660	59	45170	13.54	ug/L		88
42) Dibromomethane	7.855	93	106537	57.33	ug/L		89
43) 1,2-Dichloropropane	7.965	63	174417	60.81	ug/L		91
44) Bromodichloromethane	8.050	83	188929	60.82	ug/L		97
46) 2-Chloroethyl Vinyl Ether	8.709	63	75399	44.35	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	224852	68.80	ug/L		95
49) Toluene	8.819	91	697362	55.89	ug/L		99

4/29/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042813.D
Acq On : 28 Apr 2020 7:25 pm
Operator : PS
Sample : 0D28059-CAL9
Misc : 1X 5mL 50 PPB VOCRO
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 29 14:27:38 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

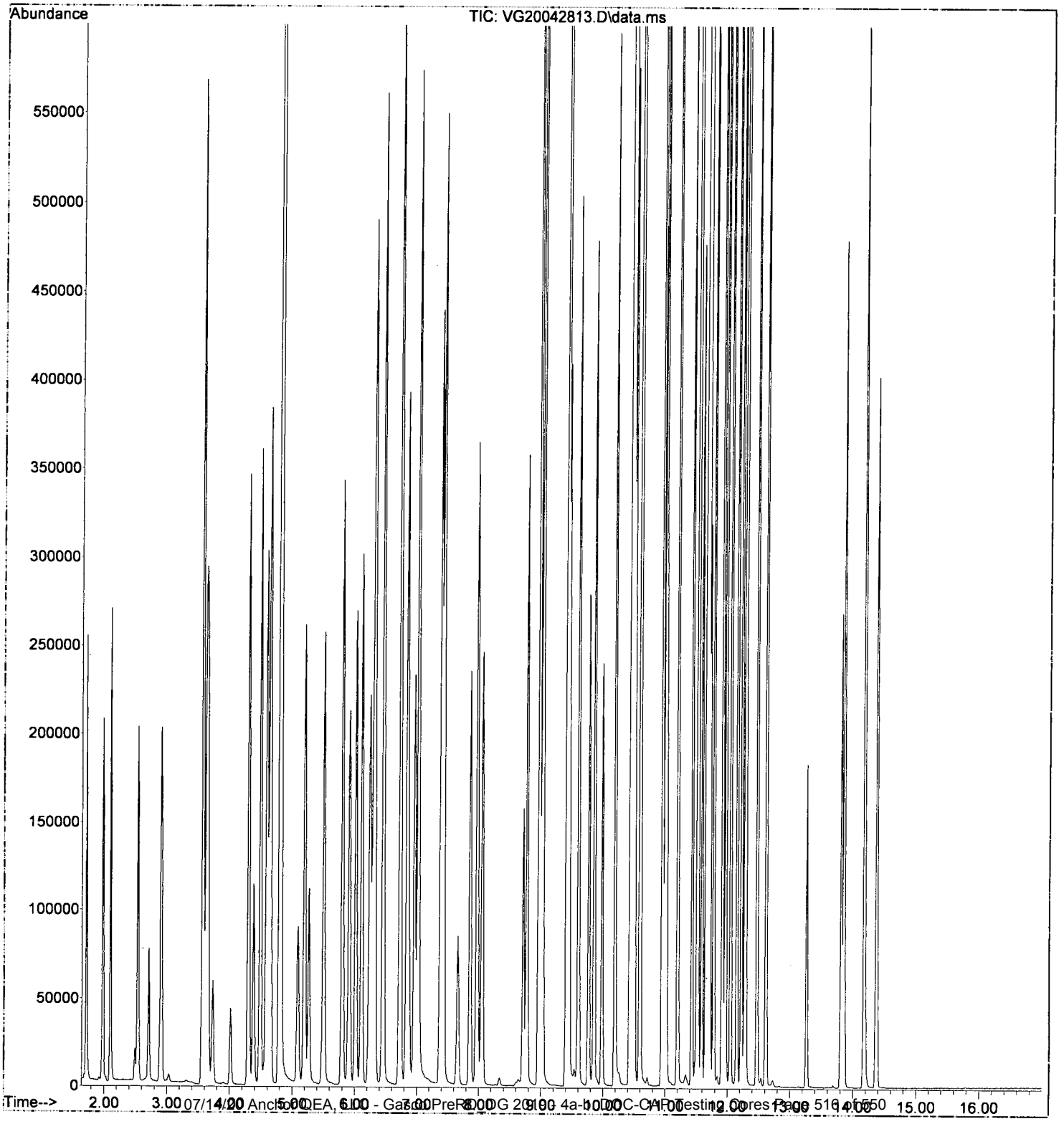
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	148064	45.45	ug/L		92
51) 4-Methyl-2-Pentanone (...	9.410	43	494983	113.55	ug/L		99
52) t-1,3-Dichloropropene	9.446	75	202313	55.72	ug/L		97
53) 1,1,2-Trichloroethane	9.599	97	160242	55.42	ug/L		96
54) Dibromochloromethane	9.769	129	151282	50.65	ug/L		99
55) 1,3-Dichloropropane	9.855	76	264551	59.29	ug/L		99
56) 1,2-Dibromoethane (EDB)	9.983	107	162144	55.64	ug/L		98
57) 2-Hexanone	10.184	43	365112	110.75	ug/L		98
58) Chlorobenzene	10.446	112	430146	50.84	ug/L		99
59) Ethylbenzene	10.464	91	723698	54.99	ug/L		98
60) 1,1,1,2-Tetrachloroethane	10.501	131	135859	55.21	ug/L		96
61) m,p-Xylenes (2)	10.592	91	1089425	107.58	ug/L		99
62) o-Xylene	10.946	91	545910	53.79	ug/L		97
63) Styrene	10.989	104	443946	53.60	ug/L		100
64) Bromoform	11.019	173	109913	48.08	ug/L		97
65) Isopropylbenzene	11.196	105	634097	52.84	ug/L		98
68) Bromobenzene	11.507	156	178576	47.20	ug/L	#	83
69) n-Propylbenzene	11.519	91	753971	56.67	ug/L		95
70) 1,1,2,2-Tetrachloroethane	11.580	83	218708	58.56	ug/L		97
71) 2-Chlorotoluene	11.647	126	158246	53.78	ug/L		96
72) 1,3,5-Trimethylbenzene	11.671	105	514083	59.37	ug/L		95
73) 1,2,3-Trichloropropane	11.690	110	67976	51.53	ug/L	#	80
74) t-1,4-Dichloro-2-butene	11.720	88	24353	53.32	ug/L	#	91
75) 4-Chlorotoluene	11.775	91	475089	57.50	ug/L		96
76) tert-Butylbenzene	11.909	91	266112	56.93	ug/L		90
77) 1,2,4-Trimethylbenzene	11.964	105	509496	59.50	ug/L		97
78) sec-Butylbenzene	12.043	105	590118	61.20	ug/L		96
79) 4-Isopropyltoluene	12.147	119	475738	54.26	ug/L		99
80) 1,3-Dichlorobenzene	12.220	146	304760	53.16	ug/L		98
81) 1,4-Dichlorobenzene	12.287	146	311097	48.54	ug/L		96
82) n-Butylbenzene	12.464	91	421761	61.76	ug/L		95
83) 1,2-Dichlorobenzene	12.610	146	294861	52.28	ug/L		98
84) 1,2-Dibromo-3-Chloropr...	13.263	157	45658	51.91	ug/L		86
85) Hexachlorobutadiene	13.811	223	32798	43.56	ug/L		96
86) 1,2,4-Trichlorobenzene	13.854	180	150152	50.48	ug/L		97
87) Naphthalene	14.177	128	510381	51.15	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	144488	48.91	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042813.D
Acq On : 28 Apr 2020 7:25 pm
Operator : PS
Sample : 0D28059-CAL9
Misc : 1X 5mL 50 PPB VOCRO
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 29 14:27:38 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042814.D
Acq On : 28 Apr 2020 7:52 pm
Operator : PS
Sample : 0D28059-IBL3
Misc : 1X 5mL DI
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 30 09:38:20 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.837	99	131823	50.00 ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	360516	50.00 ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	150819	50.00 ug/L		0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	6.307	111	130265	49.70 ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	429165	50.60 ug/L		0.00
48) Toluene-d8 (S)	8.965	98	501547	50.96 ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	124761	51.56 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.716	85	514	0.19 ug/L		71
3) Chloromethane	1.978	50	351	0.11 ug/L		89
4) Vinyl Chloride	2.094	62	269	0.08 ug/L	#	1
5) Bromomethane	2.533	96	260	0.13 ug/L	#	68
6) Chloroethane	2.722	64	55	Below Cal	#	47
7) Trichlorofluoromethane	2.905	101	409	0.12 ug/L		84
8) Ethanol	3.612	45	325	4.76 ug/L	#	55
9) 1,1-Dichloroethene	3.569	61	468	0.13 ug/L		80
10) Carbon Disulfide	3.569	76	1853	0.40 ug/L		95
11) Freon 113	3.649	101	400	0.17 ug/L		91
12) Iodomethane	0.000		0	N.D.		
13) Acrolein	4.130	56	10	0.02 ug/L	#	1
14) Methylene Chloride	4.295	84	2933	0.98 ug/L		85
15) Acetone	4.386	43	1587	1.17 ug/L		86
16) t-1,2-Dichloroethene	4.478	61	650	0.18 ug/L		78
17) n-Hexane	4.575	86	22	0.07 ug/L	#	80
18) Methyl-tert-butyl-ether	0.000		0	N.D.		
19) tert-Butanol (TBA)	4.813	59	642	1.61 ug/L	#	73
20) Diisopropyl ether (DIPE)	0.000		0	N.D.		
21) 1,1-Dichloroethane	5.185	63	107	0.02 ug/L	#	50
22) Acrylonitrile	5.289	53	10	0.01 ug/L	#	14
23) Vinyl Acetate	5.478	43	11	1.13 ug/L		74
24) Ethyl-tert-butyl ether...	0.000		0	N.D.		
25) c-1,2-Dichloroethene	5.801	61	258	0.07 ug/L		92
26) 2,2-Dichloropropane	5.904	77	10	0.01 ug/L	#	44
27) Bromochloromethane	6.026	49	122	0.05 ug/L	#	32
28) Chloroform	6.112	83	147	0.03 ug/L	#	49
29) Carbon Tetrachloride	6.246	117	30	0.01 ug/L	#	13
30) Tetrahydrofuran	6.282	42	10	0.01 ug/L	#	30
31) 1,1,1-Trichloroethane	6.313	97	61	0.02 ug/L	#	25
33) 1,1-Dichloropropene	6.459	75	345	0.11 ug/L	#	39
34) 2-Butanone (MEK)	6.386	43	20	0.01 ug/L		52
35) Benzene	6.733	78	537	0.05 ug/L		83
36) tert-Amyl methyl ether...	6.831	73	222	0.04 ug/L	#	1
37) 1,2-Dichloroethane (EDC)	6.971	62	122	0.03 ug/L	#	49
38) iso-Butyl Alcohol	7.038	43	11	0.04 ug/L	#	22
40) Trichloroethene (TCE)	7.380	130	329	0.11 ug/L		68
41) tert-Amyl ethyl ether ...	0.000		0	N.D.		
42) Dibromomethane	7.861	93	106	0.06 ug/L	#	18
43) 1,2-Dichloropropane	7.983	63	10	0.00 ug/L	#	13
44) Bromodichloromethane	8.056	83	10	0.00 ug/L	#	26
46) 2-Chloroethyl Vinyl Ether	8.599	63	10	0.76 ug/L	#	1
47) c-1,3-Dichloropropene	8.782	75	57	0.60 ug/L		57
49) Toluene	9.020	91	1	0.01 ug/L		89

NK 4/30/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042814.D
Acq On : 28 Apr 2020 7:52 pm
Operator : PS
Sample : 0D28059-IBL3
Misc : 1X 5mL DI
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 30 09:38:20 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

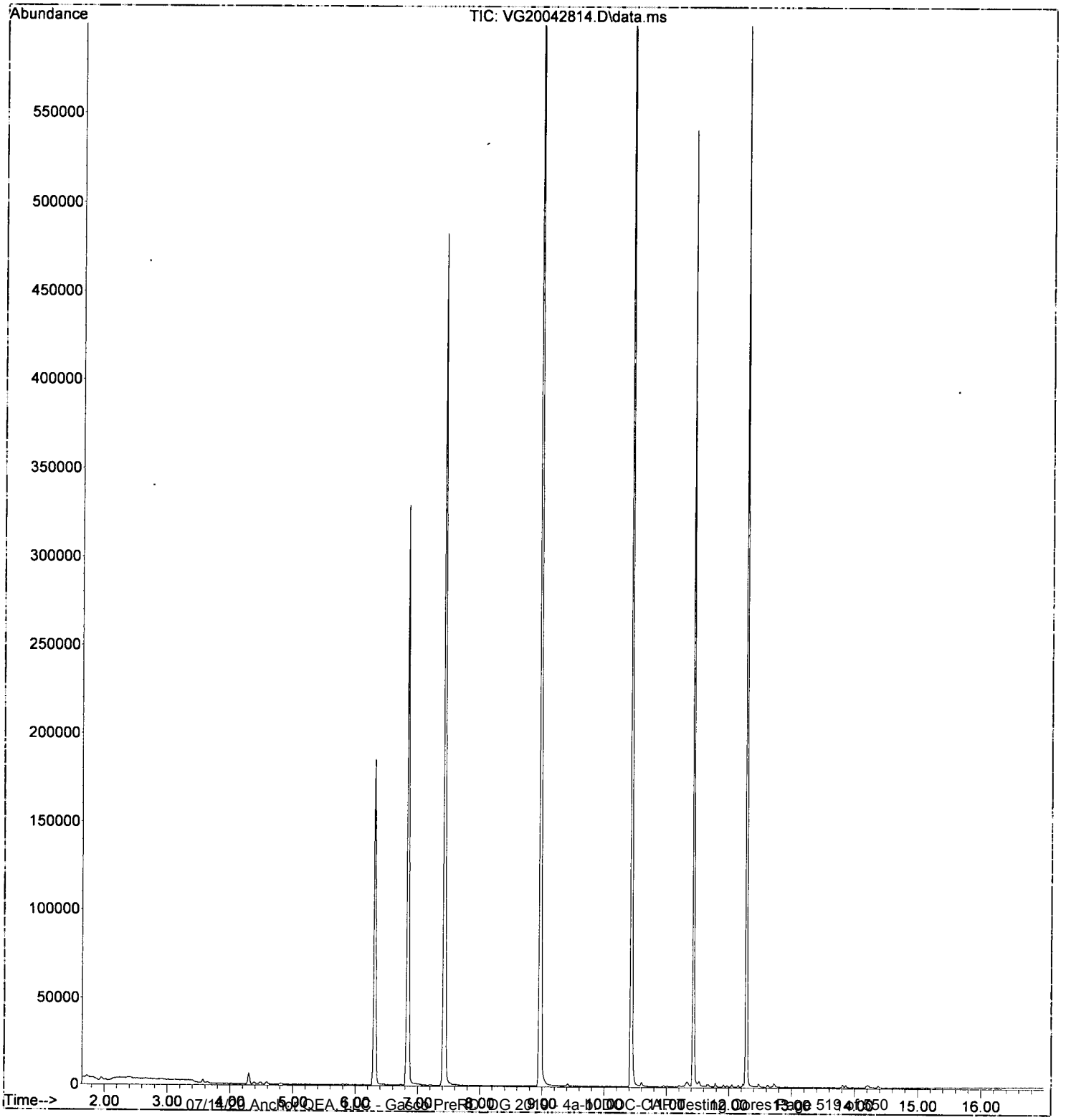
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) Tetrachloroethene (PCE)	9.416	166	477	0.20 ug/L	88
51) 4-Methyl-2-Pentanone (...	9.434	43	30	0.01 ug/L #	43
52) t-1,3-Dichloropropene	9.477	75	100	0.38 ug/L #	45
53) 1,1,2-Trichloroethane	9.587	97	11	0.00 ug/L #	12
54) Dibromochloromethane	0.000		0	N.D.	
55) 1,3-Dichloropropane	9.867	76	52	0.01 ug/L #	65
56) 1,2-Dibromoethane (EDB)	10.019	107	10	0.00 ug/L	96
57) 2-Hexanone	10.221	43	10	0.00 ug/L #	32
58) Chlorobenzene	10.446	112	1010	0.14 ug/L #	16
59) Ethylbenzene	10.477	91	1069	0.09 ug/L	89
60) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
61) m,p-Xylenes (2)	10.599	91	1565	0.32 ug/L	97
62) o-Xylene	10.952	91	426	0.14 ug/L	80
63) Styrene	11.007	104	285	0.25 ug/L	79
64) Bromoform	0.000		0	N.D.	
65) Isopropylbenzene	11.202	105	644	0.25 ug/L	84
68) Bromobenzene	11.513	156	369	0.15 ug/L #	74
69) n-Propylbenzene	11.525	91	1753	0.18 ug/L	86
70) 1,1,2,2-Tetrachloroethane	11.592	83	19	0.01 ug/L #	24
71) 2-Chlorotoluene	11.653	126	211	0.10 ug/L	86
72) 1,3,5-Trimethylbenzene	11.671	105	715	0.11 ug/L	74
73) 1,2,3-Trichloropropane	0.000		0	N.D.	
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.	
75) 4-Chlorotoluene	11.781	91	960	0.16 ug/L	97
76) tert-Butylbenzene	11.915	91	442	0.13 ug/L #	62
77) 1,2,4-Trimethylbenzene	11.970	105	598	0.25 ug/L	91
78) sec-Butylbenzene	12.049	105	1128	0.15 ug/L	88
79) 4-Isopropyltoluene	12.147	119	754	0.28 ug/L	97
80) 1,3-Dichlorobenzene	12.226	146	842	0.21 ug/L	95
81) 1,4-Dichlorobenzene	12.287	146	1286	0.29 ug/L #	71
82) n-Butylbenzene	12.476	91	1288	0.24 ug/L	92
83) 1,2-Dichlorobenzene	12.623	146	617	0.17 ug/L	83
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	
85) Hexachlorobutadiene	13.811	223	212	0.46 ug/L	89
86) 1,2,4-Trichlorobenzene	13.860	180	650	0.58 ug/L	97
87) Naphthalene	14.189	128	979	1.04 ug/L	95
88) 1,2,3-Trichlorobenzene	14.378	180	472	0.25 ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042814.D
Acq On : 28 Apr 2020 7:52 pm
Operator : PS
Sample : 0D28059-IBL3
Misc : 1X 5mL DI
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 30 09:38:20 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042815.D
Acq On : 28 Apr 2020 8:19 pm
Operator : PS
Sample : 0D28059CALA
Misc : 1X 5mL 100 PPB VOCRO
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 14:27:41 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.831	99	161668	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.428	117	457980	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	233282	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.301	111	160585	53.20	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	510262	52.59	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	605813	50.36	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	176212	44.69	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	315312	104.99	ug/L		98
3) Chloromethane	1.978	50	352785	116.54	ug/L		99
4) Vinyl Chloride	2.100	62	384111	117.18	ug/L		95
5) Bromomethane	2.533	96	201722	98.00	ug/L		98
6) Chloroethane	2.704	64	97391	90.93	ug/L		96
7) Trichlorofluoromethane	2.899	101	341980	82.36	ug/L		98
8) Ethanol	3.624	45	203485	2759.27	ug/L		85
9) 1,1-Dichloroethene	3.563	61	431318	104.70	ug/L		98
10) Carbon Disulfide	3.563	76	664668	123.87	ug/L		99
11) Freon 113	3.636	101	253439	96.78	ug/L		93
12) Iodomethane	3.722	142	174901	102.30	ug/L		92
13) Acrolein	4.008	56	92724	151.23	ug/L		99
14) Methylene Chloride	4.295	84	321685	109.62	ug/L		96
15) Acetone	4.374	43	308105	203.19	ug/L		97
16) t-1,2-Dichloroethene	4.484	61	433938	113.59	ug/L		98
17) n-Hexane	4.581	86	43493	127.94	ug/L	#	29
18) Methyl-tert-butyl-ether	4.636	73	812679	127.33	ug/L		98
19) tert-Butanol (TBA)	4.801	59	1446115	3312.51	ug/L	#	83
20) Diisopropyl ether (DIPE)	5.087	45	85631	11.70	ug/L		95
21) 1,1-Dichloroethane	5.191	63	559811	110.85	ug/L		99
22) Acrylonitrile	5.258	53	199568	129.10	ug/L		97
23) Vinyl Acetate	5.502	43	716527	135.80	ug/L		96
24) Ethyl-tert-butyl ether...	5.490	59	72497	12.91	ug/L		97
25) c-1,2-Dichloroethene	5.795	61	444480	121.87	ug/L		98
26) 2,2-Dichloropropane	5.904	77	256825	119.45	ug/L		74
27) Bromochloromethane	6.008	49	287820	114.25	ug/L		90
28) Chloroform	6.106	83	532744	106.33	ug/L		97
29) Carbon Tetrachloride	6.234	117	323005	121.15	ug/L		97
30) Tetrahydrofuran	6.276	42	179471	129.01	ug/L		99
31) 1,1,1-Trichloroethane	6.313	97	407916	109.74	ug/L		96
33) 1,1-Dichloropropene	6.453	75	407326	118.94	ug/L		98
34) 2-Butanone (MEK)	6.447	43	545218	247.63	ug/L		99
35) Benzene	6.721	78	1302053	116.40	ug/L		99
36) tert-Amyl methyl ether...	6.868	73	62759	11.62	ug/L		80
37) 1,2-Dichloroethane (EDC)	6.953	62	415815	101.50	ug/L		99
38) iso-Butyl Alcohol	7.014	43	851953	3184.70	ug/L		99
40) Trichloroethene (TCE)	7.380	130	321823	94.39	ug/L		97
41) tert-Amyl ethyl ether ...	7.654	59	46262	13.38	ug/L		86
42) Dibromomethane	7.849	93	217366	112.83	ug/L		88
43) 1,2-Dichloropropane	7.965	63	350668	117.94	ug/L		91
44) Bromodichloromethane	8.044	83	393467	122.17	ug/L		97
46) 2-Chloroethyl Vinyl Ether	8.709	63	176791	98.50	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	477036	138.25	ug/L		94
49) Toluene	9.020	92	1349453	101.67	ug/L		99

4/30/2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042815.D
Acq On : 28 Apr 2020 8:19 pm
Operator : PS
Sample : 0D28059CALA
Misc : 1X 5mL 100 PPB VOCRO
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 14:27:41 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	298184	86.70	ug/L		96
51) 4-Methyl-2-Pentanone (...	9.410	43	1051104	228.38	ug/L		97
52) t-1,3-Dichloropropene	9.446	75	438237	107.38	ug/L		98
53) 1,1,2-Trichloroethane	9.599	97	325366	106.59	ug/L		95
54) Dibromochloromethane	9.763	129	324009	97.51	ug/L		98
55) 1,3-Dichloropropane	9.855	76	543367	115.34	ug/L		99
56) 1,2-Dibromoethane (EDB)	9.977	107	338306	109.96	ug/L		98
57) 2-Hexanone	10.184	43	791292	227.35	ug/L		99
58) Chlorobenzene	10.446	112	866291	96.98	ug/L		100
59) Ethylbenzene	10.464	91	1452579	104.54	ug/L		99
60) 1,1,1,2-Tetrachloroethane	10.501	131	285345	109.83	ug/L		96
61) m,p-Xylenes (2)	10.592	91	2216310	202.97	ug/L		100
62) o-Xylene	10.946	91	1120662	101.46	ug/L		97
63) Styrene	10.989	104	925198	102.80	ug/L		98
64) Bromoform	11.019	173	245900	94.46	ug/L		98
65) Isopropylbenzene	11.196	105	1303456	99.81	ug/L		98
68) Bromobenzene	11.507	156	369547	91.31	ug/L		86
69) n-Propylbenzene	11.519	91	1547444	108.71	ug/L		96
70) 1,1,2,2-Tetrachloroethane	11.580	83	473849	118.60	ug/L		96
71) 2-Chlorotoluene	11.647	126	327467	104.03	ug/L		97
72) 1,3,5-Trimethylbenzene	11.665	105	1065161	114.99	ug/L		93
73) 1,2,3-Trichloropropane	11.690	110	141478	100.26	ug/L	#	84
74) t-1,4-Dichloro-2-butene	11.714	88	55724	107.26	ug/L	#	85
75) 4-Chlorotoluene	11.775	91	977949	110.54	ug/L		97
76) tert-Butylbenzene	11.909	91	553693	110.72	ug/L		91
77) 1,2,4-Trimethylbenzene	11.964	105	1047842	114.39	ug/L		98
78) sec-Butylbenzene	12.043	105	1227821	119.02	ug/L		96
79) 4-Isopropyltoluene	12.147	119	998151	103.02	ug/L		99
80) 1,3-Dichlorobenzene	12.220	146	624132	101.77	ug/L		98
81) 1,4-Dichlorobenzene	12.287	146	635898	92.74	ug/L		97
82) n-Butylbenzene	12.464	91	868364	118.85	ug/L		96
83) 1,2-Dichlorobenzene	12.610	146	599072	99.29	ug/L		99
84) 1,2-Dibromo-3-Chloropr...	13.263	157	100386	106.69	ug/L		91
85) Hexachlorobutadiene	13.811	223	65865	81.77	ug/L		97
86) 1,2,4-Trichlorobenzene	13.854	180	314733	98.90	ug/L		96
87) Naphthalene	14.177	128	1104031	100.36	ug/L		100
88) 1,2,3-Trichlorobenzene	14.372	180	301675	95.45	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042815.D
Acq On : 28 Apr 2020 8:19 pm
Operator : PS
Sample : 0D28059CALA
Misc : 1X 5mL 100 PPB VOCRO
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 14:27:41 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.831	99	161668	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.428	117	457980	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	233282	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.301	111	160585	53.20	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	510262	52.59	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	605813	50.36	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	176212	44.69	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	315312	104.99	ug/L		98
3) Chloromethane	1.978	50	352785	116.54	ug/L		99
4) Vinyl Chloride	2.100	62	384111	117.18	ug/L		95
5) Bromomethane	2.533	96	201722	98.00	ug/L		98
6) Chloroethane	2.704	64	97391	90.93	ug/L		96
7) Trichlorofluoromethane	2.899	101	341980	82.36	ug/L		98
8) Ethanol	3.624	45	203485	2759.27	ug/L		85
9) 1,1-Dichloroethene	3.563	61	431318	104.70	ug/L		98
10) Carbon Disulfide	3.563	76	664668	123.87	ug/L		99
11) Freon 113	3.636	101	253439	96.78	ug/L		93
12) Iodomethane	3.722	142	174901	102.30	ug/L		92
13) Acrolein	4.008	56	92724	151.23	ug/L		99
14) Methylene Chloride	4.295	84	321685	109.62	ug/L		96
15) Acetone	4.374	43	308105	203.19	ug/L		97
16) t-1,2-Dichloroethene	4.484	61	433938	113.59	ug/L		98
17) n-Hexane	4.581	86	43493	127.94	ug/L	#	29
18) Methyl-tert-butyl-ether	4.636	73	812679	127.33	ug/L		98
19) tert-Butanol (TBA)	4.801	59	1446115	3312.51	ug/L	#	83
20) Diisopropyl ether (DIPE)	5.087	45	85631	11.70	ug/L		95
21) 1,1-Dichloroethane	5.191	63	559811	110.85	ug/L		99
22) Acrylonitrile	5.258	53	199568	129.10	ug/L		97
23) Vinyl Acetate	5.502	43	716527	135.30	ug/L		96
24) Ethyl-tert-butyl ether...	5.490	59	72497	12.91	ug/L		97
25) c-1,2-Dichloroethene	5.795	61	444480	121.87	ug/L		98
26) 2,2-Dichloropropane	5.904	77	256825	119.45	ug/L		74
27) Bromochloromethane	6.008	49	287820	114.25	ug/L		90
28) Chloroform	6.106	83	532744	106.33	ug/L		97
29) Carbon Tetrachloride	6.234	117	323005	121.15	ug/L		97
30) Tetrahydrofuran	6.276	42	179471	129.01	ug/L		99
31) 1,1,1-Trichloroethane	6.313	97	407916	109.74	ug/L		96
33) 1,1-Dichloropropene	6.453	75	407326	118.94	ug/L		98
34) 2-Butanone (MEK)	6.447	43	545218	247.63	ug/L		99
35) Benzene	6.721	78	1302053	116.40	ug/L		99
36) tert-Amyl methyl ether...	6.868	73	62759	11.62	ug/L		80
37) 1,2-Dichloroethane (EDC)	6.953	62	415815	101.50	ug/L		99
38) iso-Butyl Alcohol	7.014	43	851953	3184.70	ug/L		99
40) Trichloroethene (TCE)	7.380	130	321823	94.39	ug/L		97
41) tert-Amyl ethyl ether ...	7.654	59	46262	13.38	ug/L		86
42) Dibromomethane	7.849	93	217366	112.83	ug/L		88
43) 1,2-Dichloropropane	7.965	63	350668	117.94	ug/L		91
44) Bromodichloromethane	8.044	83	393467	122.17	ug/L		97
46) 2-Chloroethyl Vinyl Ether	8.709	63	176791	98.50	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	477036	138.25	ug/L		94
49) Toluene	9.020	91	1349153	101.65	ug/L		99

4/29/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042815.D
Acq On : 28 Apr 2020 8:19 pm
Operator : PS
Sample : 0D28059CALA
Misc : 1X 5mL 100 PPB VOCRO
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 14:27:41 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

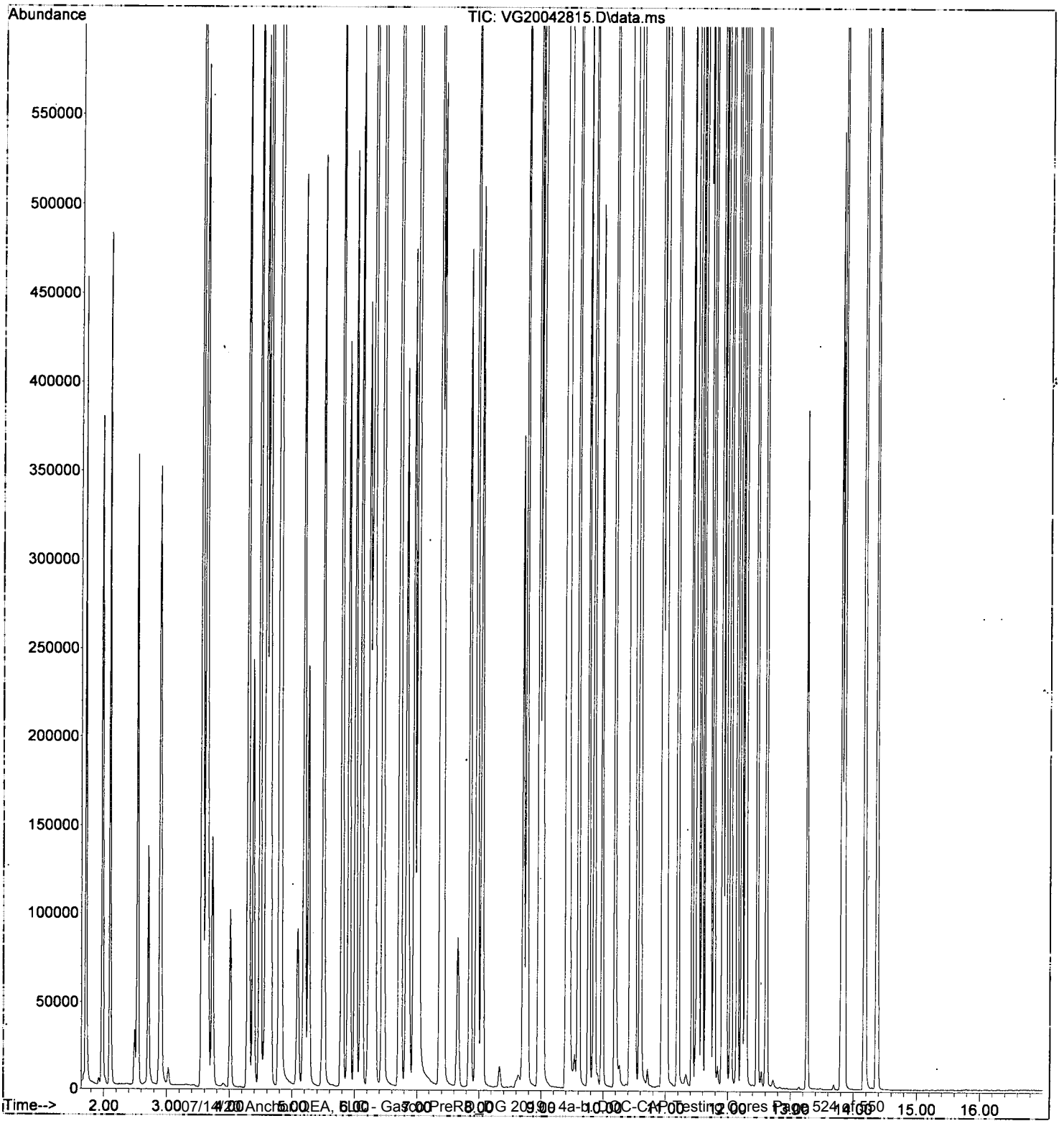
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	298184	86.70	ug/L		96
51) 4-Methyl-2-Pentanone (...	9.410	43	1051104	228.38	ug/L		97
52) t-1,3-Dichloropropene	9.446	75	438237	107.38	ug/L		98
53) 1,1,2-Trichloroethane	9.599	97	325366	106.59	ug/L		95
54) Dibromochloromethane	9.763	129	324009	97.51	ug/L		98
55) 1,3-Dichloropropane	9.855	76	543367	115.34	ug/L		99
56) 1,2-Dibromoethane (EDB)	9.977	107	338306	109.96	ug/L		98
57) 2-Hexanone	10.184	43	791292	227.35	ug/L		99
58) Chlorobenzene	10.446	112	866291	96.98	ug/L		100
59) Ethylbenzene	10.464	91	1452579	104.54	ug/L		99
60) 1,1,1,2-Tetrachloroethane	10.501	131	285345	109.83	ug/L		96
61) m,p-Xylenes (2)	10.592	91	2216310	202.97	ug/L		100
62) o-Xylene	10.946	91	1120662	101.46	ug/L		97
63) Styrene	10.989	104	925198	102.80	ug/L		98
64) Bromoform	11.019	173	245900	94.46	ug/L		98
65) Isopropylbenzene	11.196	105	1303456	99.81	ug/L		98
68) Bromobenzene	11.507	156	369547	91.81	ug/L		86
69) n-Propylbenzene	11.519	91	1547444	108.71	ug/L		96
70) 1,1,2,2-Tetrachloroethane	11.580	83	473849	118.60	ug/L		96
71) 2-Chlorotoluene	11.647	126	327467	104.03	ug/L		97
72) 1,3,5-Trimethylbenzene	11.665	105	1065161	114.99	ug/L		93
73) 1,2,3-Trichloropropane	11.690	110	141478	100.26	ug/L	#	84
74) t-1,4-Dichloro-2-butene	11.714	88	55724	107.26	ug/L	#	85
75) 4-Chlorotoluene	11.775	91	977949	110.64	ug/L		97
76) tert-Butylbenzene	11.909	91	553693	110.72	ug/L		91
77) 1,2,4-Trimethylbenzene	11.964	105	1047842	114.39	ug/L		98
78) sec-Butylbenzene	12.043	105	1227821	119.02	ug/L		96
79) 4-Isopropyltoluene	12.147	119	998151	103.02	ug/L		99
80) 1,3-Dichlorobenzene	12.220	146	624132	101.77	ug/L		98
81) 1,4-Dichlorobenzene	12.287	146	635898	92.74	ug/L		97
82) n-Butylbenzene	12.464	91	868364	118.85	ug/L		96
83) 1,2-Dichlorobenzene	12.610	146	599072	99.29	ug/L		99
84) 1,2-Dibromo-3-Chloropr...	13.263	157	100386	106.69	ug/L		91
85) Hexachlorobutadiene	13.811	223	65865	81.77	ug/L		97
86) 1,2,4-Trichlorobenzene	13.854	180	314733	98.90	ug/L		96
87) Naphthalene	14.177	128	1104031	100.36	ug/L		100
88) 1,2,3-Trichlorobenzene	14.372	180	301675	95.45	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042815.D
Acq On : 28 Apr 2020 8:19 pm
Operator : PS
Sample : 0D28059CALA
Misc : 1X 5mL 100 PPB VOCRO
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 14:27:41 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042816.D
Acq On : 28 Apr 2020 8:47 pm
Operator : PS
Sample : 0D28059-IBL4
Misc : 1X 5mL DI
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 30 09:38:24 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.837	99	149264	50.00 ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	412020	50.00 ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	177396	50.00 ug/L		0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	6.307	111	146258	49.28 ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	485846	50.59 ug/L		0.00
48) Toluene-d8 (S)	8.965	98	571012	50.76 ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	146610	51.52 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.716	85	1040	0.34 ug/L		95
3) Chloromethane	1.978	50	677	0.18 ug/L		88
4) Vinyl Chloride	2.100	62	598	0.16 ug/L		56
5) Bromomethane	2.533	96	325	0.15 ug/L		89
6) Chloroethane	2.704	64	185	Below Cal	#	29
7) Trichlorofluoromethane	2.911	101	737	0.20 ug/L		87
8) Ethanol	3.618	45	495	6.40 ug/L		65
9) 1,1-Dichloroethene	3.569	61	817	0.20 ug/L		89
10) Carbon Disulfide	3.569	76	3936	0.76 ug/L		96
11) Freon 113	3.636	101	714	0.27 ug/L		78
12) Iodomethane	3.734	142	109	4.90 ug/L	#	42
13) Acrolein	4.045	56	10	0.01 ug/L	#	1
14) Methylene Chloride	4.295	84	3962	1.17 ug/L		86
15) Acetone	4.380	43	1729	1.13 ug/L		99
16) t-1,2-Dichloroethene	4.490	61	1336	0.33 ug/L		93
17) n-Hexane	4.588	86	80	0.21 ug/L	#	54
18) Methyl-tert-butyl-ether	4.630	73	133	0.02 ug/L		57
19) tert-Butanol (TBA)	4.807	59	499	1.10 ug/L	#	43
20) Diisopropyl ether (DIPE)	5.069	45	12	0.00 ug/L	#	33
21) 1,1-Dichloroethane	5.191	63	311	0.06 ug/L		77
22) Acrylonitrile	5.307	53	35	0.02 ug/L	#	14
23) Vinyl Acetate	5.520	43	10	1.13 ug/L	#	1
24) Ethyl-tert-butyl ether...	0.000		0	N.D.		
25) c-1,2-Dichloroethene	5.807	61	564	0.14 ug/L		96
26) 2,2-Dichloropropane	5.904	77	21	0.01 ug/L	#	1
27) Bromochloromethane	6.014	49	244	0.08 ug/L		78
28) Chloroform	6.106	83	287	0.06 ug/L		81
29) Carbon Tetrachloride	6.246	117	93	0.04 ug/L	#	13
30) Tetrahydrofuran	6.288	42	110	0.08 ug/L	#	61
31) 1,1,1-Trichloroethane	6.319	97	69	0.02 ug/L	#	58
33) 1,1-Dichloropropene	6.459	75	789	0.23 ug/L		91
34) 2-Butanone (MEK)	6.453	43	10	0.00 ug/L		52
35) Benzene	6.740	78	1133	0.10 ug/L		94
36) tert-Amyl methyl ether...	6.825	73	237	0.04 ug/L	#	1
37) 1,2-Dichloroethane (EDC)	6.959	62	281	0.07 ug/L	#	48
38) iso-Butyl Alcohol	7.026	43	117	0.41 ug/L	#	52
40) Trichloroethene (TCE)	7.386	130	712	0.22 ug/L		89
41) tert-Amyl ethyl ether ...	0.000		0	N.D.		
42) Dibromomethane	7.861	93	219	0.11 ug/L	#	61
43) 1,2-Dichloropropane	7.965	63	28	0.01 ug/L	#	40
44) Bromodichloromethane	8.062	83	90	0.03 ug/L	#	63
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.		
47) c-1,3-Dichloropropene	8.788	75	263	0.65 ug/L		87
49) Toluene	9.020	91	2121	0.16 ug/L		99

NR 4/30/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042816.D
Acq On : 28 Apr 2020 8:47 pm
Operator : PS
Sample : 0D28059-IBL4
Misc : 1X 5mL DI
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 30 09:38:24 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

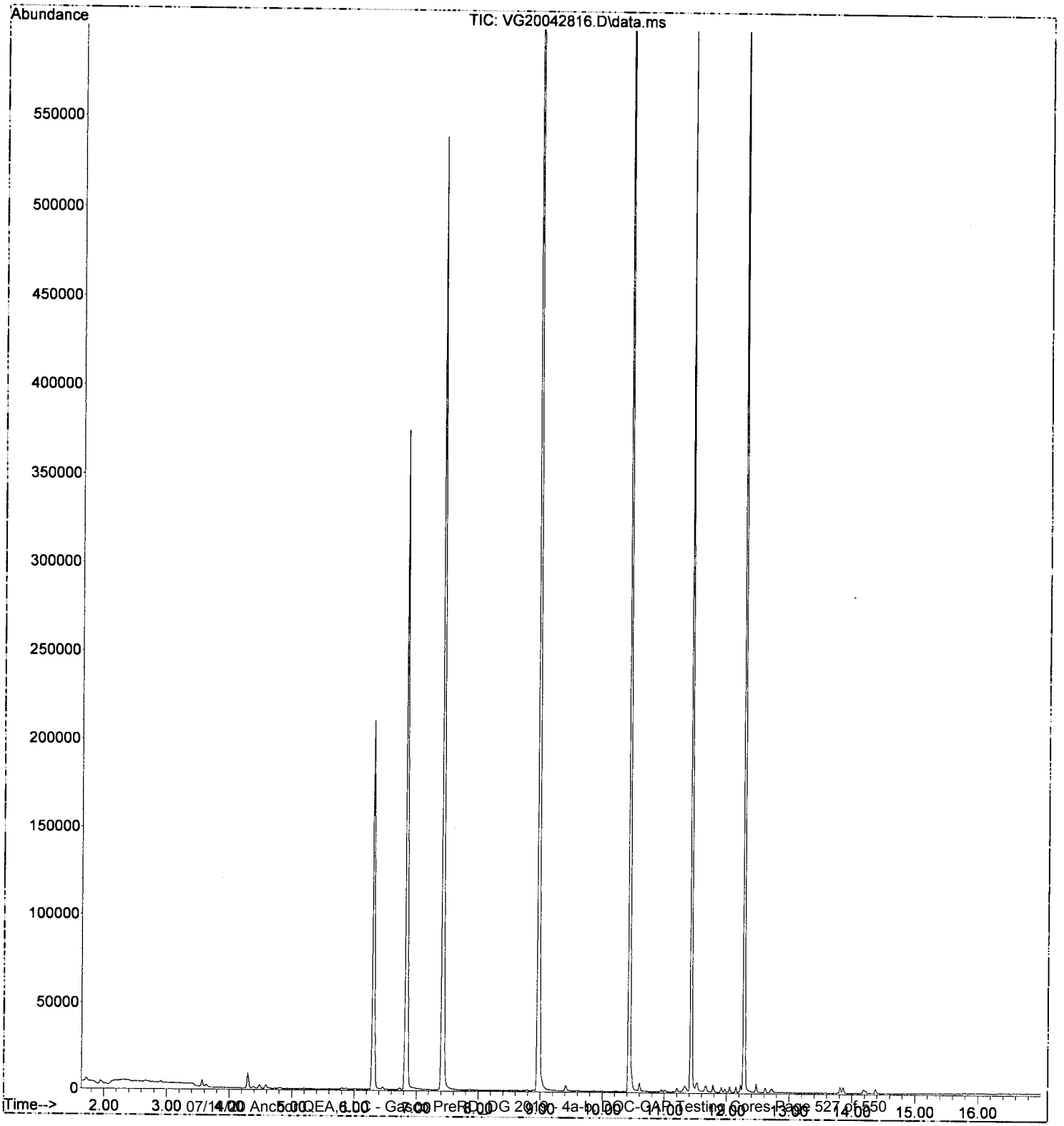
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) Tetrachloroethene (PCE)	9.404	166	1002	0.37 ug/L	99
51) 4-Methyl-2-Pentanone (...	9.422	43	294	0.07 ug/L #	43
52) t-1,3-Dichloropropene	9.465	75	314	0.44 ug/L	67
53) 1,1,2-Trichloroethane	9.611	97	139	0.05 ug/L #	12
54) Dibromochloromethane	9.763	129	10	0.16 ug/L #	17
55) 1,3-Dichloropropane	9.867	76	188	0.04 ug/L	86
56) 1,2-Dibromoethane (EDB)	10.007	107	98	0.04 ug/L	97
57) 2-Hexanone	10.214	43	137	0.04 ug/L #	32
58) Chlorobenzene	10.446	112	1960	0.24 ug/L #	57
59) Ethylbenzene	10.471	91	2281	0.18 ug/L	90
60) 1,1,1,2-Tetrachloroethane	10.501	131	48	0.02 ug/L #	1
61) m,p-Xylenes (2)	10.599	91	2991	0.44 ug/L	94
62) o-Xylene	10.952	91	1007	0.19 ug/L	89
63) Styrene	11.007	104	791	0.31 ug/L	90
64) Bromoform	0.000		0	N.D.	
65) Isopropylbenzene	11.202	105	1446	0.31 ug/L	96
68) Bromobenzene	11.507	156	665	0.23 ug/L	87
69) n-Propylbenzene	11.525	91	3449	0.30 ug/L	92
70) 1,1,2,2-Tetrachloroethane	11.586	83	146	0.04 ug/L	80
71) 2-Chlorotoluene	11.647	126	502	0.21 ug/L	88
72) 1,3,5-Trimethylbenzene	11.672	105	1509	0.20 ug/L	85
73) 1,2,3-Trichloropropane	11.696	110	37	0.03 ug/L	93
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.	
75) 4-Chlorotoluene	11.775	91	2191	0.31 ug/L	83
76) tert-Butylbenzene	11.909	91	887	0.23 ug/L #	74
77) 1,2,4-Trimethylbenzene	11.970	105	1342	0.34 ug/L	82
78) sec-Butylbenzene	12.049	105	2217	0.25 ug/L	93
79) 4-Isopropyltoluene	12.147	119	1761	0.40 ug/L	98
80) 1,3-Dichlorobenzene	12.220	146	1807	0.39 ug/L	93
81) 1,4-Dichlorobenzene	12.287	146	2354	0.45 ug/L #	74
82) n-Butylbenzene	12.470	91	3006	0.48 ug/L	88
83) 1,2-Dichlorobenzene	12.616	146	1245	0.28 ug/L	86
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	
85) Hexachlorobutadiene	13.811	223	500	0.93 ug/L	95
86) 1,2,4-Trichlorobenzene	13.854	180	1424	0.86 ug/L	88
87) Naphthalene	14.183	128	2157	1.16 ug/L	97
88) 1,2,3-Trichlorobenzene	14.378	180	1097	0.50 ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042816.D
Acq On : 28 Apr 2020 8:47 pm
Operator : PS
Sample : 0D28059-IBL4
Misc : 1X 5mL DI
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 30 09:38:24 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042817.D
Acq On : 28 Apr 2020 9:14 pm
Operator : PS
Sample : 0D28059-CALB
Misc : 1X 5mL 200 PPB VOCRO
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 29 15:14:22 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	174876	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	511754	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	246154	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.306	111	179176	54.88	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	566135	53.94	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	661083	49.18	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.427	174	191987	46.14	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	721756	222.18	ug/L		98
3) Chloromethane	1.978	50	787402	240.46	ug/L		99
4) Vinyl Chloride	2.094	62	883409	249.14	ug/L		95
5) Bromomethane	2.533	96	441017	198.07	ug/L		98
6) Chloroethane	2.704	64	193450	198.53	ug/L		97
7) Trichlorofluoromethane	2.886	101	760605	169.35	ug/L		99
8) Ethanol	0.000		0	N.D.	d		
9) 1,1-Dichloroethene	3.557	61	1013280	227.40	ug/L		98
10) Carbon Disulfide	3.557	76	1647933	283.92	ug/L		99
11) Freon 113	3.630	101	619841	218.81	ug/L		94
12) Iodomethane	3.722	142	484444	203.03	ug/L		93
13) Acrolein	4.008	56	200485	302.29	ug/L		97
14) Methylene Chloride	4.295	84	711544	224.17	ug/L		97
15) Acetone	4.380	43	670089	408.53	ug/L		96
16) t-1,2-Dichloroethene	4.478	61	1007829	243.89	ug/L		98
17) n-Hexane	4.581	86	105147	285.93	ug/L	#	37
18) Methyl-tert-butyl-ether	4.636	73	1858846	269.24	ug/L		99
19) tert-Butanol (TBA)	0.000		0	N.D.	d		
20) Diisopropyl ether (DIPE)	0.000		0	N.D.	d		
21) 1,1-Dichloroethane	5.191	63	1278947	234.12	ug/L		99
22) Acrylonitrile	5.258	53	430086	257.20	ug/L		97
23) Vinyl Acetate	5.502	43	1558199	236.98	ug/L		96
24) Ethyl-tert-butyl ether...	0.000		0	N.D.	d		
25) c-1,2-Dichloroethene	5.794	61	1012684	256.69	ug/L		99
26) 2,2-Dichloropropane	5.904	77	622935	267.84	ug/L		81
27) Bromochloromethane	6.008	49	622772	228.54	ug/L		92
28) Chloroform	6.105	83	1216725	224.51	ug/L		96
29) Carbon Tetrachloride	6.233	117	809357	280.65	ug/L		96
30) Tetrahydrofuran	6.276	42	398049	264.51	ug/L		99
31) 1,1,1-Trichloroethane	6.313	97	987730	245.65	ug/L		96
33) 1,1-Dichloropropene	6.453	75	975429	263.30	ug/L		99
34) 2-Butanone (MEK)	6.447	43	1181311	496.00	ug/L		98
35) Benzene	6.721	78	3008884	248.67	ug/L		98
36) tert-Amyl methyl ether...	0.000		0	N.D.	d		
37) 1,2-Dichloroethane (EDC)	6.953	62	923686	208.44	ug/L		99
38) iso-Butyl Alcohol	7.020	43	1783101	6162.02	ug/L		97
40) Trichloroethene (TCE)	7.379	130	762043	206.62	ug/L		98
41) tert-Amyl ethyl ether ...	0.000		0	N.D.	d		
42) Dibromomethane	7.849	93	492139	236.16	ug/L		89
43) 1,2-Dichloropropane	7.965	63	803265	249.75	ug/L		90
44) Bromodichloromethane	8.044	83	918596	263.68	ug/L		98
46) 2-Chloroethyl Vinyl Ether	8.708	63	431655	215.22	ug/L	#	1
47) c-1,3-Dichloropropene	8.769	75	1126694	292.21	ug/L		93
49) Toluene	8.919	91	2194408	211.44	ug/L		89

4/30/2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042817.D
Acq On : 28 Apr 2020 9:14 pm
Operator : PS
Sample : 0D28059-CALB
Misc : 1X 5mL 200 PPB VOCRO
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 29 15:14:22 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	743359	193.43	ug/L		97
51) 4-Methyl-2-Pentanone (...	9.410	43	2206651	429.08	ug/L		94
52) t-1,3-Dichloropropene	9.446	75	1034541	204.26	ug/L		99
53) 1,1,2-Trichloroethane	9.599	97	743055	217.85	ug/L		95
54) Dibromochloromethane	9.763	129	775840	190.19	ug/L		99
55) 1,3-Dichloropropane	9.855	76	1220547	231.85	ug/L		99
56) 1,2-Dibromoethane (EDB)	9.977	107	782130	227.50	ug/L		99
57) 2-Hexanone	10.184	43	1645799	423.17	ug/L		98
58) Chlorobenzene	10.446	112	2006540	201.02	ug/L		99
59) Ethylbenzene	10.464	91	3390116	218.34	ug/L		99
60) 1,1,1,2-Tetrachloroethane	10.501	131	678121	233.59	ug/L		95
61) m,p-Xylenes (2)	10.592	91	5118451	402.13	ug/L		99
62) o-Xylene	10.946	91	2610008	199.39	ug/L		98
63) Styrene	10.989	104	2122456	200.58	ug/L		98
64) Bromoform	11.019	173	580388	177.16	ug/L		97
65) Isopropylbenzene	11.196	105	3059960	197.99	ug/L		99
68) Bromobenzene	11.507	156	850318	199.11	ug/L		89
69) n-Propylbenzene	11.519	91	3545698	236.07	ug/L		97
70) 1,1,2,2-Tetrachloroethane	11.580	83	994174	235.82	ug/L		97
71) 2-Chlorotoluene	11.647	126	757592	228.09	ug/L		99
72) 1,3,5-Trimethylbenzene	11.671	105	2427844	248.40	ug/L		95
73) 1,2,3-Trichloropropane	11.690	110	296100	198.86	ug/L		85
74) t-1,4-Dichloro-2-butene	11.714	88	122105	203.82	ug/L	#	84
75) 4-Chlorotoluene	11.775	91	2189587	234.76	ug/L		98
76) tert-Butylbenzene	11.909	91	1274708	241.57	ug/L		93
77) 1,2,4-Trimethylbenzene	11.964	105	2375385	245.75	ug/L		98
78) sec-Butylbenzene	12.043	105	2807398	257.91	ug/L		97
79) 4-Isopropyltoluene	12.147	119	2273833	208.37	ug/L		99
80) 1,3-Dichlorobenzene	12.220	146	1380557	213.34	ug/L		99
81) 1,4-Dichlorobenzene	12.287	146	1398040	193.23	ug/L		98
82) n-Butylbenzene	12.464	91	1938953	251.51	ug/L		96
83) 1,2-Dichlorobenzene	12.610	146	1294660	203.36	ug/L		99
84) 1,2-Dibromo-3-Chloropr...	13.262	157	220807	222.40	ug/L		92
85) Hexachlorobutadiene	13.811	223	152484	179.41	ug/L		96
86) 1,2,4-Trichlorobenzene	13.854	180	708955	211.13	ug/L		96
87) Naphthalene	14.177	128	2456596	201.87	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	678103	203.33	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042817.D
Acq On : 28 Apr 2020 9:14 pm
Operator : PS
Sample : 0D28059-CALB
Misc : 1X 5mL 200 PPB VOCRO
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 29 14:27:44 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	174876	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	511754	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	246154	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.306	111	179176	54.88	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	566135	53.94	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	661083	49.18	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.427	174	191987	46.14	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	721756	222.18	ug/L		98
3) Chloromethane	1.978	50	787402	240.46	ug/L		99
4) Vinyl Chloride	2.094	62	883409	249.14	ug/L		95
5) Bromomethane	2.533	96	441017	198.07	ug/L		98
6) Chloroethane	2.704	64	193450	198.53	ug/L		97
7) Trichlorofluoromethane	2.886	101	760605	169.35	ug/L		99
8) Ethanol	3.642	45	1512	18.95	ug/L		83
9) 1,1-Dichloroethene	3.557	61	1013280	227.40	ug/L		98
10) Carbon Disulfide	3.557	76	1647933	283.92	ug/L		99
11) Freon 113	3.630	101	619841	218.81	ug/L		94
12) Iodomethane	3.722	142	484444	203.03	ug/L		93
13) Acrolein	4.008	56	200485	302.29	ug/L		97
14) Methylene Chloride	4.295	84	711544	224.17	ug/L		97
15) Acetone	4.380	43	670089	408.53	ug/L		96
16) t-1,2-Dichloroethene	4.478	61	1007829	243.89	ug/L		98
17) n-Hexane	4.581	86	105147	285.93	ug/L	#	37
18) Methyl-tert-butyl-ether	4.636	73	1858846	269.24	ug/L		99
19) tert-Butanol (TBA)	4.813	59	913	1.93	ug/L	#	1
20) Diisopropyl ether (DIPE)	5.087	45	80	0.01	ug/L	#	1
21) 1,1-Dichloroethane	5.191	63	1278947	234.12	ug/L		99
22) Acrylonitrile	5.258	53	430086	257.20	ug/L		97
23) Vinyl Acetate	5.502	43	1558199	236.98	ug/L		96
24) Ethyl-tert-butyl ether...	5.502	59	226	0.04	ug/L	#	1
25) c-1,2-Dichloroethene	5.794	61	1012684	256.69	ug/L		99
26) 2,2-Dichloropropane	5.904	77	622935	267.84	ug/L		81
27) Bromochloromethane	6.008	49	622772	228.54	ug/L		92
28) Chloroform	6.105	83	1216725	224.51	ug/L		96
29) Carbon Tetrachloride	6.233	117	809357	280.65	ug/L		96
30) Tetrahydrofuran	6.276	42	398049	264.51	ug/L		99
31) 1,1,1-Trichloroethane	6.313	97	987730	245.65	ug/L		96
33) 1,1-Dichloropropene	6.453	75	975429	263.30	ug/L		99
34) 2-Butanone (MEK)	6.447	43	1181311	496.00	ug/L		98
35) Benzene	6.721	78	3008884	248.67	ug/L		98
36) tert-Amyl methyl ether...	6.831	73	561	0.10	ug/L	#	1
37) 1,2-Dichloroethane (EDC)	6.953	62	923686	208.44	ug/L		99
38) iso-Butyl Alcohol	7.020	43	1783101	6162.02	ug/L		97
40) Trichloroethene (TCE)	7.379	130	762043	206.62	ug/L		98
41) tert-Amyl ethyl ether ...	7.654	59	263	0.07	ug/L	#	21
42) Dibromomethane	7.849	93	492139	236.16	ug/L		89
43) 1,2-Dichloropropane	7.965	63	803265	249.75	ug/L		90
44) Bromodichloromethane	8.044	83	918596	263.68	ug/L		98
46) 2-Chloroethyl Vinyl Ether	8.708	63	431655	215.22	ug/L	#	1
47) c-1,3-Dichloropropene	8.769	75	1126694	292.21	ug/L		93
49) Toluene	8.919	91	3191408	211.03	ug/L		99

4/29/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042817.D
Acq On : 28 Apr 2020 9:14 pm
Operator : PS
Sample : 0D28059-CALB
Misc : 1X 5mL 200 PPB VOCRO
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 29 14:27:44 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration

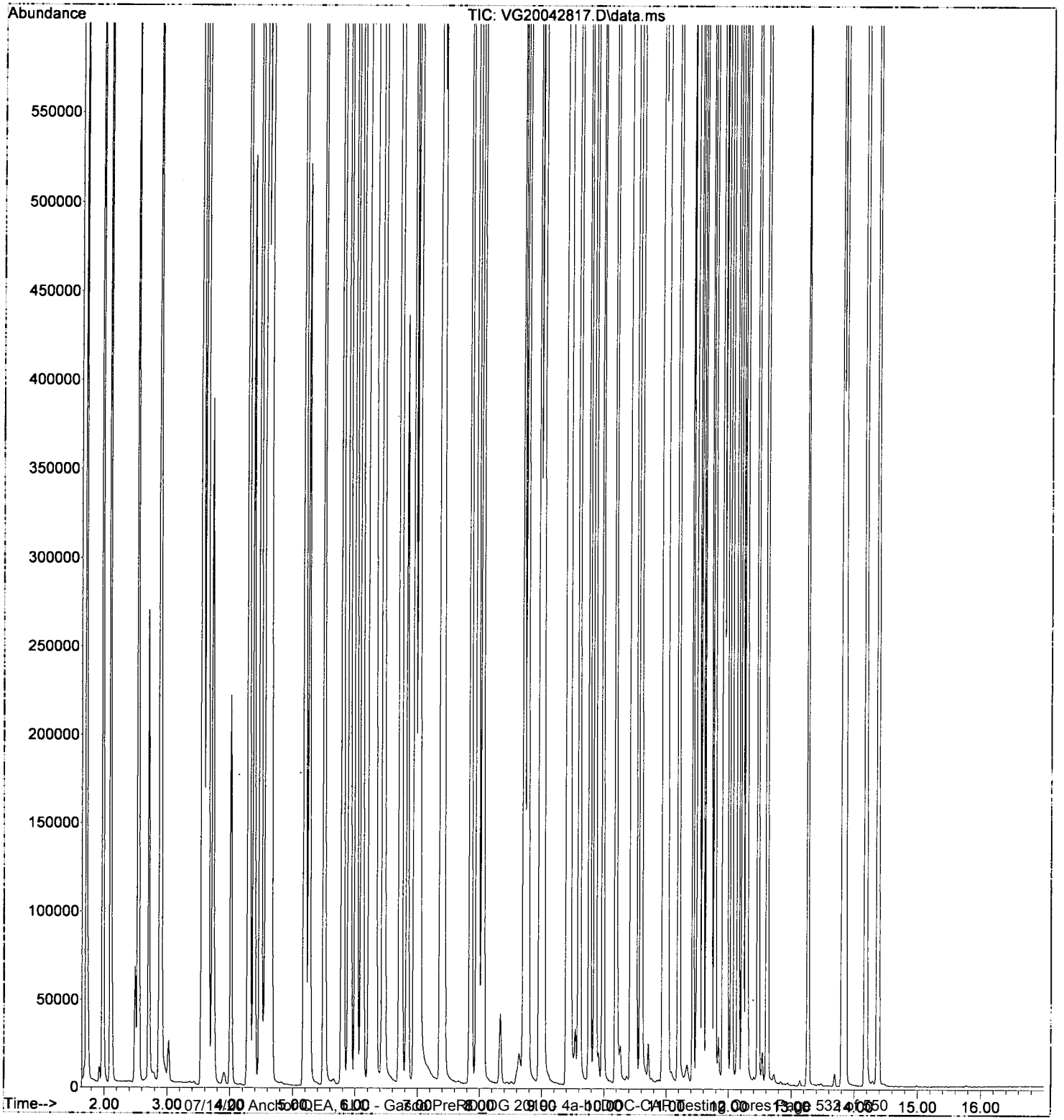
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	743359	193.43	ug/L		97
51) 4-Methyl-2-Pentanone (...	9.410	43	2206651	429.08	ug/L		94
52) t-1,3-Dichloropropene	9.446	75	1034541	204.26	ug/L		99
53) 1,1,2-Trichloroethane	9.599	97	743055	217.85	ug/L		95
54) Dibromochloromethane	9.763	129	775840	190.19	ug/L		99
55) 1,3-Dichloropropane	9.855	76	1220547	231.85	ug/L		99
56) 1,2-Dibromoethane (EDB)	9.977	107	782130	227.50	ug/L		99
57) 2-Hexanone	10.184	43	1645799	423.17	ug/L		98
58) Chlorobenzene	10.446	112	2006540	201.02	ug/L		99
59) Ethylbenzene	10.464	91	3390116	218.34	ug/L		99
60) 1,1,1,2-Tetrachloroethane	10.501	131	678121	233.59	ug/L		95
61) m,p-Xylenes (2)	10.592	91	5118451	402.13	ug/L		99
62) o-Xylene	10.946	91	2610008	199.89	ug/L		98
63) Styrene	10.989	104	2122456	200.58	ug/L		98
64) Bromoform	11.019	173	580388	177.16	ug/L		97
65) Isopropylbenzene	11.196	105	3059960	197.99	ug/L		99
68) Bromobenzene	11.507	156	850318	199.11	ug/L		89
69) n-Propylbenzene	11.519	91	3545698	236.07	ug/L		97
70) 1,1,2,2-Tetrachloroethane	11.580	83	994174	235.82	ug/L		97
71) 2-Chlorotoluene	11.647	126	757592	228.09	ug/L		99
72) 1,3,5-Trimethylbenzene	11.671	105	2427844	248.40	ug/L		95
73) 1,2,3-Trichloropropane	11.690	110	296100	198.86	ug/L		85
74) t-1,4-Dichloro-2-butene	11.714	88	122105	203.82	ug/L	#	84
75) 4-Chlorotoluene	11.775	91	2189587	234.76	ug/L		98
76) tert-Butylbenzene	11.909	91	1274708	241.57	ug/L		93
77) 1,2,4-Trimethylbenzene	11.964	105	2375385	245.75	ug/L		98
78) sec-Butylbenzene	12.043	105	2807398	257.91	ug/L		97
79) 4-Isopropyltoluene	12.147	119	2273833	208.37	ug/L		99
80) 1,3-Dichlorobenzene	12.220	146	1380557	213.34	ug/L		99
81) 1,4-Dichlorobenzene	12.287	146	1398040	193.23	ug/L		98
82) n-Butylbenzene	12.464	91	1938953	251.51	ug/L		96
83) 1,2-Dichlorobenzene	12.610	146	1294660	203.36	ug/L		99
84) 1,2-Dibromo-3-Chloropr...	13.262	157	220807	222.40	ug/L		92
85) Hexachlorobutadiene	13.811	223	152484	179.41	ug/L		96
86) 1,2,4-Trichlorobenzene	13.854	180	708955	211.13	ug/L		96
87) Naphthalene	14.177	128	2456596	201.87	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	678103	203.83	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042817.D
Acq On : 28 Apr 2020 9:14 pm
Operator : PS
Sample : 0D28059-CALB
Misc : 1X 5mL 200 PPB VOCRO
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 29 15:14:22 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 07:12:52 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042818.D
Acq On : 28 Apr 2020 9:41 pm
Operator : PS
Sample : 0D28059-IBL5
Misc : 1X 5mL DI
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 30 09:38:27 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.837	99	147546	50.00 ug/L	0.00
45) Chlorobenzene-d5 (I)	10.434	117	394020	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	170285	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (S)	6.307	111	144732	49.34 ug/L	0.00
39) 1,4-Difluorobenzene (S)	7.422	114	474103	49.94 ug/L	0.00
48) Toluene-d8 (S)	8.965	98	553722	51.47 ug/L	0.00
67) 4-Bromofluorobenzene (S)	11.428	174	140321	51.36 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.716	85	2060	0.67 ug/L	98
3) Chloromethane	1.978	50	950	0.26 ug/L	93
4) Vinyl Chloride	2.100	62	1131	0.31 ug/L	88
5) Bromomethane	2.533	96	474	0.22 ug/L	81
6) Chloroethane	2.716	64	387	Below Cal #	60
7) Trichlorofluoromethane	2.911	101	1359	0.37 ug/L	91
8) Ethanol	3.612	45	347	4.54 ug/L	79
9) 1,1-Dichloroethene	3.563	61	1592	0.39 ug/L	99
10) Carbon Disulfide	3.569	76	8526	1.66 ug/L	98
11) Freon 113	3.637	101	1688	0.65 ug/L	94
12) Iodomethane	3.734	142	222	4.99 ug/L	88
13) Acrolein	4.027	56	159	0.22 ug/L #	42
14) Methylene Chloride	4.295	84	3817	1.14 ug/L	93
15) Acetone	4.380	43	2125	1.40 ug/L	86
16) t-1,2-Dichloroethene	4.490	61	2556	0.64 ug/L	92
17) n-Hexane	4.588	86	212	0.57 ug/L #	1
18) Methyl-tert-butyl-ether	4.642	73	234	0.04 ug/L	90
19) tert-Butanol (TBA)	4.807	59	166	0.37 ug/L #	1
20) Diisopropyl ether (DIPE)	0.000		0	N.D.	
21) 1,1-Dichloroethane	5.197	63	632	0.12 ug/L	82
22) Acrylonitrile	5.283	53	213	0.13 ug/L	66
23) Vinyl Acetate	5.569	43	19	1.13 ug/L	74
24) Ethyl-tert-butyl ether...	0.000		0	N.D.	
25) c-1,2-Dichloroethene	5.795	61	1252	0.32 ug/L	91
26) 2,2-Dichloropropane	5.910	77	36	0.02 ug/L #	1
27) Bromochloromethane	6.014	49	508	0.18 ug/L	89
28) Chloroform	6.106	83	584	0.11 ug/L	88
29) Carbon Tetrachloride	6.234	117	303	0.12 ug/L	84
30) Tetrahydrofuran	6.288	42	247	0.17 ug/L #	41
31) 1,1,1-Trichloroethane	6.313	97	364	0.10 ug/L	89
33) 1,1-Dichloropropene	6.453	75	1759	0.51 ug/L	91
34) 2-Butanone (MEK)	6.441	43	10	0.00 ug/L	52
35) Benzene	6.727	78	1974	0.17 ug/L	96
36) tert-Amyl methyl ether...	6.831	73	265	0.05 ug/L #	1
37) 1,2-Dichloroethane (EDC)	6.959	62	482	0.12 ug/L	88
38) iso-Butyl Alcohol	7.057	43	459	1.64 ug/L	86
40) Trichloroethene (TCE)	7.392	130	1344	0.42 ug/L	96
41) tert-Amyl ethyl ether ...	0.000		0	N.D.	
42) Dibromomethane	7.867	93	399	0.20 ug/L #	68
43) 1,2-Dichloropropane...	7.971	63	260	0.08 ug/L	80
44) Bromodichloromethane	8.050	83	276	0.09 ug/L	84
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.	
47) c-1,3-Dichloropropene	8.788	75	478	0.71 ug/L #	67
49) Toluene	9.020	91	3682	0.56 ug/L	95

NK 4/30/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042818.D
Acq On : 28 Apr 2020 9:41 pm
Operator : PS
Sample : 0D28059-IBL5
Misc : 1X 5mL DI
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 30 09:38:27 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

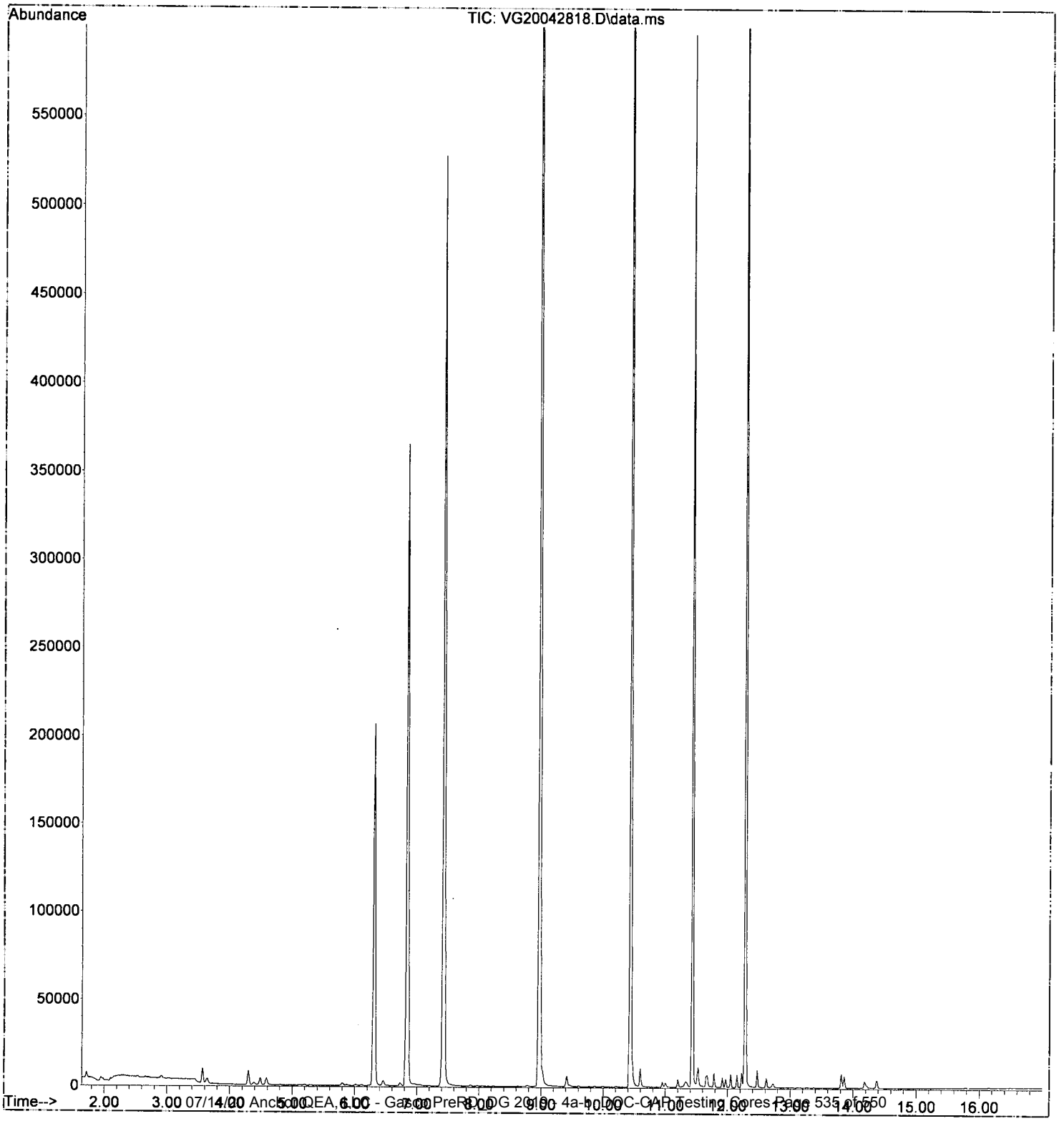
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	1999	0.78	ug/L		97
51) 4-Methyl-2-Pentanone (...	9.422	43	695	0.17	ug/L		80
52) t-1,3-Dichloropropene	9.459	75	551	0.51	ug/L		86
53) 1,1,2-Trichloroethane	9.605	97	185	0.07	ug/L	#	73
54) Dibromochloromethane	9.776	129	153	0.22	ug/L		76
55) 1,3-Dichloropropane	9.861	76	352	0.08	ug/L		90
56) 1,2-Dibromoethane (EDB)	9.989	107	373	0.14	ug/L		75
57) 2-Hexanone	10.196	43	470	0.16	ug/L		69
58) Chlorobenzene	10.446	112	3577	0.46	ug/L		79
59) Ethylbenzene	10.471	91	4277	0.35	ug/L		100
60) 1,1,1,2-Tetrachloroethane	10.501	131	158	0.07	ug/L	#	1
61) m,p-Xylenes (2)	10.599	91	6431	0.82	ug/L		91
62) o-Xylene	10.952	91	1967	0.30	ug/L		95
63) Styrene	11.001	104	1607	0.42	ug/L		96
64) Bromoform	11.019	173	76	0.25	ug/L		85
65) Isopropylbenzene	11.202	105	2886	0.45	ug/L		94
68) Bromobenzene	11.513	156	1197	0.43	ug/L		85
69) n-Propylbenzene	11.525	91	6605	0.60	ug/L		92
70) 1,1,2,2-Tetrachloroethane	11.586	83	261	0.08	ug/L		81
71) 2-Chlorotoluene	11.653	126	1078	0.47	ug/L		85
72) 1,3,5-Trimethylbenzene	11.672	105	2977	0.41	ug/L		96
73) 1,2,3-Trichloropropane	11.684	110	76	0.07	ug/L		80
74) t-1,4-Dichloro-2-butene	11.726	88	10	0.03	ug/L	#	2
75) 4-Chlorotoluene	11.781	91	4042	0.59	ug/L		92
76) tert-Butylbenzene	11.909	91	1642	0.44	ug/L		89
77) 1,2,4-Trimethylbenzene	11.970	105	2842	0.56	ug/L		95
78) sec-Butylbenzene	12.050	105	4553	0.54	ug/L		90
79) 4-Isopropyltoluene	12.147	119	3579	0.68	ug/L		93
80) 1,3-Dichlorobenzene	12.220	146	3207	0.72	ug/L		94
81) 1,4-Dichlorobenzene	12.287	146	4209	0.84	ug/L		85
82) n-Butylbenzene	12.470	91	5394	0.91	ug/L		86
83) 1,2-Dichlorobenzene	12.617	146	2203	0.52	ug/L		91
84) 1,2-Dibromo-3-Chloropr...	13.275	157	37	0.05	ug/L	#	30
85) Hexachlorobutadiene	13.811	223	997	1.93	ug/L		90
86) 1,2,4-Trichlorobenzene	13.860	180	2600	1.41	ug/L		97
87) Naphthalene	14.183	128	3853	1.40	ug/L		91
88) 1,2,3-Trichlorobenzene	14.372	180	1867	0.88	ug/L		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042818.D
Acq On : 28 Apr 2020 9:41 pm
Operator : PS
Sample : 0D28059-IBL5
Misc : 1X 5mL DI
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 30 09:38:27 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042819.D
Acq On : 28 Apr 2020 10:08 pm
Operator : PS
Sample : 0D28059-IBL6
Misc : 1X 5mL DI
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 30 09:38:30 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.837	99	153210	50.00 ug/L		0.00
45) Chlorobenzene-d5 (I)	10.434	117	424904	50.00 ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	182088	50.00 ug/L		0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	6.307	111	151643	49.78 ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	502866	51.01 ug/L		0.00
48) Toluene-d8 (S)	8.965	98	589418	50.81 ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	151014	51.70 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.716	85	870	0.27 ug/L		96
3) Chloromethane	1.978	50	432	0.11 ug/L		92
4) Vinyl Chloride	2.100	62	389	0.10 ug/L		59
5) Bromomethane	2.533	96	260	0.12 ug/L		88
6) Chloroethane	2.728	64	249	Below Cal	#	47
7) Trichlorofluoromethane	2.917	101	635	0.17 ug/L		95
8) Ethanol	3.606	45	335	4.22 ug/L	#	29
9) 1,1-Dichloroethene	3.569	61	540	0.13 ug/L		92
10) Carbon Disulfide	3.569	76	3405	0.64 ug/L		96
11) Freon 113	3.649	101	758	0.28 ug/L		78
12) Iodomethane	3.734	142	94	4.89 ug/L	#	47
13) Acrolein	0.000		0	N.D.		
14) Methylene Chloride	4.301	84	4027	1.15 ug/L		98
15) Acetone	4.386	43	2049	1.30 ug/L		91
16) t-1,2-Dichloroethene	4.490	61	912	0.22 ug/L		89
17) n-Hexane	4.594	86	38	0.10 ug/L	#	6
18) Methyl-tert-butyl-ether	0.000		0	N.D.		
19) tert-Butanol (TBA)	4.813	59	379	0.82 ug/L	#	7
20) Diisopropyl ether (DIPE)	0.000		0	N.D.		
21) 1,1-Dichloroethane	5.203	63	103	0.02 ug/L	#	50
22) Acrylonitrile	0.000		0	N.D.		
23) Vinyl Acetate	0.000		0	N.D.		
24) Ethyl-tert-butyl ether...	0.000		0	N.D.		
25) c-1,2-Dichloroethene	5.807	61	408	0.10 ug/L		73
26) 2,2-Dichloropropane	5.929	77	20	0.01 ug/L	#	32
27) Bromochloromethane	6.014	49	145	0.05 ug/L	#	28
28) Chloroform	6.112	83	156	0.03 ug/L		81
29) Carbon Tetrachloride	6.252	117	37	0.01 ug/L	#	10
30) Tetrahydrofuran	6.282	42	10	0.01 ug/L	#	40
31) 1,1,1-Trichloroethane	6.319	97	91	0.02 ug/L		77
33) 1,1-Dichloropropene	6.453	75	643	0.18 ug/L		93
34) 2-Butanone (MEK)	6.416	43	10	0.00 ug/L		52
35) Benzene	6.739	78	683	0.06 ug/L		91
36) tert-Amyl methyl ether...	6.849	73	221	0.04 ug/L	#	1
37) 1,2-Dichloroethane (EDC)	6.965	62	105	0.03 ug/L	#	49
38) iso-Butyl Alcohol	7.063	43	11	0.04 ug/L	#	22
40) Trichloroethene (TCE)	7.386	130	627	0.19 ug/L		74
41) tert-Amyl ethyl ether ...	0.000		0	N.D.		
42) Dibromomethane	7.867	93	91	0.04 ug/L	#	63
43) 1,2-Dichloropropane	7.977	63	41	0.01 ug/L	#	40
44) Bromodichloromethane	8.050	83	78	0.02 ug/L	#	26
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.		
47) c-1,3-Dichloropropene	8.782	75	155	0.62 ug/L	#	71
49) Toluene	9.013	91	1457	0.51 ug/L		89

NK
4/30/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042819.D
Acq On : 28 Apr 2020 10:08 pm
Operator : PS
Sample : 0D28059-IBL6
Misc : 1X 5mL DI
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 30 09:38:30 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

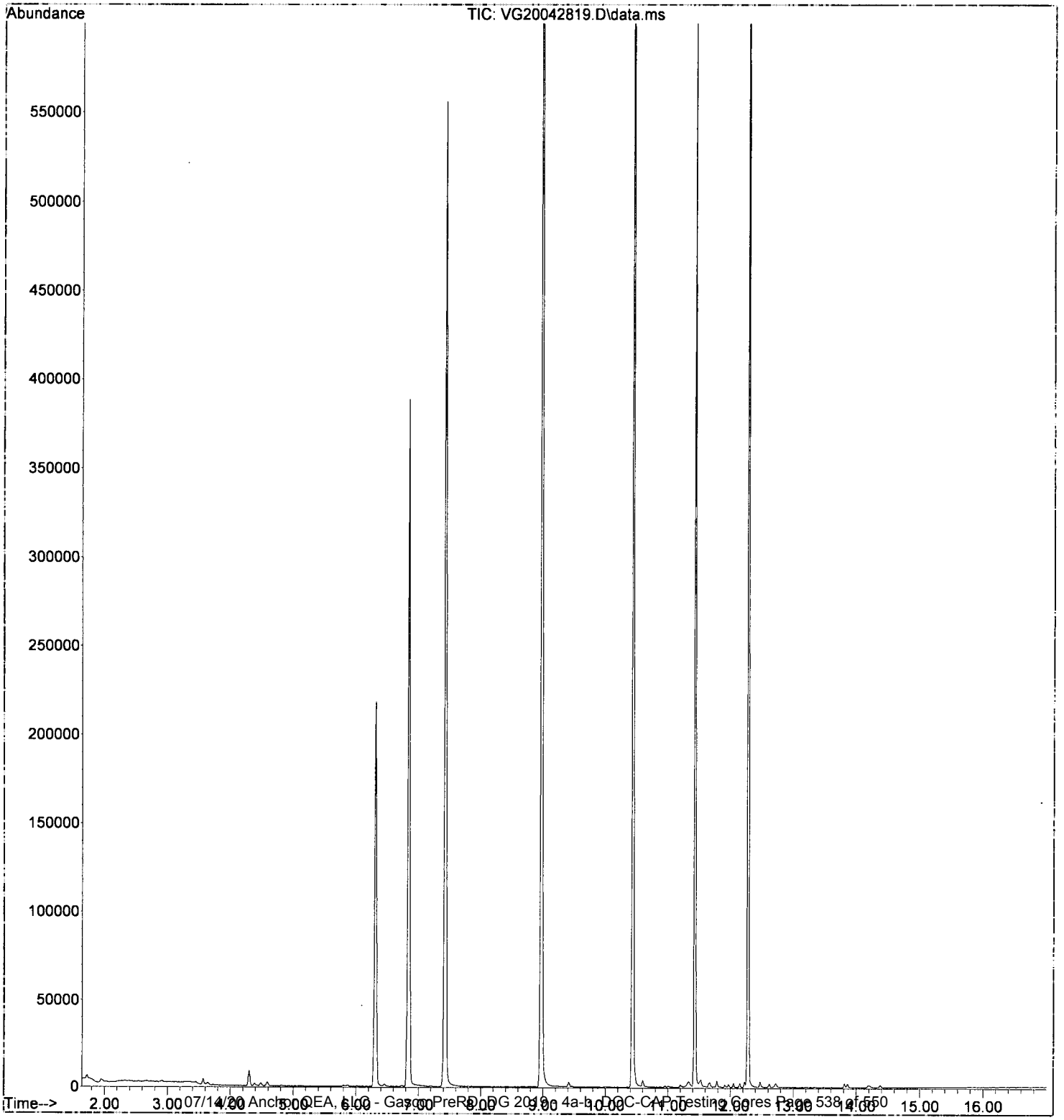
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.416	166	917	0.33	ug/L		96
51) 4-Methyl-2-Pentanone (...	9.428	43	44	0.01	ug/L	#	43
52) t-1,3-Dichloropropene	9.452	75	173	0.40	ug/L	#	45
53) 1,1,2-Trichloroethane	9.617	97	23	0.01	ug/L		85
54) Dibromochloromethane	0.000		0	N.D.			
55) 1,3-Dichloropropane	9.861	76	132	0.03	ug/L	#	70
56) 1,2-Dibromoethane (EDB)	9.989	107	153	0.05	ug/L		84
57) 2-Hexanone	10.312	43	10	0.00	ug/L	#	32
58) Chlorobenzene	10.440	112	1227	0.14	ug/L	#	1
59) Ethylbenzene	10.470	91	1612	0.12	ug/L		91
60) 1,1,1,2-Tetrachloroethane	10.507	131	31	0.01	ug/L	#	1
61) m,p-Xylenes (2)	10.598	91	2528	0.39	ug/L		96
62) o-Xylene	10.958	91	611	0.15	ug/L		84
63) Styrene	11.013	104	583	0.28	ug/L		95
64) Bromoform	11.031	173	10	0.21	ug/L	#	37
65) Isopropylbenzene	11.202	105	952	0.27	ug/L		91
68) Bromobenzene	11.513	156	432	0.14	ug/L		83
69) n-Propylbenzene	11.531	91	2616	0.22	ug/L		93
70) 1,1,2,2-Tetrachloroethane	11.586	83	103	0.03	ug/L	#	60
71) 2-Chlorotoluene	11.659	126	393	0.16	ug/L	#	71
72) 1,3,5-Trimethylbenzene	11.671	105	1086	0.14	ug/L		87
73) 1,2,3-Trichloropropane	0.000		0	N.D.			
74) t-1,4-Dichloro-2-butene	11.732	88	12	0.03	ug/L	#	44
75) 4-Chlorotoluene	11.781	91	1679	0.23	ug/L		87
76) tert-Butylbenzene	11.909	91	522	0.13	ug/L	#	73
77) 1,2,4-Trimethylbenzene	11.970	105	1108	0.30	ug/L		96
78) sec-Butylbenzene	12.049	105	1601	0.18	ug/L		96
79) 4-Isopropyltoluene	12.147	119	1313	0.34	ug/L		97
80) 1,3-Dichlorobenzene	12.226	146	1318	0.28	ug/L		84
81) 1,4-Dichlorobenzene	12.287	146	1830	0.34	ug/L		81
82) n-Butylbenzene	12.470	91	2037	0.32	ug/L		85
83) 1,2-Dichlorobenzene	12.616	146	887	0.20	ug/L		98
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
85) Hexachlorobutadiene	13.811	223	319	0.58	ug/L	#	71
86) 1,2,4-Trichlorobenzene	13.854	180	928	0.63	ug/L		81
87) Naphthalene	14.183	128	1265	1.05	ug/L		79
88) 1,2,3-Trichlorobenzene	14.378	180	710	0.31	ug/L	#	68

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042819.D
Acq On : 28 Apr 2020 10:08 pm
Operator : PS
Sample : 0D28059-IBL6
Misc : 1X 5mL DI
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 30 09:38:30 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042820.D
Acq On : 28 Apr 2020 10:35 pm
Operator : PS
Sample : 0D28059-ICV1
Misc : 1X 5mL 20-40PPB VOCRO (A19L196+A20C151+A19L249)
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 30 09:38:33 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	159516	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.428	117	441218	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	214893	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	155293	48.96	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	504406	49.15	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	599023	49.73	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	168485	48.87	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	61355	18.50	ug/L		98
3) Chloromethane	1.978	50	72113	18.34	ug/L		100
4) Vinyl Chloride	2.100	62	76580	19.49	ug/L		95
5) Bromomethane	2.533	96	41839	17.82	ug/L		99
6) Chloroethane	2.704	64	18308	14.76	ug/L		93
7) Trichlorofluoromethane	2.899	101	78865	19.72	ug/L		98
8) Ethanol	3.624	45	104339	1263.28	ug/L		84
9) 1,1-Dichloroethene	3.563	61	75693	17.04	ug/L		96
10) Carbon Disulfide	3.563	76	96998	17.46	ug/L		99
11) Freon 113	3.636	101	49579	17.67	ug/L		93
12) Iodomethane	3.722	142	23295	21.57	ug/L		94
13) Acrolein	4.008	56	16167	20.79	ug/L		99
14) Methylene Chloride	4.295	84	70870	19.50	ug/L		98
15) Acetone	4.380	43	64898	39.62	ug/L		97
16) t-1,2-Dichloroethene	4.484	61	83741	19.30	ug/L		97
17) n-Hexane	4.581	86	7545	18.67	ug/L	#	26
18) Methyl-tert-butyl-ether	4.636	73	151947	21.57	ug/L		98
19) tert-Butanol (TBA)	4.801	59	725153	1500.93	ug/L	#	76
20) Diisopropyl ether (DIPE)	5.087	45	45236	5.69	ug/L		95
21) 1,1-Dichloroethane	5.191	63	115257	20.13	ug/L		99
22) Acrylonitrile	5.264	53	37569	20.81	ug/L		95
23) Vinyl Acetate	5.502	43	97037	17.41	ug/L		95
24) Ethyl-tert-butyl ether...	5.490	59	35255	5.74	ug/L		94
25) c-1,2-Dichloroethene	5.795	61	87258	20.92	ug/L		97
26) 2,2-Dichloropropane	5.904	77	43887	18.19	ug/L	#	65
27) Bromochloromethane	6.008	49	59271	18.89	ug/L		86
28) Chloroform	6.105	83	110895	20.12	ug/L		97
29) Carbon Tetrachloride	6.233	117	60263	21.60	ug/L		97
30) Tetrahydrofuran	6.282	42	33845	21.78	ug/L		99
31) 1,1,1-Trichloroethane	6.313	97	80606	20.20	ug/L		94
33) 1,1-Dichloropropene	6.453	75	82110	22.13	ug/L		98
34) 2-Butanone (MEK)	6.453	43	101928	42.53	ug/L		98
35) Benzene	6.721	78	266648	21.06	ug/L		99
36) tert-Amyl methyl ether...	6.874	73	31484	5.18	ug/L		76
37) 1,2-Dichloroethane (EDC)	6.953	62	87437	20.31	ug/L		96
38) iso-Butyl Alcohol	7.020	43	156286	517.93	ug/L		97
40) Trichloroethene (TCE)	7.380	130	70624	20.19	ug/L		97
41) tert-Amyl ethyl ether ...	7.660	59	23370	5.75	ug/L		88
42) Dibromomethane	7.855	93	42818	19.97	ug/L		87
43) 1,2-Dichloropropane	7.965	63	71057	20.84	ug/L		94
44) Bromodichloromethane	8.044	83	74470	21.75	ug/L		100
46) 2-Chloroethyl Vinyl Ether	8.709	63	27443	19.39	ug/L	#	1
47) c-1,3-Dichloropropene	8.770	75	82345	19.40	ug/L		96
49) Toluene	8.919	91	279309	20.02	ug/L		100

4/30/2020

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042820.D
Acq On : 28 Apr 2020 10:35 pm
Operator : PS
Sample : 0D28059-ICV1
Misc : 1X 5mL 20-40PPB VOCRO (A19L196+A20C151+A19L249)
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 30 09:38:33 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

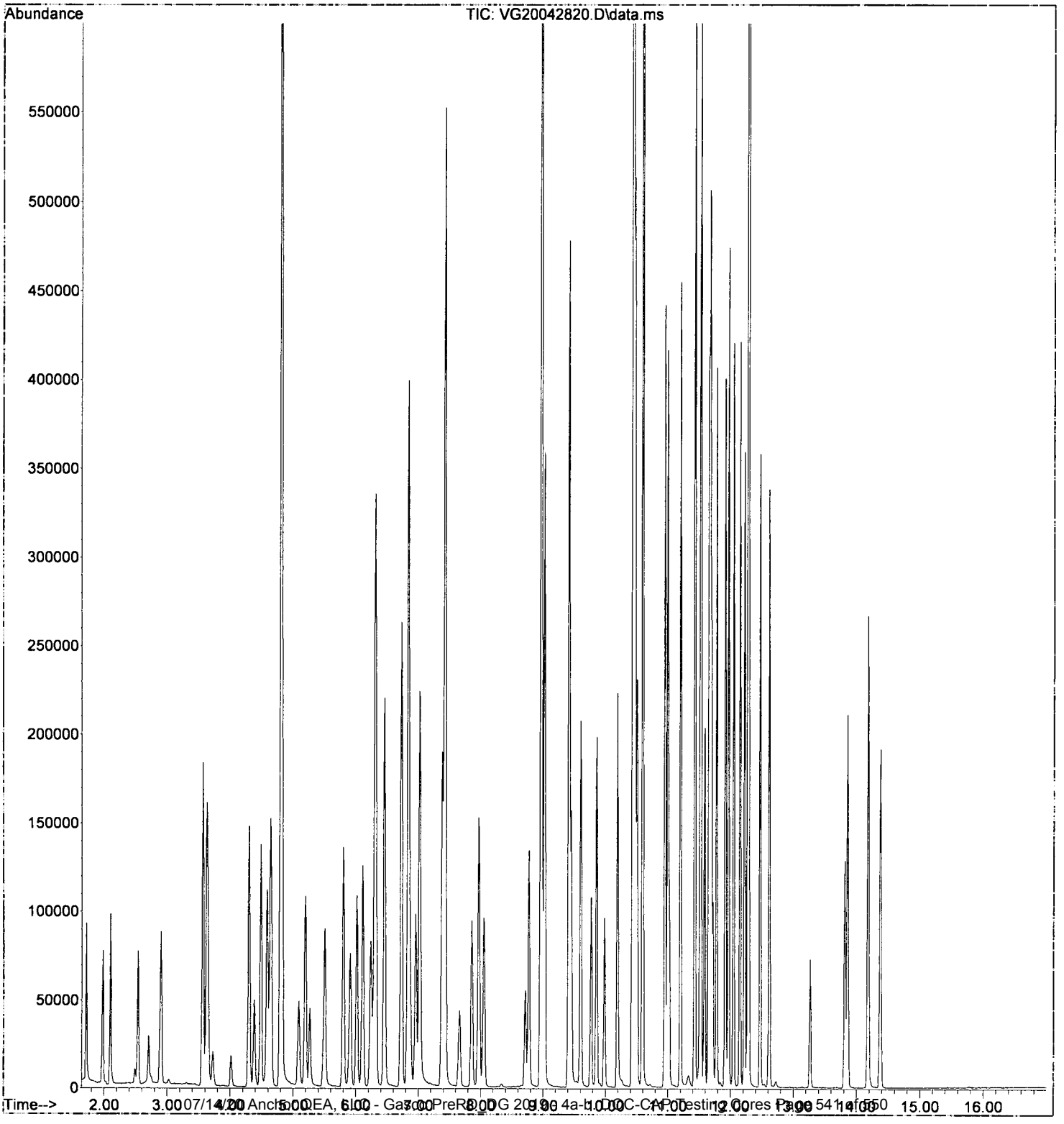
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	61706	21.39	ug/L		92
51) 4-Methyl-2-Pentanone (...	9.410	43	190805	41.80	ug/L		99
52) t-1,3-Dichloropropene	9.446	75	75061	19.60	ug/L		96
53) 1,1,2-Trichloroethane	9.599	97	66335	21.11	ug/L		97
54) Dibromochloromethane	9.769	129	58204	20.36	ug/L		97
55) 1,3-Dichloropropane	9.855	76	109086	21.67	ug/L		98
56) 1,2-Dibromoethane (EDB)	9.983	107	65645	22.40	ug/L		99
57) 2-Hexanone	10.190	43	137116	40.50	ug/L		100
58) Chlorobenzene	10.446	112	181561	20.65	ug/L		99
59) Ethylbenzene	10.464	91	299962	21.77	ug/L		98
60) 1,1,1,2-Tetrachloroethane	10.501	131	53954	21.61	ug/L		97
61) m,p-Xylenes (2)	10.592	91	444010	42.08	ug/L		99
62) o-Xylene	10.946	91	216251	20.87	ug/L		96
63) Styrene	10.989	104	176082	21.25	ug/L		99
64) Bromoform	11.019	173	40985	19.95	ug/L		98
65) Isopropylbenzene	11.196	105	255763	21.22	ug/L		97
68) Bromobenzene	11.513	156	73096	20.75	ug/L		89
69) n-Propylbenzene	11.519	91	306865	21.94	ug/L		95
70) 1,1,2,2-Tetrachloroethane	11.580	83	91449	21.01	ug/L		97
71) 2-Chlorotoluene	11.647	126	64230	22.01	ug/L		94
72) 1,3,5-Trimethylbenzene	11.671	105	211739	23.22	ug/L		94
73) 1,2,3-Trichloropropane	11.690	110	29376	21.44	ug/L	#	75
74) t-1,4-Dichloro-2-butene	11.720	88	7608	16.09	ug/L	#	83
75) 4-Chlorotoluene	11.775	91	195007	22.66	ug/L		96
76) tert-Butylbenzene	11.915	91	109741	23.44	ug/L		93
77) 1,2,4-Trimethylbenzene	11.964	105	207410	22.97	ug/L		98
78) sec-Butylbenzene	12.043	105	243925	23.12	ug/L		96
79) 4-Isopropyltoluene	12.147	119	192788	22.00	ug/L		99
80) 1,3-Dichlorobenzene	12.220	146	127930	22.91	ug/L		96
81) 1,4-Dichlorobenzene	12.287	146	132714	20.90	ug/L		97
82) n-Butylbenzene	12.470	91	174865	23.26	ug/L		97
83) 1,2-Dichlorobenzene	12.610	146	124636	23.49	ug/L		99
84) 1,2-Dibromo-3-Chloropr...	13.263	157	17571	20.69	ug/L		74
85) Hexachlorobutadiene	13.811	223	15607	23.93	ug/L		94
86) 1,2,4-Trichlorobenzene	13.854	180	67104	23.72	ug/L		95
87) Naphthalene	14.177	128	217197	23.16	ug/L		99
88) 1,2,3-Trichlorobenzene	14.372	180	68875	25.85	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042820.D
Acq On : 28 Apr 2020 10:35 pm
Operator : PS
Sample : 0D28059-ICV1
Misc : 1X 5mL 20-40PPB VOCRO (A19L196+A20C151+A19L249)
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 30 09:38:33 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042821.D
Acq On : 28 Apr 2020 11:02 pm
Operator : PS
Sample : 0D28059-IBL7
Misc : 1X 5mL DI
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 30 09:38:36 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.837	99	134724	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	10.428	117	365933	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	12.275	152	154202	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	6.307	111	132741	49.56	ug/L		0.00
39) 1,4-Difluorobenzene (S)	7.422	114	438161	50.55	ug/L		0.00
48) Toluene-d8 (S)	8.965	98	512715	51.32	ug/L		0.00
67) 4-Bromofluorobenzene (S)	11.428	174	127332	51.47	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.716	85	550	0.20	ug/L		95
3) Chloromethane	1.978	50	433	0.13	ug/L		89
4) Vinyl Chloride	2.094	62	200	0.06	ug/L	#	48
5) Bromomethane	2.527	96	240	0.12	ug/L	#	66
6) Chloroethane	2.716	64	169	Below Cal			77
7) Trichlorofluoromethane	2.911	101	315	0.09	ug/L		74
8) Ethanol	3.606	45	299	4.29	ug/L	#	29
9) 1,1-Dichloroethene	3.569	61	376	0.10	ug/L		75
10) Carbon Disulfide	3.569	76	1783	0.38	ug/L		93
11) Freon 113	3.643	101	511	0.22	ug/L		78
12) Iodomethane	3.734	142	42	4.85	ug/L	#	47
13) Acrolein	4.082	56	10	0.02	ug/L	#	23
14) Methylene Chloride	4.301	84	6443	2.10	ug/L		96
15) Acetone	4.386	43	2501	1.81	ug/L		94
16) t-1,2-Dichloroethene	4.490	61	523	0.14	ug/L		92
17) n-Hexane	4.600	86	11	0.03	ug/L	#	45
18) Methyl-tert-butyl-ether	0.000		0	N.D.			
19) tert-Butanol (TBA)	4.813	59	770	1.89	ug/L	#	98
20) Diisopropyl ether (DIPE)	5.094	45	10	0.00	ug/L	#	33
21) 1,1-Dichloroethane	0.000		0	N.D.			
22) Acrylonitrile	0.000		0	N.D.			
23) Vinyl Acetate	0.000		0	N.D.			
24) Ethyl-tert-butyl ether...	5.496	59	10	0.00	ug/L	#	38
25) c-1,2-Dichloroethene	5.801	61	189	0.05	ug/L		84
26) 2,2-Dichloropropane	0.000		0	N.D.			
27) Bromochloromethane	6.020	49	131	0.05	ug/L	#	14
28) Chloroform	6.106	83	94	0.02	ug/L	#	25
29) Carbon Tetrachloride	6.240	117	15	0.01	ug/L	#	13
30) Tetrahydrofuran	6.295	42	10	0.01	ug/L	#	37
31) 1,1,1-Trichloroethane	0.000		0	N.D.			
33) 1,1-Dichloropropene	6.453	75	395	0.13	ug/L		79
34) 2-Butanone (MEK)	0.000		0	N.D.			
35) Benzene	6.727	78	567	0.05	ug/L		80
36) tert-Amyl methyl ether...	6.831	73	241	0.05	ug/L	#	1
37) 1,2-Dichloroethane (EDC)	6.965	62	33	0.01	ug/L	#	49
38) iso-Butyl Alcohol	7.038	43	21	0.08	ug/L	#	22
40) Trichloroethene (TCE)	7.380	130	343	0.12	ug/L		88
41) tert-Amyl ethyl ether ...	0.000		0	N.D.			
42) Dibromomethane	7.910	93	10	0.01	ug/L	#	1
43) 1,2-Dichloropropane	7.977	63	19	0.01	ug/L	#	40
44) Bromodichloromethane	0.000		0	N.D.			
46) 2-Chloroethyl Vinyl Ether	8.770	63	10	0.76	ug/L	#	1
47) c-1,3-Dichloropropene	8.782	75	10	0.59	ug/L	#	1
49) Toluene	9.020	91	988	0.09	ug/L		83

4/30/20 hy

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042821.D
Acq On : 28 Apr 2020 11:02 pm
Operator : PS
Sample : 0D28059-IBL7
Misc : 1X 5mL DI
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 30 09:38:36 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration

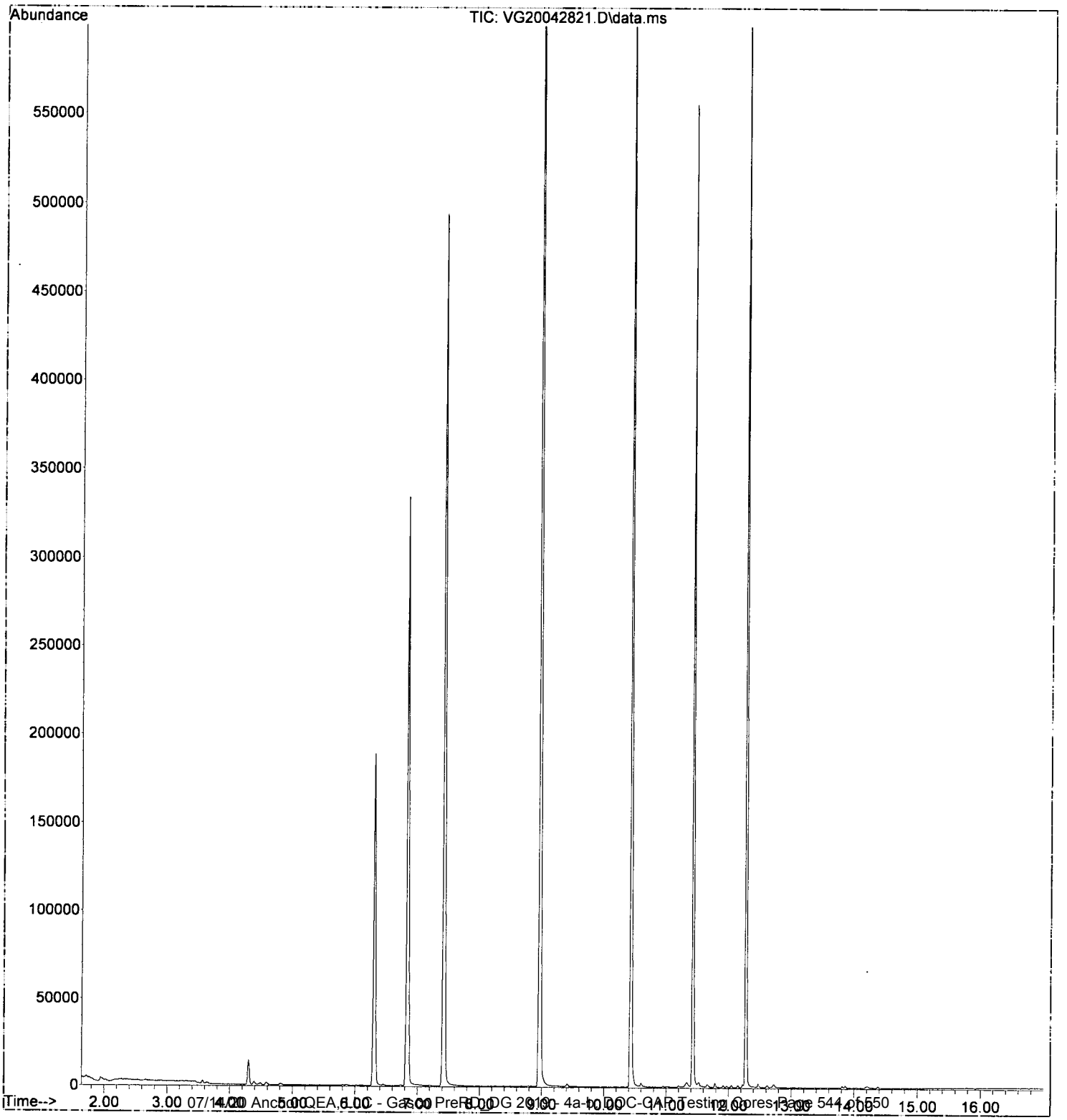
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) Tetrachloroethene (PCE)	9.410	166	518	0.22 ug/L	80
51) 4-Methyl-2-Pentanone (...	9.434	43	31	0.01 ug/L #	43
52) t-1,3-Dichloropropene	9.465	75	112	0.38 ug/L #	45
53) 1,1,2-Trichloroethane	0.000		0	N.D.	
54) Dibromochloromethane	9.769	129	11	0.17 ug/L #	17
55) 1,3-Dichloropropane	9.867	76	51	0.01 ug/L #	60
56) 1,2-Dibromoethane (EDB)	9.995	107	33	0.01 ug/L #	7
57) 2-Hexanone	0.000		0	N.D.	
58) Chlorobenzene	10.440	112	781	0.11 ug/L #	1
59) Ethylbenzene	10.477	91	1087	0.10 ug/L	96
60) 1,1,1,2-Tetrachloroethane	10.519	131	10	0.00 ug/L #	1
61) m,p-Xylenes (2)	10.599	91	1377	0.30 ug/L	78
62) o-Xylene	10.952	91	474	0.14 ug/L	83
63) Styrene	11.013	104	355	0.26 ug/L	86
64) Bromoform	0.000		0	N.D.	
65) Isopropylbenzene	11.202	105	651	0.25 ug/L	85
68) Bromobenzene	11.507	156	295	0.12 ug/L	78
69) n-Propylbenzene	11.525	91	1642	0.16 ug/L	96
70) 1,1,2,2-Tetrachloroethane	11.586	83	38	0.01 ug/L #	24
71) 2-Chlorotoluene	11.653	126	248	0.12 ug/L	90
72) 1,3,5-Trimethylbenzene	11.672	105	717	0.11 ug/L	80
73) 1,2,3-Trichloropropane	0.000		0	N.D.	
74) t-1,4-Dichloro-2-butene	11.787	88	10	0.03 ug/L #	18
75) 4-Chlorotoluene	11.781	91	1029	0.17 ug/L	93
76) tert-Butylbenzene	11.922	91	377	0.11 ug/L	88
77) 1,2,4-Trimethylbenzene	11.964	105	606	0.25 ug/L	82
78) sec-Butylbenzene	12.050	105	955	0.13 ug/L	90
79) 4-Isopropyltoluene	12.147	119	884	0.30 ug/L	93
80) 1,3-Dichlorobenzene	12.226	146	742	0.19 ug/L	96
81) 1,4-Dichlorobenzene	12.287	146	1165	0.26 ug/L #	66
82) n-Butylbenzene	12.470	91	1377	0.26 ug/L	86
83) 1,2-Dichlorobenzene	12.616	146	545	0.14 ug/L	95
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	
85) Hexachlorobutadiene	13.811	223	160	0.34 ug/L #	79
86) 1,2,4-Trichlorobenzene	13.854	180	528	0.51 ug/L	78
87) Naphthalene	14.183	128	738	1.00 ug/L	91
88) 1,2,3-Trichlorobenzene	14.384	180	342	0.18 ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-04\0D28059\
Data File : VG20042821.D
Acq On : 28 Apr 2020 11:02 pm
Operator : PS
Sample : 0D28059-IBL7
Misc : 1X 5mL DI
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 30 09:38:36 2020
Quant Method : C:\msdchem\1\methods\VG200429W.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Wed Apr 29 15:17:10 2020
Response via : Initial Calibration



APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard OR 97223 phone 503-718-2323

Total Solids by SM2540G
Benchsheet Data

Batch 0050886 (A0E0312-01)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

JUN 03 2020

Percent Solids + Dry Weight Worksheet

BATCH #: 0050886 (Matrix: Sediment)

Lab Number	Analysis	QC Source ID	Prepared (Time In)	Weighed (Time Out)	Tare Wt. (g)	Wet Weight (+Tare) (g)	Dry Weight (+Tare) (g)	% Solids (Calc)	LogComments
A0E0281-25	Dry Weight		05/22/20 18:59		1.2663	29.9242	17.7333	57.5	Use Results from TS.. Make NR once completed.
A0E0281-25	Solids, Total (SM 254		05/22/20 18:59		1.2663	29.9242	17.7333	57.5	Use Results for Dry Weight (Not for Waters)
A0E0310-01	Dry Weight		05/22/20 18:59		1.2632	29.2889	15.794	51.8	Use Results from TS.. Make NR once completed.
A0E0310-01	Solids, Total (SM 254		05/22/20 18:59		1.2632	29.2889	15.794	51.8	Use Results for Dry Weight (Not for Waters)
A0E0310-02	Dry Weight		05/22/20 18:59		1.2598	26.9834	17.9644	64.9	Use Results from TS.. Make NR once completed.
A0E0310-02	Solids, Total (SM 254		05/22/20 18:59		1.2598	26.9834	17.9644	64.9	Use Results for Dry Weight (Not for Waters)
0050886-DUP1	QC	A0E0310-02	05/22/20 18:59		1.2522	31.3537	20.7054	64.6	
A0E0312-01	Dry Weight		05/22/20 18:59		1.2629	27.3887	16.249	57.4	Use Results from TS.. Make NR once completed.
A0E0312-01	Solids, Total (SM 254		05/22/20 18:59		1.2629	27.3887	16.249	57.4	Use Results for Dry Weight (Not for Waters)
A0E0314-01	Dry Weight		05/22/20 18:59		1.2659	33.2172	21.2689	62.6	Use Results from TS.. Make NR once completed.
A0E0314-01	Solids, Total (SM 254		05/22/20 18:59		1.2659	33.2172	21.2689	62.6	Use Results for Dry Weight (Not for Waters)

MAS 5/28/20
Prepared By: Date

5/28/2020
Reviewed By: Date

Total Solids Worksheet

Analyst: MAS Date: 05/22/20 Batch: 0050886

Sample ID	Vessel ID	Tare Weight (g)	Wet+ Tare Weight (g)	Dry Weight (g)		Comments
				1st weighing	2nd weighing	
A0E0281-25	1	1.2663	29.9242	17.7601	17.7333	
A0E0310-01	2	1.2632	29.2889	15.8243	15.794	
A0E0310-02	3	1.2598	26.9834	17.9913	17.9644	
0050886-DUP1	4	1.2522	31.3537	20.7242	20.7054	
A0E0312-01	5	1.2629	27.3887	16.2847	16.249	
A0E0314-01	6	1.2659	33.2172	21.3004	21.2689	

Oven Temp at Sample Introduction	103	103.2	*Constant weight = +/- 50 mg.
Oven Temp at sample removal	103.6	103.3	
Time/date	16:50 5/27	12:14 5/28	

APEX LABORATORIES, LLC
6700 SW Sandburg St. Tigard OR 97223 phone 503-718-2323

Balance Checksheets

Sample Receiving May 2020
Wet Chem May 2020

Balance Challenge Log

BalanceName
Lady Justice
S/N 593312

Weight ID	weight (g) =/<1g >1g	acceptance range (g) ± 0.02g ± 2%	
10660	0.10g	0.08	0.12
10581	50.00g	49.00	51.00
15477	500.00g	490.00	510.00

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Month: May 2020
Year:

Alternate Weight/ID used:

Date Range:

	Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1	7:40	MS		0.10		49.98	ONLY	499.88
2	901	JS		0.10		49.99	NEEDED	
3							WHEN	
4	7:40	MS		0.10		49.98	WEIGHING	
5	7:50	MS		0.10		49.98	OVER	
6	7:43	MS		0.10		50.00	50 g	
7	7:40	MS		0.10		49.99	KEPT	
8	7:45	MS		0.09		49.98	IN METALS	
9							DEPT.	
10								
11	7:55	MS		0.09		49.98		499.92 MS 15:43
12	7:45	MS		0.10		49.99		
13	8:20	MS		0.09		49.98		
14	7:55	MS		0.09		49.99	500.00g	
15	7:50	MS		0.10		49.99		
16	958	AKK	0.10g	0.10	50.00g	49.99		
17								
18	7:58	MS		0.10		49.98		
19	8:00	MS		0.10		49.98		
20	8:50	MS		0.10		49.99		
21	8:00	MS		0.09		49.98		
22	8:15	MS		0.10		49.99		
23								
24								
25								
26	909	SD		0.09		49.99		
27	7:57	MS		0.10		49.98		499.91 AKK @ 1649
28	8:10	MS		0.10		49.99		499.90 MS 10:00
29	9:00	MS		0.10		49.98		
30	8:44	TAH		0.11		49.98		
31								

Balance Challenge Log

Wet Chem Balance 1
Ohaus Adventurer Pro
ID# 8C30461093

Weight ID	weight (g)	acceptance range (g)	
	<0.5000g	± 0.5mg	
	>/=0.5000g	± 0.1%	
1000015949	0.005g	0.0045	0.0055
66067	0.100g	0.0995	0.1005
66067	100g	99.9000	100.1000

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Month: May
Year: 2020

Alternate Weight/ID used:

Date Range:

Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1 1055	MAS		100.0004		0.1003		0.0050
2							
3							
4 1019	MAS		100.0002		0.0999		0.0050
5 1051	MAS		100.0004		0.0998		0.0050
6 1030	MAS		100.0002		0.0999		0.0049
7 1016	MAS		100.0001		0.1001		0.0050
8 1200	MAS		100.0002		0.1000		0.0051
9							
10							
11 ~~MAS 1110~~ ~~HH~~ MAS			99.9993		0.1000		0.0047
12 1038	MAS		100.0005		0.1000		0.0050
13 1117	MAS	MAS 5/11/20	100.0003		0.1001		0.0050
14 1038	MAS		100.0005		0.1001		0.0050
15 1129	MAS		100.0010		0.1002		0.0049
16		100.0000g		0.1000g		.0050g	
17							
18 1219	MAS		100.0015	MR 7/9/2020	0.1001		0.0051
19 1008	MAS		~~100.0027~~ 99.9997		0.1000		0.0052
20 1100	MAS		100.0002		0.1001		0.0051
21 1104	MAS		99.9995		0.999		0.0050
22 1115	MAS		99.9993		0.1000		
23							
24							
25							
26 1116	MAS		99.9994		0.0999		0.0048
27 1021	MAS		99.9991		0.1000		0.0049
28 1048	MAS		99.9994		0.0998		0.0054
29 1201	MAS		99.9994		0.0999		0.0050
30							
31							