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 - 4c. Waste Characterization

Apex Laboratories Work Order #:

A0A0539

The information contained in this Data Package is intended solely for the purpose of validating client sample results submitted under the associated Chain of Custody(ies). An effort has been made to remove all traceable non-client data. Any incidental inclusion of non-client data is considered privileged and confidential information. The use of this information for any purpose other than data validation is strictly prohibited, and constitutes a breach of contract.

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

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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: 02/26/2020
Project: Gasco PreRD_DG 2019 - 4c. Waste Characterization
Apex Work Order Number: A0A0539

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
EPA ID: OR01039

Friday, January 31, 2020

Matt Wilson
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A0A0539 - Gasco PreRD_DG 2019 - 4c. Waste Characterization - Riverbank:000029-02.64 T:04.0402

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 A0A0539, which was received by the laboratory on 1/14/2020 at 2:27:00PM.

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 1.4 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
EPA ID: OR01039

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4c. Waste Characterization**	
6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PDI-WC-011420-02	**A0A0539-01**	**Sediment**	**01/14/20 09:30**	**01/14/20 14:27**
PDI-WC-011420-04	**A0A0539-02**	**Sediment**	**01/14/20 10:35**	**01/14/20 14:27**

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6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-WC-011420-02 (A0A0539-01)				**Matrix: Sediment**		**Batch: 0010543**		
Diesel	**427**	12.0	23.9	mg/kg dry	1	01/18/20 01:57	NWTPH-Dx	**F-24**
Oil	**304**	23.9	47.9	mg/kg dry	1	01/18/20 01:57	NWTPH-Dx	**F-24**
Surrogate: o-Terphenyl (Surr)		*Recovery: 105 %*		*Limits: 50-150 %*	*1*	*01/18/20 01:57*	*NWTPH-Dx*	
PDI-WC-011420-04 (A0A0539-02)				**Matrix: Sediment**		**Batch: 0010543**		
Diesel	**222**	11.7	23.3	mg/kg dry	1	01/18/20 02:19	NWTPH-Dx	**F-24**
Oil	**218**	23.3	46.7	mg/kg dry	1	01/18/20 02:19	NWTPH-Dx	**F-24**
Surrogate: o-Terphenyl (Surr)		*Recovery: 101 %*		*Limits: 50-150 %*	*1*	*01/18/20 02:19*	*NWTPH-Dx*	

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6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-WC-011420-02 (A0A0539-01)				**Matrix: Sediment**		**Batch: 0010530**		
Gasoline Range Organics	**14.1**	3.49	6.98	mg/kg dry	50	01/17/20 12:12	NWTPH-Gx (MS)	**Q-42**
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 110 %*		*Limits: 50-150 %*	*1*	*01/17/20 12:12*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*	*1*	*01/17/20 12:12*	*NWTPH-Gx (MS)*	
PDI-WC-011420-04 (A0A0539-02)				**Matrix: Sediment**		**Batch: 0010530**		
Gasoline Range Organics	**45.8**	3.37	6.73	mg/kg dry	50	01/17/20 14:26	NWTPH-Gx (MS)	**F-09**
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 113 %*		*Limits: 50-150 %*	*1*	*01/17/20 14:26*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*	*1*	*01/17/20 14:26*	*NWTPH-Gx (MS)*	

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6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-WC-011420-02 (A0A0539-01)				**Matrix: Sediment**		**Batch: 0010530**		
Benzene	ND	6.98	14.0	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
2-Butanone (MEK)	ND	349	698	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
Carbon tetrachloride	ND	34.9	69.8	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
Chlorobenzene	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
Chloroform	ND	34.9	69.8	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
1,4-Dichlorobenzene	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
1,1-Dichloroethene	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
cis-1,2-Dichloroethene	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
trans-1,2-Dichloroethene	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
Ethylbenzene	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
Tetrachloroethene (PCE)	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
Toluene	ND	34.9	69.8	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
Trichloroethene (TCE)	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
Vinyl chloride	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
m,p-Xylene	ND	34.9	69.8	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
o-Xylene	ND	17.5	34.9	ug/kg dry	50	01/17/20 12:12	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits: 80-120 %*	*1*	*01/17/20 12:12*	*5035A/8260C*	
Toluene-d8 (Surr)			*95 %*	*80-120 %*	*1*	*01/17/20 12:12*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*	*1*	*01/17/20 12:12*	*5035A/8260C*	
PDI-WC-011420-04 (A0A0539-02)				**Matrix: Sediment**		**Batch: 0010530**		
Benzene	**7.00**	6.73	13.5	ug/kg dry	50	01/17/20 14:26	5035A/8260C	**J**
2-Butanone (MEK)	ND	337	673	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
Carbon tetrachloride	ND	33.7	67.3	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
Chlorobenzene	ND	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
Chloroform	ND	33.7	67.3	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
1,4-Dichlorobenzene	ND	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
1,1-Dichloroethene	ND	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
cis-1,2-Dichloroethene	ND	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
trans-1,2-Dichloroethene	ND	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
Ethylbenzene	ND	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
Tetrachloroethene (PCE)	**506**	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	

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Darwin Thomas, Business Development Director

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Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4c. Waste Characterization**	
6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-WC-011420-04 (A0A0539-02)				**Matrix: Sediment**		**Batch: 0010530**		
Toluene	ND	33.7	67.3	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
Trichloroethene (TCE)	**70.3**	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
Vinyl chloride	ND	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
m,p-Xylene	ND	33.7	67.3	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
o-Xylene	ND	16.8	33.7	ug/kg dry	50	01/17/20 14:26	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits: 80-120 %*	*1*	*01/17/20 14:26*	*5035A/8260C*	
Toluene-d8 (Surr)			*94 %*	*80-120 %*	*1*	*01/17/20 14:26*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*104 %*	*80-120 %*	*1*	*01/17/20 14:26*	*5035A/8260C*	

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6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-WC-011420-02 (A0A0539-01RE2)				**Matrix: Sediment**		**Batch: 0010574**		**R-04**
2-Methylphenol	ND	81.7	164	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
3+4-Methylphenol(s)	ND	81.7	164	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
Pentachlorophenol (PCP)	ND	326	655	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
Phenol	ND	65.5	131	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
2,4,5-Trichlorophenol	ND	164	326	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
2,4,6-Trichlorophenol	ND	164	326	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
Hexachlorobenzene	ND	32.6	65.5	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
Hexachlorobutadiene	ND	81.7	164	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
Hexachloroethane	ND	81.7	164	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
Nitrobenzene	ND	326	655	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
2,4-Dinitrotoluene	ND	326	655	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
Pyridine	ND	164	326	ug/kg dry	20	01/21/20 16:41	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*60 %*	*Limits: 37-122 %*	*20*	*01/21/20 16:41*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*73 %*	*44-115 %*	*20*	*01/21/20 16:41*	*EPA 8270D*	
Phenol-d6 (Surr)			*50 %*	*33-122 %*	*20*	*01/21/20 16:41*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*81 %*	*54-127 %*	*20*	*01/21/20 16:41*	*EPA 8270D*	
2-Fluorophenol (Surr)			*54 %*	*35-115 %*	*20*	*01/21/20 16:41*	*EPA 8270D*	
2,4,6-Tribromophenol (Surr)			*91 %*	*39-132 %*	*20*	*01/21/20 16:41*	*EPA 8270D*	
PDI-WC-011420-04 (A0A0539-02RE1)				**Matrix: Sediment**		**Batch: 0010574**		**R-04**
2-Methylphenol	ND	158	316	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
3+4-Methylphenol(s)	ND	158	316	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
Pentachlorophenol (PCP)	ND	629	1260	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
Phenol	ND	126	252	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
2,4,5-Trichlorophenol	ND	316	629	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
2,4,6-Trichlorophenol	ND	316	629	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
Hexachlorobenzene	ND	62.9	126	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
Hexachlorobutadiene	ND	158	316	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
Hexachloroethane	ND	158	316	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
Nitrobenzene	ND	629	1260	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
2,4-Dinitrotoluene	ND	1260	1260	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
Pyridine	ND	316	629	ug/kg dry	40	01/20/20 17:51	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*75 %*	*Limits: 37-122 %*	*40*	*01/20/20 17:51*	*EPA 8270D*	*S-05*
2-Fluorobiphenyl (Surr)			*84 %*	*44-115 %*	*40*	*01/20/20 17:51*	*EPA 8270D*	*S-05*

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Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-WC-011420-04 (A0A0539-02RE1)				**Matrix: Sediment**		**Batch: 0010574**		**R-04**
Surrogate: Phenol-d6 (Surr)		*Recovery:*	*48 %*	*Limits: 33-122 %*	*40*	*01/20/20 17:51*	*EPA 8270D*	*S-05*
p-Terphenyl-d14 (Surr)			*95 %*	*54-127 %*	*40*	*01/20/20 17:51*	*EPA 8270D*	*S-05*
2-Fluorophenol (Surr)			*59 %*	*35-115 %*	*40*	*01/20/20 17:51*	*EPA 8270D*	*S-05*
2,4,6-Tribromophenol (Surr)			*129 %*	*39-132 %*	*40*	*01/20/20 17:51*	*EPA 8270D*	*S-05*

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EPA ID: OR01039

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4c. Waste Characterization**	
6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-WC-011420-02 (A0A0539-01)				**Matrix: Sediment**				
Batch: 0010756								
Arsenic	**3.20**	0.325	0.649	mg/kg dry	5	01/24/20 17:43	EPA 6020A	
Barium	**99.8**	0.325	0.649	mg/kg dry	5	01/24/20 17:43	EPA 6020A	
Cadmium	**0.107**	0.0649	0.130	mg/kg dry	5	01/24/20 17:43	EPA 6020A	**J**
Chromium	**24.9**	0.325	0.649	mg/kg dry	5	01/24/20 17:43	EPA 6020A	
Lead	**7.31**	0.0649	0.130	mg/kg dry	5	01/24/20 17:43	EPA 6020A	
Mercury	**0.0549**	0.0260	0.0519	mg/kg dry	5	01/24/20 17:43	EPA 6020A	
Selenium	**0.364**	0.325	0.649	mg/kg dry	5	01/24/20 17:43	EPA 6020A	**J**
Silver	**0.133**	0.0649	0.130	mg/kg dry	5	01/24/20 17:43	EPA 6020A	
PDI-WC-011420-04 (A0A0539-02)				**Matrix: Sediment**				
Batch: 0010756								
Arsenic	**3.59**	0.315	0.630	mg/kg dry	5	01/24/20 17:48	EPA 6020A	
Barium	**117**	0.315	0.630	mg/kg dry	5	01/24/20 17:48	EPA 6020A	
Cadmium	**0.136**	0.0630	0.126	mg/kg dry	5	01/24/20 17:48	EPA 6020A	**Q-42**
Chromium	**28.7**	0.315	0.630	mg/kg dry	5	01/24/20 17:48	EPA 6020A	
Lead	**8.00**	0.0630	0.126	mg/kg dry	5	01/24/20 17:48	EPA 6020A	**Q-42**
Mercury	**0.0482**	0.0252	0.0504	mg/kg dry	5	01/24/20 17:48	EPA 6020A	**J, Q-42**
Selenium	**0.398**	0.315	0.630	mg/kg dry	5	01/24/20 17:48	EPA 6020A	**J**
Silver	**0.101**	0.0630	0.126	mg/kg dry	5	01/24/20 17:48	EPA 6020A	**J, Q-42**

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503-718-2323
EPA ID: OR01039

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6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

ANALYTICAL SAMPLE RESULTS

Total Cyanide by UV Digestion/Gas Diffusion/Amperometric Detection

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-WC-011420-02 (A0A0539-01RE1)				**Matrix: Sediment**		**Batch: 0010568**		
Total Cyanide	**11.9**	1.26	2.53	mg/kg dry	20	01/20/20 13:38	D7511-12	
PDI-WC-011420-04 (A0A0539-02RE1)				**Matrix: Sediment**		**Batch: 0010568**		
Total Cyanide	**18.7**	3.00	6.00	mg/kg dry	50	01/20/20 13:40	D7511-12	

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ANALYTICAL SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-WC-011420-02 (A0A0539-01)				**Matrix: Sediment**				
Batch: 0010552								
Total Solids	**78.6**	1.00	1.00	% by Weight	1	01/20/20 12:45	SM 2540 G	
PDI-WC-011420-04 (A0A0539-02)				**Matrix: Sediment**				
Batch: 0010552								
Total Solids	**81.7**	1.00	1.00	% by Weight	1	01/20/20 12:45	SM 2540 G	

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ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-WC-011420-02 (A0A0539-01)				**Matrix: Sediment**				
Batch: 0010593								
Soil pH (measured in H2O)	**6.02**	0.500	0.500	pH Units	1	01/20/20 17:05	EPA 9045D	**H-12**
pH Temperature (deg C)	**21.3**	1.00	1.00	pH Units	1	01/20/20 17:05	EPA 9045D	**H-12**
Batch: 0010775								
Free Liquid	ND	0.00	0.00	mL	1	01/24/20 13:46	EPA 9095B	
Batch: 0010801								
Flash Point (Ignitability)	>150° F	---	70.0	°F	1	01/27/20 12:45	EPA 1010M	
PDI-WC-011420-04 (A0A0539-02)				**Matrix: Sediment**				
Batch: 0010593								
Soil pH (measured in H2O)	**5.69**	0.500	0.500	pH Units	1	01/20/20 17:10	EPA 9045D	**H-12**
pH Temperature (deg C)	**20.9**	1.00	1.00	pH Units	1	01/20/20 17:10	EPA 9045D	**H-12**
Batch: 0010775								
Free Liquid	ND	0.00	0.00	mL	1	01/24/20 13:51	EPA 9095B	
Batch: 0010801								
Flash Point (Ignitability)	>150° F	---	70.0	°F	1	01/27/20 13:07	EPA 1010M	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0010543 - EPA 3546 (Fuels)							**Sediment**					
Blank (0010543-BLK1)			Prepared: 01/17/20 12:52		Analyzed: 01/18/20 00:09							
NWTPH-Dx												
Diesel	ND	9.09	18.2	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	18.2	36.4	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 108 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS (0010543-BS1)			Prepared: 01/17/20 12:52		Analyzed: 01/18/20 00:30							
NWTPH-Dx												
Diesel	123	10.0	20.0	mg/kg wet	1	125	---	99	76-115%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 110 %*		*Limits: 50-150 %*		*Dilution: 1x*						
Duplicate (0010543-DUP1)			Prepared: 01/17/20 12:52		Analyzed: 01/18/20 01:14							
QC Source Sample: Non-SDG (A0A0538-01)												
Diesel	ND	10.3	20.5	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**44.5**	20.5	41.1	mg/kg dry	1	---	46.0	---	---	3	30%	F-03
Surr: o-Terphenyl (Surr)		*Recovery: 107 %*		*Limits: 50-150 %*		*Dilution: 1x*						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0010530 - EPA 5035A							**Soil**					
Blank (0010530-BLK1)			Prepared: 01/16/20 09:00 Analyzed: 01/17/20 11:18									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 100 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*			*"*					
LCS (0010530-BS2)			Prepared: 01/16/20 09:00 Analyzed: 01/17/20 10:51									
NWTPH-Gx (MS)												
Gasoline Range Organics	21.6	2.50	5.00	mg/kg wet	50	25.0	---	86	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 101 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*			*"*					
Duplicate (0010530-DUP1)			Prepared: 01/14/20 09:30 Analyzed: 01/17/20 12:39									
QC Source Sample: PDI-WC-011420-02 (A0A0539-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	**32.8**	3.61	7.23	mg/kg dry	50	---	14.1	---	---	**80**	**30%**	Q-04
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 114 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*			*"*					

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QUALITY CONTROL (QC) SAMPLE RESULTS

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 0010530 - EPA 5035A							**Soil**					
Blank (0010530-BLK1)			Prepared: 01/16/20 09:00 Analyzed: 01/17/20 11:18									
5035A/8260C												
Acetone	ND	333	667	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	3.33	6.67	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	333	333	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	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	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	

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Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

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 0010530 - EPA 5035A							**Soil**					
Blank (0010530-BLK1)			Prepared: 01/16/20 09:00 Analyzed: 01/17/20 11:18									
1,2-Dichloropropane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	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	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 102 %* *Limits: 80-120 %* *Dilution: 1x*

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QUALITY CONTROL (QC) SAMPLE RESULTS

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 0010530 - EPA 5035A							**Soil**					
Blank (0010530-BLK1)				Prepared: 01/16/20 09:00 Analyzed: 01/17/20 11:18								
Surr: Toluene-d8 (Surr)			*Recovery: 98 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*104 %*	*80-120 %*			*"*					
LCS (0010530-BS1)				Prepared: 01/16/20 09:00 Analyzed: 01/17/20 10:24								
5035A/8260C												
Acetone	1810	500	1000	ug/kg wet	50	2000	---	91	80-120%	---	---	
Acrylonitrile	810	50.0	100	ug/kg wet	50	1000	---	81	80-120%	---	---	
Benzene	1030	5.00	10.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Bromobenzene	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Bromochloromethane	961	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Bromodichloromethane	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Bromoform	1110	50.0	100	ug/kg wet	50	1000	---	111	80-120%	---	---	
Bromomethane	968	500	500	ug/kg wet	50	1000	---	97	80-120%	---	---	
2-Butanone (MEK)	1740	250	500	ug/kg wet	50	2000	---	87	80-120%	---	---	
n-Butylbenzene	992	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
sec-Butylbenzene	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
tert-Butylbenzene	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Carbon disulfide	978	250	500	ug/kg wet	50	1000	---	98	80-120%	---	---	
Carbon tetrachloride	1110	25.0	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Chlorobenzene	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Chloroethane	938	250	500	ug/kg wet	50	1000	---	94	80-120%	---	---	
Chloroform	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Chloromethane	856	125	250	ug/kg wet	50	1000	---	86	80-120%	---	---	
2-Chlorotoluene	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
4-Chlorotoluene	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Dibromochloromethane	1070	50.0	100	ug/kg wet	50	1000	---	107	80-120%	---	---	
1,2-Dibromo-3-chloropropane	941	125	250	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,2-Dibromoethane (EDB)	1040	25.0	50.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
Dibromomethane	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,2-Dichlorobenzene	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,3-Dichlorobenzene	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,4-Dichlorobenzene	1000	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Dichlorodifluoromethane	916	50.0	100	ug/kg wet	50	1000	---	92	80-120%	---	---	
1,1-Dichloroethane	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4c. Waste Characterization**	
6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

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 0010530 - EPA 5035A							**Soil**					
LCS (0010530-BS1)			Prepared: 01/16/20 09:00 Analyzed: 01/17/20 10:24									
1,2-Dichloroethane (EDC)	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1-Dichloroethene	996	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
cis-1,2-Dichloroethene	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
trans-1,2-Dichloroethene	991	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,2-Dichloropropane	985	50.0	100	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,3-Dichloropropane	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
2,2-Dichloropropane	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,1-Dichloropropene	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
cis-1,3-Dichloropropene	964	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
trans-1,3-Dichloropropene	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Ethylbenzene	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Hexachlorobutadiene	1090	50.0	100	ug/kg wet	50	1000	---	109	80-120%	---	---	
2-Hexanone	1600	250	500	ug/kg wet	50	2000	---	80	80-120%	---	---	
Isopropylbenzene	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
4-Isopropyltoluene	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Methylene chloride	998	125	250	ug/kg wet	50	1000	---	100	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1680	250	500	ug/kg wet	50	2000	---	84	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Naphthalene	914	50.0	100	ug/kg wet	50	1000	---	91	80-120%	---	---	
n-Propylbenzene	994	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Styrene	968	25.0	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1090	12.5	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
1,1,2,2-Tetrachloroethane	963	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Tetrachloroethene (PCE)	1120	12.5	25.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Toluene	984	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	1110	125	250	ug/kg wet	50	1000	---	111	80-120%	---	---	
1,2,4-Trichlorobenzene	1070	125	250	ug/kg wet	50	1000	---	107	80-120%	---	---	
1,1,1-Trichloroethane	1090	12.5	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
1,1,2-Trichloroethane	1000	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Trichloroethene (TCE)	1150	12.5	25.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
Trichlorofluoromethane	1090	50.0	100	ug/kg wet	50	1000	---	109	80-120%	---	---	
1,2,3-Trichloropropane	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
1,2,4-Trimethylbenzene	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,3,5-Trimethylbenzene	1110	25.0	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	

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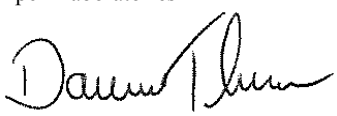

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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503-718-2323
EPA ID: OR01039

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4c. Waste Characterization**	
6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

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 0010530 - EPA 5035A							**Soil**					
LCS (0010530-BS1)			Prepared: 01/16/20 09:00 Analyzed: 01/17/20 10:24									
Vinyl chloride	947	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
m,p-Xylene	2210	25.0	50.0	ug/kg wet	50	2000	---	110	80-120%	---	---	
o-Xylene	1090	12.5	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*94 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*			*"*					
Duplicate (0010530-DUP1)			Prepared: 01/14/20 09:30 Analyzed: 01/17/20 12:39									
QC Source Sample: PDI-WC-011420-02 (A0A0539-01)												
5035A/8260C												
Acetone	ND	723	1450	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	72.3	145	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	7.23	14.5	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	72.3	145	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	723	723	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	361	723	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	361	723	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	361	723	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	181	361	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	72.3	145	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	181	361	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4c. Waste Characterization**	
6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

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 0010530 - EPA 5035A							**Soil**					
Duplicate (0010530-DUP1)			Prepared: 01/14/20 09:30 Analyzed: 01/17/20 12:39									
QC Source Sample: PDI-WC-011420-02 (A0A0539-01)												
1,2-Dichlorobenzene	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	72.3	145	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	72.3	145	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	36.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	72.3	145	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	361	723	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	181	361	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	361	723	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	**4650**	72.3	145	ug/kg dry	50	---	1500	---	---	**102**	**30%**	Q-04
n-Propylbenzene	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	**75.3**	36.1	72.3	ug/kg dry	50	---	ND	---	---		**30%**	Q-05
1,1,1,2-Tetrachloroethane	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	181	361	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	181	361	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4c. Waste Characterization**	
6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

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 0010530 - EPA 5035A							**Soil**					
Duplicate (0010530-DUP1)			Prepared: 01/14/20 09:30		Analyzed: 01/17/20 12:39							
QC Source Sample: PDI-WC-011420-02 (A0A0539-01)												
1,1,2-Trichloroethane	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	72.3	145	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	**88.1**	36.1	72.3	ug/kg dry	50	---	37.0	---	---	**82**	**30%**	Q-05
1,3,5-Trimethylbenzene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	36.1	72.3	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	18.1	36.1	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*93 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*105 %*		*80-120 %*		*"*					
Matrix Spike (0010530-MS1)			Prepared: 01/14/20 09:00		Analyzed: 01/17/20 13:33							
QC Source Sample: Non-SDG (A0A0538-01)												
5035A/8260C												
Acetone	1830	483	966	ug/kg dry	50	1930	ND	95	36-164%	---	---	
Acrylonitrile	975	48.3	96.6	ug/kg dry	50	965	ND	101	65-134%	---	---	
Benzene	995	4.83	9.66	ug/kg dry	50	965	ND	103	77-121%	---	---	
Bromobenzene	1010	12.1	24.1	ug/kg dry	50	965	ND	105	78-121%	---	---	
Bromochloromethane	949	24.1	48.3	ug/kg dry	50	965	ND	98	78-125%	---	---	
Bromodichloromethane	1020	24.1	48.3	ug/kg dry	50	965	ND	105	75-127%	---	---	
Bromoform	1010	48.3	96.6	ug/kg dry	50	965	ND	105	67-132%	---	---	
Bromomethane	959	483	483	ug/kg dry	50	965	ND	99	53-143%	---	---	
2-Butanone (MEK)	1650	241	483	ug/kg dry	50	1930	ND	86	51-148%	---	---	
n-Butylbenzene	933	24.1	48.3	ug/kg dry	50	965	ND	97	70-128%	---	---	
sec-Butylbenzene	1000	24.1	48.3	ug/kg dry	50	965	ND	104	73-126%	---	---	
tert-Butylbenzene	934	24.1	48.3	ug/kg dry	50	965	ND	97	73-125%	---	---	
Carbon disulfide	910	241	483	ug/kg dry	50	965	ND	94	63-132%	---	---	
Carbon tetrachloride	994	24.1	48.3	ug/kg dry	50	965	ND	103	70-135%	---	---	
Chlorobenzene	949	12.1	24.1	ug/kg dry	50	965	ND	98	79-120%	---	---	
Chloroethane	871	241	483	ug/kg dry	50	965	ND	90	59-139%	---	---	
Chloroform	1020	24.1	48.3	ug/kg dry	50	965	ND	106	78-123%	---	---	

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Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4c. Waste Characterization**	
6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

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 0010530 - EPA 5035A							**Soil**					
Matrix Spike (0010530-MS1)			Prepared: 01/14/20 09:00		Analyzed: 01/17/20 13:33							
QC Source Sample: Non-SDG (A0A0538-01)												
Chloromethane	811	121	241	ug/kg dry	50	965	ND	84	50-136%	---	---	
2-Chlorotoluene	1010	24.1	48.3	ug/kg dry	50	965	ND	104	75-122%	---	---	
4-Chlorotoluene	968	24.1	48.3	ug/kg dry	50	965	ND	100	72-124%	---	---	
Dibromochloromethane	978	48.3	96.6	ug/kg dry	50	965	ND	101	74-126%	---	---	
1,2-Dibromo-3-chloropropane	889	121	241	ug/kg dry	50	965	ND	92	61-132%	---	---	
1,2-Dibromoethane (EDB)	991	24.1	48.3	ug/kg dry	50	965	ND	103	78-122%	---	---	
Dibromomethane	1060	24.1	48.3	ug/kg dry	50	965	ND	110	78-125%	---	---	
1,2-Dichlorobenzene	1010	12.1	24.1	ug/kg dry	50	965	ND	105	78-121%	---	---	
1,3-Dichlorobenzene	1010	12.1	24.1	ug/kg dry	50	965	ND	104	77-121%	---	---	
1,4-Dichlorobenzene	922	12.1	24.1	ug/kg dry	50	965	ND	96	75-120%	---	---	
Dichlorodifluoromethane	816	48.3	96.6	ug/kg dry	50	965	ND	85	29-149%	---	---	
1,1-Dichloroethane	1000	12.1	24.1	ug/kg dry	50	965	ND	104	76-125%	---	---	
1,2-Dichloroethane (EDC)	945	12.1	24.1	ug/kg dry	50	965	ND	98	73-128%	---	---	
1,1-Dichloroethene	905	12.1	24.1	ug/kg dry	50	965	ND	94	70-131%	---	---	
cis-1,2-Dichloroethene	983	12.1	24.1	ug/kg dry	50	965	ND	102	77-123%	---	---	
trans-1,2-Dichloroethene	931	12.1	24.1	ug/kg dry	50	965	ND	97	74-125%	---	---	
1,2-Dichloropropane	988	48.3	96.6	ug/kg dry	50	965	ND	102	76-123%	---	---	
1,3-Dichloropropane	949	24.1	48.3	ug/kg dry	50	965	ND	98	77-121%	---	---	
2,2-Dichloropropane	998	24.1	48.3	ug/kg dry	50	965	ND	103	67-133%	---	---	
1,1-Dichloropropene	1010	24.1	48.3	ug/kg dry	50	965	ND	104	76-125%	---	---	
cis-1,3-Dichloropropene	933	24.1	48.3	ug/kg dry	50	965	ND	97	74-126%	---	---	
trans-1,3-Dichloropropene	994	24.1	48.3	ug/kg dry	50	965	ND	103	71-130%	---	---	
Ethylbenzene	936	12.1	24.1	ug/kg dry	50	965	ND	97	76-122%	---	---	
Hexachlorobutadiene	1050	48.3	96.6	ug/kg dry	50	965	ND	108	61-135%	---	---	
2-Hexanone	1520	241	483	ug/kg dry	50	1930	ND	79	53-145%	---	---	
Isopropylbenzene	987	24.1	48.3	ug/kg dry	50	965	ND	102	68-134%	---	---	
4-Isopropyltoluene	1040	24.1	48.3	ug/kg dry	50	965	ND	108	73-127%	---	---	
Methylene chloride	976	121	241	ug/kg dry	50	965	ND	101	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	1600	241	483	ug/kg dry	50	1930	ND	83	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	981	24.1	48.3	ug/kg dry	50	965	ND	102	73-125%	---	---	
Naphthalene	960	48.3	96.6	ug/kg dry	50	965	ND	100	62-129%	---	---	
n-Propylbenzene	924	12.1	24.1	ug/kg dry	50	965	ND	96	73-125%	---	---	
Styrene	902	24.1	48.3	ug/kg dry	50	965	ND	94	76-124%	---	---	

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6700 S.W. Sandburg Street
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503-718-2323
EPA ID: OR01039

Anchor QEA, LLC	Project:	**Gasco PreRD DG 2019 - 4c. Waste Characterization**	
6720 SW Macadam Ave. Suite 125	Project Number:	**Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager:	**Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

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 0010530 - EPA 5035A							**Soil**					
Matrix Spike (0010530-MS1)			Prepared: 01/14/20 09:00		Analyzed: 01/17/20 13:33							
QC Source Sample: Non-SDG (A0A0538-01)												
1,1,1,2-Tetrachloroethane	995	12.1	24.1	ug/kg dry	50	965	ND	103	78-125%	---	---	
1,1,2,2-Tetrachloroethane	914	24.1	48.3	ug/kg dry	50	965	ND	95	70-124%	---	---	
Tetrachloroethene (PCE)	1030	12.1	24.1	ug/kg dry	50	965	ND	107	73-128%	---	---	
Toluene	916	24.1	48.3	ug/kg dry	50	965	ND	95	77-121%	---	---	
1,2,3-Trichlorobenzene	1080	121	241	ug/kg dry	50	965	ND	112	66-130%	---	---	
1,2,4-Trichlorobenzene	1040	121	241	ug/kg dry	50	965	ND	108	67-129%	---	---	
1,1,1-Trichloroethane	991	12.1	24.1	ug/kg dry	50	965	ND	103	73-130%	---	---	
1,1,2-Trichloroethane	958	12.1	24.1	ug/kg dry	50	965	ND	99	78-121%	---	---	
Trichloroethene (TCE)	1100	12.1	24.1	ug/kg dry	50	965	ND	114	77-123%	---	---	Q-01
Trichlorofluoromethane	910	48.3	96.6	ug/kg dry	50	965	ND	94	62-140%	---	---	
1,2,3-Trichloropropane	922	24.1	48.3	ug/kg dry	50	965	ND	96	73-125%	---	---	
1,2,4-Trimethylbenzene	1040	24.1	48.3	ug/kg dry	50	965	ND	108	75-123%	---	---	
1,3,5-Trimethylbenzene	1030	24.1	48.3	ug/kg dry	50	965	ND	107	73-124%	---	---	
Vinyl chloride	918	12.1	24.1	ug/kg dry	50	965	ND	95	56-135%	---	---	
m,p-Xylene	2010	24.1	48.3	ug/kg dry	50	1930	ND	104	77-124%	---	---	
o-Xylene	1020	12.1	24.1	ug/kg dry	50	965	ND	106	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 107 %*		*Limits: 80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*95 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*102 %*		*80-120 %*		*"*					

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Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0010574 - EPA 3546							**Sediment**					
Blank (0010574-BLK1)			Prepared: 01/20/20 10:08		Analyzed: 01/20/20 14:22							
EPA 8270D												
2-Methylphenol	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
Phenol	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	18.7	37.5	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
Hexachloroethane	ND	3.12	6.25	ug/kg wet	1	---	---	---	---	---	---	
Nitrobenzene	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
Pyridine	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 76 %*		*Limits: 37-122 %*			*Dilution: 1x*				
2-Fluorobiphenyl (Surr)			*71 %*		*44-115 %*			*"*				
Phenol-d6 (Surr)			*68 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*89 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*71 %*		*35-115 %*			*"*				
2,4,6-Tribromophenol (Surr)			*86 %*		*39-132 %*			*"*				
LCS (0010574-BS1)			Prepared: 01/20/20 10:08		Analyzed: 01/20/20 14:57							**Q-18**
EPA 8270D												
2-Methylphenol	457	6.66	13.3	ug/kg wet	2	533	---	86	32-122%	---	---	
3+4-Methylphenol(s)	463	6.66	13.3	ug/kg wet	2	533	---	87	34-120%	---	---	
Pentachlorophenol (PCP)	574	26.6	53.4	ug/kg wet	2	533	---	108	25-133%	---	---	
Phenol	470	5.34	10.7	ug/kg wet	2	533	---	88	34-120%	---	---	
2,4,5-Trichlorophenol	514	13.3	26.6	ug/kg wet	2	533	---	96	41-124%	---	---	
2,4,6-Trichlorophenol	500	13.3	26.6	ug/kg wet	2	533	---	94	39-126%	---	---	
Hexachlorobenzene	472	2.66	5.34	ug/kg wet	2	533	---	89	44-122%	---	---	
Hexachlorobutadiene	462	6.66	13.3	ug/kg wet	2	533	---	87	32-123%	---	---	
Hexachloroethane	481	6.66	13.3	ug/kg wet	2	533	---	90	28-120%	---	---	
Nitrobenzene	448	26.6	53.4	ug/kg wet	2	533	---	84	34-122%	---	---	
2,4-Dinitrotoluene	527	26.6	53.4	ug/kg wet	2	533	---	99	48-126%	---	---	

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6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0010574 - EPA 3546							**Sediment**					
LCS (0010574-BS1)			Prepared: 01/20/20 10:08		Analyzed: 01/20/20 14:57							**Q-18**
Pyridine	407	13.3	26.6	ug/kg wet	2	533	---	76	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 78 %*		*Limits: 37-122 %*		*Dilution: 2x*					
2-Fluorobiphenyl (Surr)			*78 %*		*44-115 %*		*"*					
Phenol-d6 (Surr)			*85 %*		*33-122 %*		*"*					
p-Terphenyl-d14 (Surr)			*99 %*		*54-127 %*		*"*					
2-Fluorophenol (Surr)			*87 %*		*35-115 %*		*"*					
2,4,6-Tribromophenol (Surr)			*93 %*		*39-132 %*		*"*					
Duplicate (0010574-DUP2)			Prepared: 01/20/20 10:08		Analyzed: 01/21/20 15:31							**R-04**
QC Source Sample: Non-SDG (A0A0538-01RE2)												
2-Methylphenol	ND	35.9	71.9	ug/kg dry	10	---	ND	---	---	---	30%	
3+4-Methylphenol(s)	ND	35.9	71.9	ug/kg dry	10	---	ND	---	---	---	30%	
Pentachlorophenol (PCP)	ND	143	288	ug/kg dry	10	---	ND	---	---	---	30%	
Phenol	ND	28.8	57.4	ug/kg dry	10	---	ND	---	---	---	30%	
2,4,5-Trichlorophenol	ND	71.9	143	ug/kg dry	10	---	ND	---	---	---	30%	
2,4,6-Trichlorophenol	ND	71.9	143	ug/kg dry	10	---	ND	---	---	---	30%	
Hexachlorobenzene	ND	14.3	28.8	ug/kg dry	10	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	35.9	71.9	ug/kg dry	10	---	ND	---	---	---	30%	
Hexachloroethane	ND	35.9	71.9	ug/kg dry	10	---	ND	---	---	---	30%	
Nitrobenzene	ND	143	288	ug/kg dry	10	---	ND	---	---	---	30%	
2,4-Dinitrotoluene	ND	143	288	ug/kg dry	10	---	ND	---	---	---	30%	
Pyridine	ND	71.9	143	ug/kg dry	10	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 54 %*		*Limits: 37-122 %*		*Dilution: 10x*					
2-Fluorobiphenyl (Surr)			*65 %*		*44-115 %*		*"*					
Phenol-d6 (Surr)			*41 %*		*33-122 %*		*"*					
p-Terphenyl-d14 (Surr)			*78 %*		*54-127 %*		*"*					
2-Fluorophenol (Surr)			*49 %*		*35-115 %*		*"*					
2,4,6-Tribromophenol (Surr)			*56 %*		*39-132 %*		*"*					

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Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0010756 - EPA 3051A							**Sediment**					
Blank (0010756-BLK1)			Prepared: 01/24/20 10:03		Analyzed: 01/24/20 17:24							
EPA 6020A												
Lead	ND	0.0481	0.0962	mg/kg wet	5	---	---	---	---	---	---	
Mercury	ND	0.0192	0.0385	mg/kg wet	5	---	---	---	---	---	---	
Selenium	ND	0.240	0.481	mg/kg wet	5	---	---	---	---	---	---	
Silver	ND	0.0481	0.0962	mg/kg wet	5	---	---	---	---	---	---	
Blank (0010756-BLK2)			Prepared: 01/24/20 10:03		Analyzed: 01/24/20 18:19							
EPA 6020A												
Arsenic	ND	0.240	0.481	mg/kg wet	5	---	---	---	---	---	---	Q-16
Barium	ND	0.240	0.481	mg/kg wet	5	---	---	---	---	---	---	Q-16
Cadmium	ND	0.0481	0.0962	mg/kg wet	5	---	---	---	---	---	---	Q-16
Chromium	ND	0.240	0.481	mg/kg wet	5	---	---	---	---	---	---	Q-16
LCS (0010756-BS1)			Prepared: 01/24/20 10:03		Analyzed: 01/24/20 17:29							
EPA 6020A												
Arsenic	24.5	0.250	0.500	mg/kg wet	5	25.0	---	98	80-120%	---	---	
Barium	23.8	0.250	0.500	mg/kg wet	5	25.0	---	95	80-120%	---	---	
Cadmium	23.7	0.0500	0.100	mg/kg wet	5	25.0	---	95	80-120%	---	---	
Chromium	24.2	0.250	0.500	mg/kg wet	5	25.0	---	97	80-120%	---	---	
Lead	25.3	0.0500	0.100	mg/kg wet	5	25.0	---	101	80-120%	---	---	
Mercury	0.500	0.0200	0.0400	mg/kg wet	5	0.500	---	100	80-120%	---	---	
Selenium	11.8	0.250	0.500	mg/kg wet	5	12.5	---	94	80-120%	---	---	
Silver	12.4	0.0500	0.100	mg/kg wet	5	12.5	---	99	80-120%	---	---	
Duplicate (0010756-DUP1)			Prepared: 01/24/20 10:03		Analyzed: 01/24/20 17:52							
QC Source Sample: PDI-WC-011420-04 (A0A0539-02)												
EPA 6020A												
Arsenic	**3.14**	0.300	0.600	mg/kg dry	5	---	3.59	---	---	13	40%	
Barium	**119**	0.300	0.600	mg/kg dry	5	---	117	---	---	2	40%	
Cadmium	**0.0894**	0.0600	0.120	mg/kg dry	5	---	0.136	---	---	**42**	**40%**	J, Q-05
Chromium	**25.3**	0.300	0.600	mg/kg dry	5	---	28.7	---	---	13	40%	
Lead	**5.17**	0.0600	0.120	mg/kg dry	5	---	8.00	---	---	**43**	**40%**	Q-04
Mercury	**0.0306**	0.0240	0.0480	mg/kg dry	5	---	0.0482	---	---	**45**	**40%**	J, Q-05
Selenium	**0.339**	0.300	0.600	mg/kg dry	5	---	0.398	---	---	16	40%	J

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Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0010756 - EPA 3051A							**Sediment**					
Duplicate (0010756-DUP1)			Prepared: 01/24/20 10:03		Analyzed: 01/24/20 17:52							
QC Source Sample: PDI-WC-011420-04 (A0A0539-02)												
Silver	ND	0.0600	0.120	mg/kg dry	5	---	0.101	---	---	***	**40%**	Q-05
Matrix Spike (0010756-MS1)			Prepared: 01/24/20 10:03		Analyzed: 01/24/20 18:24							
QC Source Sample: PDI-WC-011420-04 (A0A0539-02)												
EPA 6020A												
Arsenic	30.2	0.298	0.596	mg/kg dry	5	29.8	3.59	89	75-125%	---	---	
Barium	147	0.298	0.596	mg/kg dry	5	29.8	117	98	75-125%	---	---	
Cadmium	27.5	0.0596	0.119	mg/kg dry	5	29.8	0.136	92	75-125%	---	---	
Chromium	52.1	0.298	0.596	mg/kg dry	5	29.8	28.7	78	75-125%	---	---	
Lead	34.4	0.0596	0.119	mg/kg dry	5	29.8	8.00	89	75-125%	---	---	
Mercury	0.587	0.0239	0.0477	mg/kg dry	5	0.596	0.0482	90	75-125%	---	---	
Selenium	13.4	0.298	0.596	mg/kg dry	5	14.9	0.398	87	75-125%	---	---	
Silver	13.8	0.0596	0.119	mg/kg dry	5	14.9	0.101	92	75-125%	---	---	

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Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Cyanide by UV Digestion/Gas Diffusion/Amperometric Detection

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0010568 - ASTM D7511-12mod (S)							**Soil**					
Blank (0010568-BLK1)			Prepared: 01/20/20 08:35		Analyzed: 01/20/20 12:26							
D7511-12												
Total Cyanide	ND	0.0500	0.100	mg/kg wet	1	---	---	---	---	---	---	
LCS (0010568-BS1)			Prepared: 01/20/20 08:35		Analyzed: 01/20/20 12:28							
D7511-12												
Total Cyanide	0.433	0.0500	0.100	mg/kg wet	1	0.400	---	108	84-116%	---	---	
Matrix Spike (0010568-MS1)			Prepared: 01/20/20 08:35		Analyzed: 01/20/20 12:34							
QC Source Sample: Non-SDG (A0A0538-01)												
D7511-12												
Total Cyanide	1.25	0.0545	0.109	mg/kg dry	1	0.436	0.736	119	64-136%	---	---	E
Matrix Spike Dup (0010568-MSD1)			Prepared: 01/20/20 08:35		Analyzed: 01/20/20 12:36							
QC Source Sample: Non-SDG (A0A0538-01)												
Total Cyanide	1.31	0.0544	0.109	mg/kg dry	1	0.435	0.736	133	64-136%	5	47%	E

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4c. Waste Characterization**	
6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

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 0010552 - Total Solids (SM2540G/PSEP)							**Sediment**					
Duplicate (0010552-DUP1)			Prepared: 01/17/20 15:30		Analyzed: 01/20/20 12:51							
QC Source Sample: PDI-WC-011420-02 (A0A0539-01)												
SM 2540 G												
Total Solids	**77.1**	1.00	1.00	% by Weight	1	---	78.6	---	---	2	10%	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0010593 - DI Leach							**Sediment**					
Duplicate (0010593-DUP1)			Prepared: 01/20/20 13:39		Analyzed: 01/20/20 17:08							
QC Source Sample: PDI-WC-011420-02 (A0A0539-01)												
EPA 9045D												
Soil pH (measured in H2O)	**5.87**	0.500	0.500	pH Units	1	---	6.02	---	---	3	5%	H-12
pH Temperature (deg C)	**21.0**	1.00	1.00	pH Units	1	---	21.3	---	---	1	30%	H-12
Reference (0010593-SRM1)			Prepared: 01/20/20 13:39		Analyzed: 01/20/20 14:30							
EPA 9045D												
Soil pH (measured in H2O)	6.03			pH Units	1	6.00		100	33333-101.666	---	---	
pH Temperature (deg C)	20.7			pH Units	1	20.0		104	50-200%	---	---	
Reference (0010593-SRM2)			Prepared: 01/20/20 13:39		Analyzed: 01/20/20 14:32							
EPA 9045D												
Soil pH (measured in H2O)	8.01			pH Units	1	8.00		100	98.75-101.25%	---	---	
pH Temperature (deg C)	20.7			pH Units	1	20.0		104	50-200%	---	---	
Reference (0010593-SRM3)			Prepared: 01/20/20 13:39		Analyzed: 01/20/20 16:41							
EPA 9045D												
Soil pH (measured in H2O)	6.02			pH Units	1	6.00		100	33333-101.666	---	---	
pH Temperature (deg C)	21.3			pH Units	1	20.0		106	50-200%	---	---	
Reference (0010593-SRM4)			Prepared: 01/20/20 13:39		Analyzed: 01/20/20 18:10							
EPA 9045D												
Soil pH (measured in H2O)	8.02			pH Units	1	8.00		100	98.75-101.25%	---	---	
pH Temperature (deg C)	21.4			pH Units	1	20.0		107	50-200%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0010801 - Flashpoint							**Oil**					
LCS (0010801-BS1)			Prepared: 01/27/20 10:08			Analyzed: 01/27/20 10:15						
EPA 1010M												
Flash Point (Ignitability)	148	---		°F	1	145	---	102	95-105%	---	---	
Duplicate (0010801-DUP1)			Prepared: 01/27/20 10:08			Analyzed: 01/27/20 16:10						
QC Source Sample: Non-SDG (A0A0774-01)												
Flash Point (Ignitability)	**102**	---	70.0	°F	1	---	100	---	---	2	10%	

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SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0010543							
A0A0539-01	Sediment	NWTPH-Dx	01/14/20 09:30	01/17/20 12:52	10.63g/5mL	10g/5mL	0.94
A0A0539-02	Sediment	NWTPH-Dx	01/14/20 10:35	01/17/20 12:52	10.49g/5mL	10g/5mL	0.95

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0010530							
A0A0539-01	Sediment	NWTPH-Gx (MS)	01/14/20 09:30	01/14/20 09:30	5.66g/5mL	5g/5mL	0.88
A0A0539-02	Sediment	NWTPH-Gx (MS)	01/14/20 10:35	01/14/20 10:35	5.45g/5mL	5g/5mL	0.92

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: 0010530							
A0A0539-01	Sediment	5035A/8260C	01/14/20 09:30	01/14/20 09:30	5.66g/5mL	5g/5mL	0.88
A0A0539-02	Sediment	5035A/8260C	01/14/20 10:35	01/14/20 10:35	5.45g/5mL	5g/5mL	0.92

Semivolatile Organic Compounds by EPA 8270D

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0010574							
A0A0539-01RE2	Sediment	EPA 8270D	01/14/20 09:30	01/20/20 10:08	15.55g/2mL	15g/2mL	0.97
A0A0539-02RE1	Sediment	EPA 8270D	01/14/20 10:35	01/20/20 10:08	15.52g/2mL	15g/2mL	0.97

Total Metals by EPA 6020A (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0010756							
A0A0539-01	Sediment	EPA 6020A	01/14/20 09:30	01/24/20 10:03	0.49g/50mL	0.5g/50mL	1.02
A0A0539-02	Sediment	EPA 6020A	01/14/20 10:35	01/24/20 10:03	0.486g/50mL	0.5g/50mL	1.03

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SAMPLE PREPARATION INFORMATION

Total Cyanide by UV Digestion/Gas Diffusion/Amperometric Detection

Prep: ASTM D7511-12mod (S)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0010568							
A0A0539-01RE1	Sediment	D7511-12	01/14/20 09:30	01/20/20 08:35	2.5145g/50mL	2.5g/50mL	0.99
A0A0539-02RE1	Sediment	D7511-12	01/14/20 10:35	01/20/20 08:35	2.5488g/50mL	2.5g/50mL	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: 0010552							
A0A0539-01	Sediment	SM 2540 G	01/14/20 09:30	01/17/20 15:30			NA
A0A0539-02	Sediment	SM 2540 G	01/14/20 10:35	01/17/20 15:30			NA

Conventional Chemistry Parameters

Prep: DI Leach

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0010593							
A0A0539-01	Sediment	EPA 9045D	01/14/20 09:30	01/20/20 13:39	20.0081g/20mL	20g/20mL	NA
A0A0539-02	Sediment	EPA 9045D	01/14/20 10:35	01/20/20 13:39	20.1158g/20mL	20g/20mL	NA

Prep: Flashpoint

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0010801							
A0A0539-01	Sediment	EPA 1010M	01/14/20 09:30	01/27/20 10:08			NA
A0A0539-02	Sediment	EPA 1010M	01/14/20 10:35	01/27/20 10:08			NA

Prep: Paint Filter

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0010775							
A0A0539-01	Sediment	EPA 9095B	01/14/20 09:30	01/24/20 13:41	100.04g/1mL	100g/1mL	NA
A0A0539-02	Sediment	EPA 9095B	01/14/20 10:35	01/24/20 13:46	100.03g/1mL	100g/1mL	NA

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6720 SW Macadam Ave. Suite 125	Project Number: **Riverbank:000029-02.64 T:(**	**Report ID:**
Portland, OR 97219	Project Manager: **Matt Wilson**	**A0A0539 - 01 31 20 0817**

QUALIFIER DEFINITIONS

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

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E	Estimated Value. The result is above the calibration range of the instrument.
F-03	The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
F-09	Results in the Gasoline Range are primarily due to overlap from a heavier fuel hydrocarbon product.
F-24	The chromatographic pattern does not resemble the fuel standard used for quantitation. The Diesel result represents carbon range C12 to C24, and the Oil result represents >C24 to C40.
H-12	Sample analysis was performed >15 minutes after sample collection. Consult regulator or permit manager to determine the usability of data for intended use.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-04	Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
Q-16	Reanalysis of an original Batch QC sample.
Q-18	Matrix Spike results for this extraction batch are not reported due to the high dilution necessary for analysis of the source sample.
Q-42	Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
R-04	Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

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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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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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LABORATORY ACCREDITATION INFORMATION

TNI 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.

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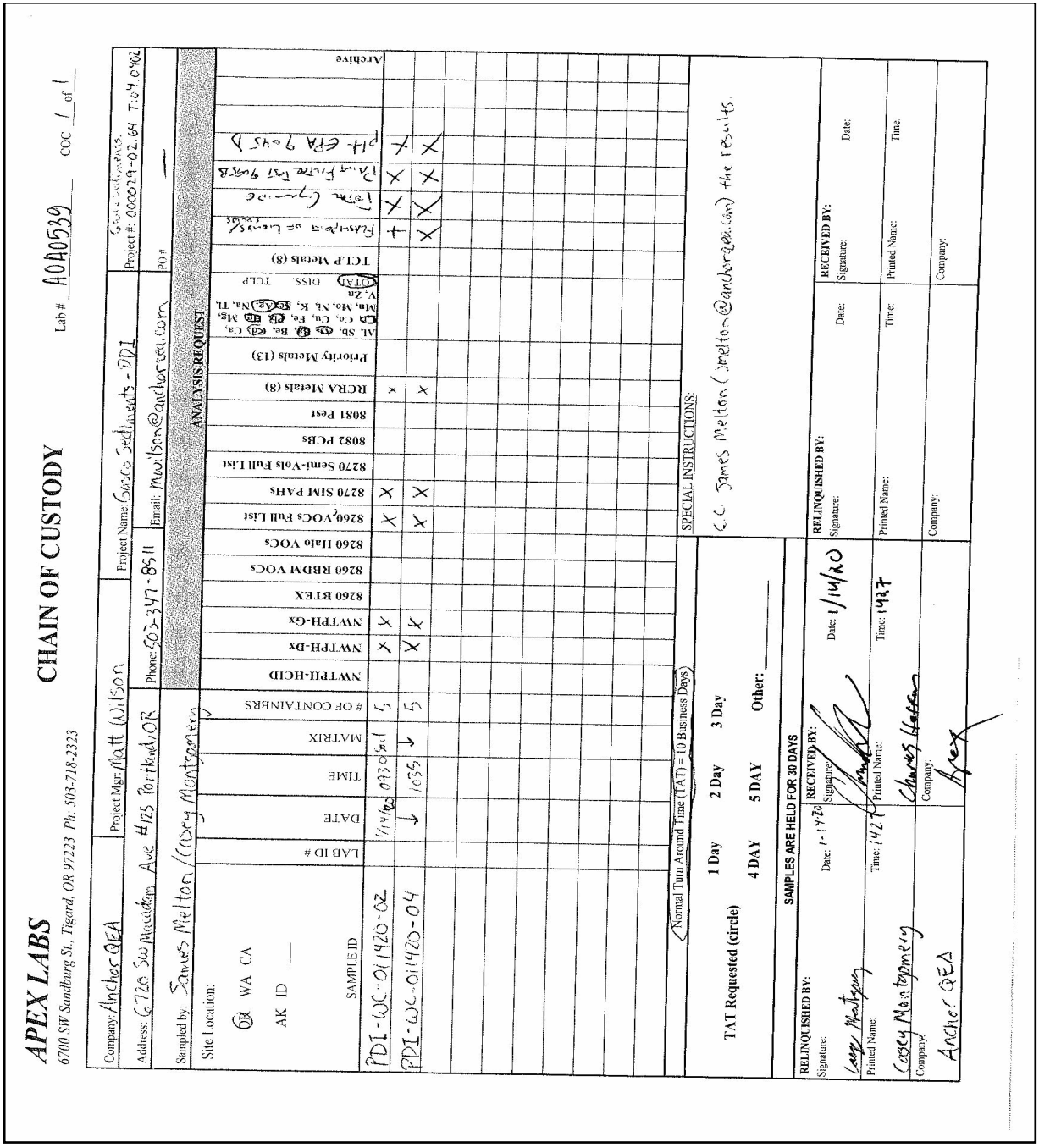

APEX LABS

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A0A0539 COC 1 of 1

Company: Anchor QEA | Project Mgr: Matt Wilson | Project Name: Gasco Sediments - PDI | Project #: 000029-02.64 T:04.0402 (Gasco Sediments)

Address: 6720 SW Macadam Ave #125 Portland, OR | Phone: 503-347-8511 | Email: mwilson@anchorqea.com | PO #: —

Sampled by: James Melton / Casey Montgomery

Site Location: OR WA CA AK ID ___

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn (TOTAL) DISS. TCLP	TCLP Metals (8)	Flashpoint of liquids/solids	Total Cyanide	Paint Filter Test 9095B	pH EPA 9045D			Archive
PDI-WC-011420-02		1/14/20	0930	Soil	5		X	X				X	X				X				+	X	X	X			
PDI-WC-011420-04		↓	1035	↓	5		X	X				X	X				X				X	X	X	X			

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: ___

SPECIAL INSTRUCTIONS: C.C. James Melton (jmelton@anchorqea.com) the results.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Casey Montgomery	Signature: [signature]	Signature:	Signature:
Date: 1-14-20	Date: 1/14/20	Date:	Date:
Printed Name: Casey Montgomery	Printed Name: Charles Hassan	Printed Name:	Printed Name:
Time: 1427	Time: 1427	Time:	Time:
Company: Anchor QEA	Company: Apex	Company:	Company:

Apex Laboratories

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APEX LABS COOLER RECEIPT FORM

Client: Anchor Element WO#: A0 A0539

Project/Project #: Gasco Sediments - PDI Gasco Sediments 000029-02.64 T:04.0402

Delivery Info:

Date/time received: 1/14/20 @ 1427 By: CF H

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

Cooler Inspection Date/time inspected: 1/14/20 @ 1530 By: CF H

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

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)	1.4						
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: 1/16/20 @ 1519 By: [illegible]

All samples intact? Yes X No Comments:

Bottle labels/COCs agree? Yes X No Comments:

COC/container discrepancies form initiated? Yes No NA X

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

Do VOA vials have visible headspace? Yes No NA X

Comments

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

Comments:

Additional information: Subsampled by: [illegible]
Witnessed by: JZ

Labeled by: [illegible] Witness: [illegible] Cooler Inspected by: NRP See Project Contact Form: Y

Apex Laboratories

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

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)

A0A0539

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 4c. Waste Characterization**	**Project Number:**	**Riverbank:000029-02.64 T:04.0402**

Report To:

Anchor QEA, LLC
Matt Wilson
6720 SW Macadam Ave. Suite 125
Portland, OR 97219
Phone: 503-347-8511
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:	01/28/20 17:00 (10 day TAT)		
Received By:	Charles F. Hoffman	Date Received:	01/14/20 14:27
Logged In By:	Susan L. Treat	Date Logged In:	01/16/20 15:53

Cooler #1 received at 1.4°C

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

A0A0539-01 PDI-WC-011420-02 [Sediment] Sampled 01/14/20 09:30
(GMT-08:00) Pacific Time (US & Canada) 6 Containers

Analysis	Due	TAT	Expires	Comments
Dry Weight				
Dry Weight	01/17/20 17:00	3	07/12/20 09:30	Use TS Results for Dry Weight
Fuels				
NWTPH-Dx (Diesel/Oil)	01/21/20 17:00	5	01/28/20 09:30	
Metals				
Metals, Select 1	01/27/20 17:00	10	07/12/20 09:30	
Project Mgmt				
Data Package	03/05/20 17:00	10	04/22/20 09:30	
Sample Control				
Archive Samples - Frozen	01/27/20 17:00	10	01/15/20 09:30	
Sample Subsampling	01/15/20 17:00	1	04/22/20 09:30	Subsampled from B to F container
Semivols (Scan)				
8270D LL Full List	01/27/20 17:00	10	01/28/20 09:30	custom
Volatiles				
8260C Full List	01/27/20 17:00	10	01/16/20 09:30	
NWTPH-Gx	01/21/20 17:00	5	01/16/20 09:30	
Wet Chem				
1010M - Flashpoint of Liquids/Soils	01/27/20 17:00	10	01/28/20 09:30	
Cyanide, Total (ASTM D7511, OIA)	01/27/20 17:00	10	01/28/20 09:30	
Paint Filter Test (9095B)	01/27/20 17:00	10	02/11/20 09:30	
pH - EPA 9045D (non-aq)	01/27/20 17:00	10	01/14/20 09:44	
Solids, Total (SM 2540 G,B)	01/27/20 17:00	10	07/12/20 09:30	Use Results for Dry Weight

A0A0539

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 4c. Waste Characterization**	**Project Number:**	**Riverbank:000029-02.64 T:04.0402**

Analysis	Due	TAT	Expires	Comments

Analysis	Due	TAT	Expires	Comments

A0A0539-02 PDI-WC-011420-04 [Sediment] Sampled 01/14/20 10:35
(GMT-08:00) Pacific Time (US & Canada) 6 Containers

Dry Weight				
Dry Weight	01/17/20 17:00	3	07/12/20 10:35	Use TS Results for Dry Weight
Fuels				
NWTPH-Dx (Diesel/Oil)	01/21/20 17:00	5	01/28/20 10:35	
Metals				
Metals, Select 1	01/27/20 17:00	10	07/12/20 10:35	
Sample Control				
Archive Samples - Frozen	01/27/20 17:00	10	01/15/20 10:35	
Sample Subsampling	01/15/20 17:00	1	04/22/20 10:35	Subsampled from B to F container
Semivols (Scan)				
8270D LL Full List	01/27/20 17:00	10	01/28/20 10:35	custom
Volatiles				
8260C Full List	01/27/20 17:00	10	01/16/20 10:35	
NWTPH-Gx	01/21/20 17:00	5	01/16/20 10:35	
Wet Chem				
1010M - Flashpoint of Liquids/Soils	01/27/20 17:00	10	01/28/20 10:35	
Cyanide, Total (ASTM D7511, OIA)	01/27/20 17:00	10	01/28/20 10:35	
Paint Filter Test (9095B)	01/27/20 17:00	10	02/11/20 10:35	
pH - EPA 9045D (non-aq)	01/27/20 17:00	10	01/14/20 10:49	
Solids, Total (SM 2540 G,B)	01/27/20 17:00	10	07/12/20 10:35	Use Results for Dry Weight

Analysis groups included in this work order

Metals, Select 1

Ag (Silver) - 6020 - Total	As (Arsenic) - 6020 - Total	Ba (Barium) - 6020 - Total	Cd (Cadmium) - 6020 - Total
Cr (Chromium) - 6020 - Total	Hg (Mercury) - 6020 - Total	Pb (Lead) - 6020 - Total	Se (Selenium) - 6020 - Total

Reviewed By

Date

APEX LABS

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A0A0539 COC 1 of 1

Company: Anchor QEA	Project Mgr: Matt Wilson	Project Name: Gasco Sediments - PDI	Project #: 000029-02.64 T:04.0402
Address: 6720 SW Macadam Ave #125 Portland, OR	Phone: 503-347-8511	Email: mwilson@anchorqea.com	PO # —
Sampled by: James Melton / Casey Montgomery			

Site Location: OR WA CA AK ID ____

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Se, Na, Tl, V, Zn DISS. TOTAL TCLP	TCLP Metals (8)	Filter Prep of Lead/Cyanide	Total Cyanide	Plant Filter Prep 9045	pH- EPA 9045 D			Archive
PDI-WC-011420-02		1/14/20	0930	Soil	5		X	X				X	X				X				+	X	X	X			
PDI-WC-011420-04		↓	1035	↓	5		X	X				X	X				X				X	X	X	X			

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle) 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: ____

SPECIAL INSTRUCTIONS:

C.C. James Melton (jmelton@anchorqea.com) the results.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Casey Montgomery	Signature:	Signature:	Signature:
Date: 1-14-20	Date: 1/14/20	Date:	Date:
Printed Name: Casey Montgomery	Printed Name: Charles Hatem	Printed Name:	Printed Name:
Time: 1427	Time: 1427	Time:	Time:
Company: Anchor QEA	Company: Apex	Company:	Company:

APEX LABS COOLER RECEIPT FORM

Client: Anchor Element WO#: A0 A0539

Project/Project #: Gasco Sediments - PDI Gasco Sediments 000029-02.64 T:04.0402

Delivery Info:

Date/time received: 1/14/20 @ 1427 By: CFH

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

Cooler Inspection Date/time inspected: 1/14/20 @ 1530 By: CFH

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

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)	1.4						
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: 1/16/20 @ 1519 By: ___

All samples intact? Yes X No ___ Comments: ___

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

COC/container discrepancies form initiated? Yes ___ No ___ NA X

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

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

Comments ___

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

Comments: ___

Additional information: Subsampled by:
Witnessed by:

Labeled by: Witness: Cooler Inspected by: NRP 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: GC

METHOD: NWTPH-Dx

ANALYSES DATA PACKAGE COVER PAGE

NWTPH-Dx

Laboratory: Apex Laboratories
SDG: Gasco PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco PreRD_DG 2019 - 4c. Waste Characterization

Client Sample Id:	Lab Sample Id:	Matrix
PDI-WC-011420-02	A0A0539-01	Sediment
PDI-WC-011420-04	A0A0539-02	Sediment

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: 2/19/2020 12:29PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

NWTPH-Dx

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Diesel	10.0	20.0	mg/kg
Oil	20.0	40.0	mg/kg

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

ORGANIC ANALYSIS DATA SHEET

NWTPH-Dx

PDI-WC-011420-02

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-01	File ID:	4R011724.D
Sampled:	01/14/20 09:30	Prepared:	01/17/20 12:52	Analyzed:	01/18/20 01:57
Solids:	78.60	Preparation:	EPA 3546_(Fuels)	Initial/Final:	10.63 g / 5 mL
Batch:	0010543	Sequence:	0A17024	Calibration:	A0A1404
Instrument:	DUALFID4R				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
68334-30-5	Diesel	1	427	
Oil	Oil	1	304	

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	29.9	31.4	105	50 - 150	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

NWTPH-Dx

PDI-WC-011420-04

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-02	File ID:	4R011725.D
Sampled:	01/14/20 10:35	Prepared:	01/17/20 12:52	Analyzed:	01/18/20 02:19
Solids:	81.70	Preparation:	EPA 3546 (Fuels)	Initial/Final:	10.49 g / 5 mL
Batch:	0010543	Sequence:	0A17024	Calibration:	A0A1404
Instrument:	DUALFID4R				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
68334-30-5	Diesel	1	222	
Oil	Oil	1	218	

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	29.2	29.4	101	50 - 150	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

NWTPH-Dx

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Batch: 0010543 Batch Matrix: Sediment Preparation: EPA 3546 (Fuels)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	0010543-BLK1	4R011719.D	01/17/20 12:52	
LCS	0010543-BS1	4R011720.D	01/17/20 12:52	
PDI-WC-011420-02	A0A0539-01	4R011724.D	01/17/20 12:52	
PDI-WC-011420-04	A0A0539-02	4R011725.D	01/17/20 12:52	

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
NWTPH-Dx

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	0010543-BLK1	File ID:	4R011719.D
Prepared:	01/17/20 12:52	Preparation:	EPA 3546_(Fuels)	Initial/Final:	11 g / 5 mL
Analyzed:	01/18/20 00:09	Instrument:	DUALFID4R		
Batch:	0010543	Sequence:	0A17024	Calibration:	A0A1404

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
68334-30-5	Diesel	9.09	U
Oil	Oil	18.2	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg wet)	CONC (mg/kg wet)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	22.7	24.6	108	50 - 150	

LCS / LCS DUPLICATE RECOVERY

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment		
Batch:	0010543	Laboratory ID:	0010543-BS1
Preparation:	EPA 3546 (Fuels)	Initial/Final:	10 g / 5 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Diesel	125	123	99	76 - 115

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A13043	Instrument:	DUALFID4R
Matrix:	Sediment	Calibration:	A0A1404

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Blank	0A13043-ICB1	4R011303.D	01/13/20 17:46
Cal Standard	0A13043-CAL1	4R011304.D	01/13/20 18:08
Cal Standard	0A13043-CAL2	4R011305.D	01/13/20 18:29
Cal Standard	0A13043-CAL3	4R011306.D	01/13/20 21:14
Cal Standard	0A13043-CAL4	4R011307.D	01/13/20 21:34
Cal Standard	0A13043-CAL5	4R011308.D	01/13/20 21:55
Cal Standard	0A13043-CAL6	4R011309.D	01/13/20 22:16
Cal Standard	0A13043-CAL7	4R011311.D	01/13/20 22:57
Initial Cal Check	0A13043-ICV1	4R011313.D	01/13/20 23:39

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

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A17024	Instrument:	DUALFID4R
Matrix:	Sediment	Calibration:	A0A1404

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0A17024-CCV1	4R011703.D	01/17/20 16:40
Calibration Check	0A17024-CCV2	4R011704.D	01/17/20 17:02
Calibration Blank	0A17024-CCB1	4R011705.D	01/17/20 17:24
Blank	0010543-BLK1	4R011719.D	01/18/20 00:09
LCS	0010543-BS1	4R011720.D	01/18/20 00:30
PDI-WC-011420-02	A0A0539-01	4R011724.D	01/18/20 01:57
PDI-WC-011420-04	A0A0539-02	4R011725.D	01/18/20 02:19
Calibration Check	0A17024-CCV3	4R011727.D	01/18/20 03:02
Calibration Check	0A17024-CCV4	4R011728.D	01/18/20 03:24

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

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	9K13038	Instrument:	DUALFID4R
Matrix:	Sediment	Calibration:	A0A1404

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Blank	9K13038-ICB1	4R111304.D	11/13/19 10:59
Cal Standard	9K13038-CAL1	4R111305.D	11/13/19 11:21
Cal Standard	9K13038-CAL2	4R111306.D	11/13/19 11:41
Cal Standard	9K13038-CAL3	4R111307.D	11/13/19 12:01
Cal Standard	9K13038-CAL4	4R111308.D	11/13/19 12:22
Cal Standard	9K13038-CAL5	4R111309.D	11/13/19 12:43
Cal Standard	9K13038-CAL6	4R111310.D	11/13/19 13:04
Cal Standard	9K13038-CAL7	4R111311.D	11/13/19 13:26
Cal Standard	9K13038-CAL8	4R111312.D	11/13/19 13:47
Cal Standard	9K13038-CAL9	4R111313.D	11/13/19 14:09
Cal Standard	9K13038-CALA	4R111314.D	11/13/19 14:30
Cal Standard	9K13038-CALB	4R111315.D	11/13/19 14:52
Cal Standard	9K13038-CALC	4R111316.D	11/13/19 15:12
Cal Standard	9K13038-CALD	4R111317.D	11/13/19 15:34
Initial Cal Check	9K13038-ICV1	4R111327.D	11/13/19 19:05
Initial Cal Check	9K13038-ICV2	4R111328.D	11/13/19 19:25

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.

INITIAL CALIBRATION DATA (Summary)

NWTPH-Dx

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatic

Calibration: A0A1404 Date: 01/14/20 10:12 Instrument: DUALFID4R

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Diesel	1104087	Ave	2.564338	6	0			15	
Oil	1143811	Ave	2.739513	9	0			15	
o-Terphenyl (Surr)	1227156	Ave	2.674881	6.382	7.327287E-02			15	

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

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration:	A0A1404	Instrument:	DUALFID4R
		Calibration Date:	01/14/20 10:12

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Diesel	25	1137106	40	1149979	100	1078911	250	1080042	500	1071981	1000	1114900
Diesel Range Organics (C12-C24)	25	1137106	40	1149979	100	1078911	250	1080042	500	1071981	1000	1114900

INITIAL CALIBRATION DATA (Continued)

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration:	A0A1404	Instrument:	DUALFID4R
Matrix:		Calibration Date:	01/14/20 10:12

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Diesel	2500	1103046	5000	1096733								
Diesel Range Organics (C12-C24)	2500	1103046	5000	1096733								
o-Terphenyl (Surr)					10	1214393	25	1205156	50	1273050	100	1248929

INITIAL CALIBRATION DATA (Continued)

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration:	A0A1404	Instrument:	DUALFID4R
Matrix:		Calibration Date:	01/14/20 10:12

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Oil			40	1177600	80	1120319	250	1147093	500	1092737	1000	1129123
o-Terphenyl (Surr)	200	1194253										
Residual Range Organics (>C24-C			40	1177600	80	1120319	250	1147093	500	1092737	1000	1129123

SECOND-SOURCE CALIBRATION VERIFICATION

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Charac
Instrument ID:	DUALFID4R	Calibration:	A0A1404
Lab File ID:	4R011313.D		
Sequence:	0A13043	Inject Date:	01/13/20
Lab Sample ID:	0A13043-ICV1	Inject Time:	23:39

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Oil	1000	887	-11.3	85 - 115

SECOND-SOURCE CALIBRATION VERIFICATION

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Charac
Instrument ID:	DUALFID4R	Calibration:	A0A1404
Lab File ID:	4R111327.D		
Sequence:	9K13038	Inject Date:	11/13/19
Lab Sample ID:	9K13038-ICV1	Inject Time:	19:05

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Diesel	1000	963	-3.7	85 - 115

SECOND-SOURCE CALIBRATION VERIFICATION

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Charac
Instrument ID:	DUALFID4R	Calibration:	A0A1404
Lab File ID:	4R111328.D		
Sequence:	9K13038	Inject Date:	11/13/19
Lab Sample ID:	9K13038-ICV2	Inject Time:	19:25

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Oil	1000	893	-10.7	85 - 115

CONTINUING CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID:	DUALFID4R	Calibration:	A0A1404
Lab File ID:	4R011703.D	Calibration Date:	01/14/20 10:12
Sequence:	0A17024	Injection Date:	01/17/20
Lab Sample ID:	0A17024-CCV1	Injection Time:	16:40

COMPOUND	Curve Fit	Calculated Concentration (ug/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Oil	Ave	500	466		1143811	1066440	-6.8	15

** Quadratic Curve fit may be weighted (1/a or 1/a2).

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID:	DUALFID4R	Calibration:	A0A1404
Lab File ID:	4R011704.D	Calibration Date:	01/14/20 10:12
Sequence:	0A17024	Injection Date:	01/17/20
Lab Sample ID:	0A17024-CCV2	Injection Time:	17:02

COMPOUND	Curve Fit	Calculated Concentration (ug/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Diesel	Ave	1000	1000		1104087	1105766	0.2	15

** Quadratic Curve fit may be weighted (1/a or 1/a2).

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID:	DUALFID4R	Calibration:	A0A1404
Lab File ID:	4R011727.D	Calibration Date:	01/14/20 10:12
Sequence:	0A17024	Injection Date:	01/18/20
Lab Sample ID:	0A17024-CCV3	Injection Time:	03:02

COMPOUND	Curve Fit	Calculated Concentration (ug/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Diesel	Ave	1000	1010		1104087	1113527	0.9	15

** Quadratic Curve fit may be weighted (1/a or 1/a2).

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID:	DUALFID4R	Calibration:	A0A1404
Lab File ID:	4R011728.D	Calibration Date:	01/14/20 10:12
Sequence:	0A17024	Injection Date:	01/18/20
Lab Sample ID:	0A17024-CCV4	Injection Time:	03:24

COMPOUND	Curve Fit	Calculated Concentration (ug/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Oil	Ave	500	489		1143811	1119766	-2.1	15

** Quadratic Curve fit may be weighted (1/a or 1/a2).

* = Values outside of QC limits

SURROGATE STANDARD RECOVERY AND RT SUMMARY

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A17024	Instrument:	DUALFID4R
Matrix:	Sediment	Calibration:	A0A1404

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (0A17024-CCV1)			Lab File ID: 4R011703.D		Analyzed: 01/17/20 16:40			
o-Terphenyl (Surr)	50.0	106	80 - 120	6.35	6.382	-0.0320	+/-1.0	
Calibration Check (0A17024-CCV2)			Lab File ID: 4R011704.D		Analyzed: 01/17/20 17:02			
o-Terphenyl (Surr)	50.0	110	80 - 120	6.35	6.382	-0.0320	+/-1.0	
Calibration Blank (0A17024-CCB1)			Lab File ID: 4R011705.D		Analyzed: 01/17/20 17:24			
o-Terphenyl (Surr)			50 - 150	0	6.382	-6.3820	+/-1.0	
Blank (0010543-BLK1)			Lab File ID: 4R011719.D		Analyzed: 01/18/20 00:09			
o-Terphenyl (Surr)	22.7	108	50 - 150	6.34	6.382	-0.0420	+/-1.0	
LCS (0010543-BS1)			Lab File ID: 4R011720.D		Analyzed: 01/18/20 00:30			
o-Terphenyl (Surr)	25.0	110	50 - 150	6.35	6.382	-0.0320	+/-1.0	
PDI-WC-011420-02 (A0A0539-01)			Lab File ID: 4R011724.D		Analyzed: 01/18/20 01:57			
o-Terphenyl (Surr)	29.9	105	50 - 150	6.34	6.382	-0.0420	+/-1.0	
PDI-WC-011420-04 (A0A0539-02)			Lab File ID: 4R011725.D		Analyzed: 01/18/20 02:19			
o-Terphenyl (Surr)	29.2	101	50 - 150	6.34	6.382	-0.0420	+/-1.0	
Calibration Check (0A17024-CCV3)			Lab File ID: 4R011727.D		Analyzed: 01/18/20 03:02			
o-Terphenyl (Surr)	50.0	111	80 - 120	6.34	6.382	-0.0420	+/-1.0	
Calibration Check (0A17024-CCV4)			Lab File ID: 4R011728.D		Analyzed: 01/18/20 03:24			
o-Terphenyl (Surr)	50.0	108	80 - 120	6.34	6.382	-0.0420	+/-1.0	

HOLDING TIME SUMMARY

NWTPH-Dx

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatior

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-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/17/20 12:52	3.14	14.00	01/18/20 01:57	0.55	40.00	
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/17/20 12:52	3.10	14.00	01/18/20 02:19	0.56	40.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: GCMS

METHOD: NWTPH-Gx (MS)

ANALYSES DATA PACKAGE COVER PAGE

NWTPH-Gx (MS)

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019

Project: Gasco PreRD_DG 2019 - 4c. Waste Characterization

Client Sample Id:	Lab Sample Id:	Matrix
PDI-WC-011420-02	A0A0539-01	Sediment
PDI-WC-011420-04	A0A0539-02	Sediment

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: 2/19/2020 12:29PM

Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

NWTPH-Gx (MS)

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Gasoline Range Organics	2.50	5.00	mg/kg

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

ORGANIC ANALYSIS DATA SHEET

NWTPH-Gx (MS)

PDI-WC-011420-02

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-01	File ID:	VJ20011707.D
Sampled:	01/14/20 09:30	Prepared:	01/14/20 09:30	Analyzed:	01/17/20 12:12
Solids:	78.60	Preparation:	EPA 5035A	Initial/Final:	5.66 g / 5 mL
Batch:	0010530	Sequence:	0A17017	Calibration:	A0A0801
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
8006-61-9	Gasoline Range Organics	50	14.1	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
4-Bromofluorobenzene (Sur)	50.0	55.2	110	50 - 150	
1,4-Difluorobenzene (Sur)	50.0	48.3	97	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	178483	6.083	200193	6.083	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

NWTPH-Gx (MS)

PDI-WC-011420-04

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-02	File ID:	VJ20011712.D
Sampled:	01/14/20 10:35	Prepared:	01/14/20 10:35	Analyzed:	01/17/20 14:26
Solids:	81.70	Preparation:	EPA 5035A	Initial/Final:	5.45 g / 5 mL
Batch:	0010530	Sequence:	0A17017	Calibration:	A0A0801
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
8006-61-9	Gasoline Range Organics	50	45.8	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
4-Bromofluorobenzene (Sur)	50.0	56.6	113	50 - 150	
1,4-Difluorobenzene (Sur)	50.0	48.6	97	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	208609	6.083	200193	6.083	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

NWTPH-Gx (MS)

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Batch: 0010530 Batch Matrix: Soil Preparation: EPA 5035A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	0010530-BLK1	VJ20011705.D	01/16/20 09:00	
LCS	0010530-BS2	VJ20011704.D	01/16/20 09:00	
PDI-WC-011420-02 (Dup)	0010530-DUP1	VJ20011708.D	01/14/20 09:30	
PDI-WC-011420-02	A0A0539-01	VJ20011707.D	01/14/20 09:30	
PDI-WC-011420-04	A0A0539-02	VJ20011712.D	01/14/20 10:35	

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.

METHOD BLANK DATA SHEET
NWTPH-Gx (MS)

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Soil	Laboratory ID:	0010530-BLK1	File ID:	VJ20011705.D
Prepared:	01/16/20 09:00	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	01/17/20 11:18	Instrument:	VOA-GCMS10		
Batch:	0010530	Sequence:	0A17017	Calibration:	A0A0801

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
8006-61-9	Gasoline Range Organics	1.67	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
4-Bromofluorobenzene (Sur)	50.0	50.0	100	50 - 150	
1,4-Difluorobenzene (Sur)	50.0	48.3	97	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	180685	6.089	200193	6.083	

LCS / LCS DUPLICATE RECOVERY

NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Soil		
Batch:	0010530	Laboratory ID:	0010530-BS2
Preparation:	EPA 5035A	Initial/Final:	5 g / 5 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Gasoline Range Organics	25.0	21.6	86	80 - 120

* = Values outside of QC limits

DUPLICATES

PDI-WC-011420-02

NWTPH-Gx (MS)

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Charact
Matrix: Soil
Laboratory ID: 0010530-DUP1
Batch: 0010530
Lab Source ID: A0A0539-01
Preparation: EPA 5035A
Initial/Final: 5.42 g / 5 mL
Source Sample Name: PDI-WC-011420-02
% Solids: 78.60

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/kg dry)	C	DUPLICATE CONCENTRATION (mg/kg dry)	C	RPD %	Q	METHOD
Gasoline Range Organics	30	14.1		32.8		80	*	NWTPH-Gx (MS)

* Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY
NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A06051	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0A0801

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0A06051-TUN2	VJ20010631.D	01/07/20 00:49
Initial Cal Blank	0A06051-ICB2	VJ20010633.D	01/07/20 01:43
Cal Standard	0A06051-CALC	VJ20010634.D	01/07/20 02:09
Cal Standard	0A06051-CALD	VJ20010635.D	01/07/20 02:36
Cal Standard	0A06051-CALE	VJ20010636.D	01/07/20 03:03
Cal Standard	0A06051-CALF	VJ20010637.D	01/07/20 03:30
Cal Standard	0A06051-CALG	VJ20010638.D	01/07/20 03:57
Cal Standard	0A06051-CALH	VJ20010639.D	01/07/20 04:24
Cal Standard	0A06051-CALI	VJ20010640.D	01/07/20 04:50
Cal Standard	0A06051-CALJ	VJ20010641.D	01/07/20 05:17
Initial Cal Check	0A06051-ICV2	VJ20010644.D	01/07/20 06:38

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
NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A17017	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0A0801

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0A17017-TUN1	VJ20011702.D	01/17/20 09:57
Calibration Check	0A17017-CCV2	VJ20011704.D	01/17/20 10:51
Blank	0010530-BLK1	VJ20011705.D	01/17/20 11:18
PDI-WC-011420-02	A0A0539-01	VJ20011707.D	01/17/20 12:12
PDI-WC-011420-02 (Dup)	0010530-DUP1	VJ20011708.D	01/17/20 12:39
PDI-WC-011420-04	A0A0539-02	VJ20011712.D	01/17/20 14:26

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

NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Lab File ID:	VJ20010631.D	Injection Date:	01/07/20
Instrument ID:	VOA-GCMS10	Injection Time:	00:49
Sequence:	0A06051	Lab Sample ID:	0A06051-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	126.39	PASS
m/z 96	5 - 9% of m/z 95	7.08	PASS
m/z 173	Less than 2% of m/z 174	0.25	PASS
m/z 174	50 - 200% of m/z 95	79.12	PASS
m/z 175	5 - 9% of m/z 174	7.23	PASS
m/z 176	95 - 105% of m/z 174	95.64	PASS
m/z 177	5 - 10% of m/z 176	6.77	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Lab File ID:	VJ20011702.D	Injection Date:	01/17/20
Instrument ID:	VOA-GCMS10	Injection Time:	09:57
Sequence:	0A17017	Lab Sample ID:	0A17017-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	113.86	PASS
m/z 96	5 - 9% of m/z 95	6.88	PASS
m/z 173	Less than 2% of m/z 174	0.20	PASS
m/z 174	50 - 200% of m/z 95	87.82	PASS
m/z 175	5 - 9% of m/z 174	7.04	PASS
m/z 176	95 - 105% of m/z 174	95.84	PASS
m/z 177	5 - 10% of m/z 176	6.48	PASS

INITIAL CALIBRATION DATA (Summary)

NWTPH-Gx (MS)

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatic

Calibration: A0A0801 Date: 01/08/20 11:26 Instrument: VOA-GCMS10

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Gasoline Range Organics	1.748652	XXX	12.2162	8.739	1.633768E-02				
4-Bromofluorobenzene (Sur)	0.4735402	Ave	2.286728	10.877	1.376355E-02			15	
1,4-Difluorobenzene (Sur)	1.612062	Ave	0.8678896	6.649	1.915463E-02			15	

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 (Continued)

NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration:	A0A0801	Instrument:	VOA-GCMS10
Matrix:		Calibration Date:	01/08/20 11:26

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Gasoline Range Organics											50	1.481937
4-Bromofluorobenzene (Sur)											50	0.4736368
1,4-Difluorobenzene (Sur)											50	1.640526

INITIAL CALIBRATION DATA (Continued)

NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration:	A0A0801	Instrument:	VOA-GCMS10
Matrix:		Calibration Date:	01/08/20 11:26

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Gasoline Range Organics	100	1.481521	250	1.618085	500	1.712535	1000	1.780479	2500	2.021365	5000	1.897684
4-Bromofluorobenzene (Sur)	50	0.4555764	50	0.4701137	50	0.4673544	50	0.4673519	50	0.4812414	50	0.4891079
1,4-Difluorobenzene (Sur)	50	1.608711	50	1.622244	50	1.616216	50	1.606832	50	1.601055	50	1.602716

SECOND-SOURCE CALIBRATION VERIFICATION

NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Charac
Instrument ID:	VOA-GCMS10	Calibration:	A0A0801
Lab File ID:	VJ20010644.D		
Sequence:	0A06051	Inject Date:	01/07/20
Lab Sample ID:	0A06051-ICV2	Inject Time:	06:38

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Gasoline Range Organics	500	443	-11.3	70 - 130

SURROGATE STANDARD RECOVERY AND RT SUMMARY

NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A06051	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0A0801

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (0A06051-ICV2)				Lab File ID: VJ20010644.D		Analyzed: 01/07/20 06:38		
4-Bromofluorobenzene (Sur)	50.0	97	0 - 200	10.877	10.877	0.0000	+/-1.0	
1,4-Difluorobenzene (Sur)	50.0	99	0 - 200	6.643	6.649	-0.0060	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A17017	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0A0801

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
LCS (0010530-BS2)			Lab File ID: VJ20011704.D		Analyzed: 01/17/20 10:51			
4-Bromofluorobenzene (Sur)	50.0	101	50 - 150	10.871	10.877	-0.0060	+/-1.0	
1,4-Difluorobenzene (Sur)	50.0	96	50 - 150	6.643	6.649	-0.0060	+/-1.0	
Blank (0010530-BLK1)			Lab File ID: VJ20011705.D		Analyzed: 01/17/20 11:18			
4-Bromofluorobenzene (Sur)	50.0	100	50 - 150	10.877	10.877	0.0000	+/-1.0	
1,4-Difluorobenzene (Sur)	50.0	97	50 - 150	6.649	6.649	0.0000	+/-1.0	
PDI-WC-011420-02 (A0A0539-01)			Lab File ID: VJ20011707.D		Analyzed: 01/17/20 12:12			
4-Bromofluorobenzene (Sur)	50.0	110	50 - 150	10.871	10.877	-0.0060	+/-1.0	
1,4-Difluorobenzene (Sur)	50.0	97	50 - 150	6.649	6.649	0.0000	+/-1.0	
Duplicate (0010530-DUP1)			Lab File ID: VJ20011708.D		Analyzed: 01/17/20 12:39			
4-Bromofluorobenzene (Sur)	50.0	114	50 - 150	10.877	10.877	0.0000	+/-1.0	
1,4-Difluorobenzene (Sur)	50.0	97	50 - 150	6.649	6.649	0.0000	+/-1.0	
PDI-WC-011420-04 (A0A0539-02)			Lab File ID: VJ20011712.D		Analyzed: 01/17/20 14:26			
4-Bromofluorobenzene (Sur)	50.0	113	50 - 150	10.871	10.877	-0.0060	+/-1.0	
1,4-Difluorobenzene (Sur)	50.0	97	50 - 150	6.643	6.649	-0.0060	+/-1.0	

INTERNAL STANDARD AREA AND RT SUMMARY
NWTPH-Gx (MS)

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A17017	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0A0801

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (0010530-BS2)			Lab File ID: VJ20011704.D			Analyzed: 01/17/20 10:51			
Pentafluorobenzene (IS)	200193	6.083	200193	6.083	100	50 - 200	0.0000	+/-0.50	
Calibration Check (0A17017-CCV2)			Lab File ID: VJ20011704.D			Analyzed: 01/17/20 10:51			
Pentafluorobenzene (IS)	200193	6.083	192629	6.089	104	50 - 200	-0.0060	+/-0.50	
Blank (0010530-BLK1)			Lab File ID: VJ20011705.D			Analyzed: 01/17/20 11:18			
Pentafluorobenzene (IS)	180685	6.089	200193	6.083	90	50 - 200	0.0060	+/-0.50	
PDI-WC-011420-02 (A0A0539-01)			Lab File ID: VJ20011707.D			Analyzed: 01/17/20 12:12			
Pentafluorobenzene (IS)	178483	6.083	200193	6.083	89	50 - 200	0.0000	+/-0.50	
Duplicate (0010530-DUP1)			Lab File ID: VJ20011708.D			Analyzed: 01/17/20 12:39			
Pentafluorobenzene (IS)	203825	6.089	200193	6.083	102	50 - 200	0.0060	+/-0.50	
PDI-WC-011420-04 (A0A0539-02)			Lab File ID: VJ20011712.D			Analyzed: 01/17/20 14:26			
Pentafluorobenzene (IS)	208609	6.083	200193	6.083	104	50 - 200	0.0000	+/-0.50	

HOLDING TIME SUMMARY

NWTPH-Gx (MS)

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatior

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-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/14/20 09:30	0.00	2.00	01/17/20 12:12	3.11	14.00	
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/14/20 10:35	0.00	2.00	01/17/20 14:26	3.16	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 - 4c. Waste Characterization

Client Sample Id:	Lab Sample Id:	Matrix
PDI-WC-011420-02	A0A0539-01	Sediment
PDI-WC-011420-04	A0A0539-02	Sediment

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: 2/19/2020 12:29PM
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 - 4c. Waste Charac

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Acetone	500	1000	ug/kg
Acrylonitrile	50.0	100	ug/kg
Benzene	5.00	10.0	ug/kg
Bromobenzene	12.5	25.0	ug/kg
Bromochloromethane	25.0	50.0	ug/kg
Bromodichloromethane	25.0	50.0	ug/kg
Bromoform	50.0	100	ug/kg
Bromomethane	500	500	ug/kg
2-Butanone (MEK)	250	500	ug/kg
n-Butylbenzene	25.0	50.0	ug/kg
sec-Butylbenzene	25.0	50.0	ug/kg
tert-Butylbenzene	25.0	50.0	ug/kg
Carbon tetrachloride	25.0	50.0	ug/kg
Chlorobenzene	12.5	25.0	ug/kg
Chloroethane	250	500	ug/kg
Chloroform	25.0	50.0	ug/kg
Chloromethane	125	250	ug/kg
2-Chlorotoluene	25.0	50.0	ug/kg
4-Chlorotoluene	25.0	50.0	ug/kg
Dibromochloromethane	50.0	100	ug/kg
1,2-Dibromo-3-chloropropane	125	250	ug/kg
1,2-Dibromoethane (EDB)	25.0	50.0	ug/kg
Dibromomethane	25.0	50.0	ug/kg
1,2-Dichlorobenzene	12.5	25.0	ug/kg
1,3-Dichlorobenzene	12.5	25.0	ug/kg
1,4-Dichlorobenzene	12.5	25.0	ug/kg
Dichlorodifluoromethane	50.0	100	ug/kg
1,1-Dichloroethane	12.5	25.0	ug/kg
1,2-Dichloroethane (EDC)	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
trans-1,2-Dichloroethene	12.5	25.0	ug/kg
1,2-Dichloropropane	12.5	25.0	ug/kg
1,3-Dichloropropane	25.0	50.0	ug/kg
2,2-Dichloropropane	25.0	50.0	ug/kg
1,1-Dichloropropene	25.0	50.0	ug/kg
trans-1,3-Dichloropropene	25.0	50.0	ug/kg

METHOD DETECTION AND REPORTING LIMITS

5035A/8260C

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

Client: Anchor QEA, LLC **Project:** Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Ethylbenzene	12.5	25.0	ug/kg
Hexachlorobutadiene	50.0	100	ug/kg
2-Hexanone	250	500	ug/kg
Methylene chloride	250	500	ug/kg
4-Methyl-2-pentanone (MiBK)	250	500	ug/kg
Methyl tert-butyl ether (MTBE)	25.0	50.0	ug/kg
Naphthalene	50.0	100	ug/kg
n-Propylbenzene	12.5	25.0	ug/kg
Styrene	25.0	50.0	ug/kg
1,1,1,2-Tetrachloroethane	12.5	25.0	ug/kg
1,1,2,2-Tetrachloroethane	25.0	50.0	ug/kg
Tetrachloroethene (PCE)	12.5	25.0	ug/kg
Toluene	25.0	50.0	ug/kg
1,2,3-Trichlorobenzene	125	250	ug/kg
1,2,4-Trichlorobenzene	125	250	ug/kg
1,1,1-Trichloroethane	12.5	25.0	ug/kg
1,1,2-Trichloroethane	12.5	25.0	ug/kg
Trichloroethene (TCE)	12.5	25.0	ug/kg
Trichlorofluoromethane	50.0	100	ug/kg
1,2,3-Trichloropropane	25.0	50.0	ug/kg
1,2,4-Trimethylbenzene	25.0	50.0	ug/kg
1,3,5-Trimethylbenzene	25.0	50.0	ug/kg
Vinyl chloride	12.5	25.0	ug/kg
m,p-Xylene	25.0	50.0	ug/kg
o-Xylene	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-WC-011420-02

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-01	File ID:	VJ20011707.D
Sampled:	01/14/20 09:30	Prepared:	01/14/20 09:30	Analyzed:	01/17/20 12:12
Solids:	78.60	Preparation:	EPA 5035A	Initial/Final:	5.66 g / 5 mL
Batch:	0010530	Sequence:	0A17017	Calibration:	A0A0801
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-43-2	Benzene	50	6.98	U
78-93-3	2-Butanone (MEK)	50	349	U
56-23-5	Carbon tetrachloride	50	34.9	U
108-90-7	Chlorobenzene	50	17.5	U
67-66-3	Chloroform	50	34.9	U
106-46-7	1,4-Dichlorobenzene	50	17.5	U
107-06-2	1,2-Dichloroethane (EDC)	50	17.5	U
75-35-4	1,1-Dichloroethene	50	17.5	U
156-59-2	cis-1,2-Dichloroethene	50	17.5	U
156-60-5	trans-1,2-Dichloroethene	50	17.5	U
100-41-4	Ethylbenzene	50	17.5	U
127-18-4	Tetrachloroethene (PCE)	50	17.5	U
108-88-3	Toluene	50	34.9	U
79-01-6	Trichloroethene (TCE)	50	17.5	U
75-01-4	Vinyl chloride	50	17.5	U
179601-23-1	m,p-Xylene	50	34.9	U
95-47-6	o-Xylene	50	17.5	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	51.1	102	80 - 120	
Toluene-d8 (Surr)	50.0	47.6	95	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	51.5	103	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	92795	6.083	99045	6.083	
Chlorobenzene-d5 (ISTD)	239801	9.8	249894	9.8	
1,4-Dichlorobenzene-d4 (ISTD)	117501	11.759	123313	11.759	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

5035A/8260C

PDI-WC-011420-04

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-02	File ID:	VJ20011712.D
Sampled:	01/14/20 10:35	Prepared:	01/14/20 10:35	Analyzed:	01/17/20 14:26
Solids:	81.70	Preparation:	EPA 5035A	Initial/Final:	5.45 g / 5 mL
Batch:	0010530	Sequence:	0A17017	Calibration:	A0A0801
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-43-2	Benzene	50	7.00	J
78-93-3	2-Butanone (MEK)	50	337	U
56-23-5	Carbon tetrachloride	50	33.7	U
108-90-7	Chlorobenzene	50	16.8	U
67-66-3	Chloroform	50	33.7	U
106-46-7	1,4-Dichlorobenzene	50	16.8	U
107-06-2	1,2-Dichloroethane (EDC)	50	16.8	U
75-35-4	1,1-Dichloroethene	50	16.8	U
156-59-2	cis-1,2-Dichloroethene	50	16.8	U
156-60-5	trans-1,2-Dichloroethene	50	16.8	U
100-41-4	Ethylbenzene	50	16.8	U
127-18-4	Tetrachloroethene (PCE)	50	506	
108-88-3	Toluene	50	33.7	U
79-01-6	Trichloroethene (TCE)	50	70.3	
75-01-4	Vinyl chloride	50	16.8	U
179601-23-1	m,p-Xylene	50	33.7	U
95-47-6	o-Xylene	50	16.8	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	53.5	107	80 - 120	
Toluene-d8 (Surr)	50.0	46.8	94	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	52.2	104	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	104693	6.083	99045	6.083	
Chlorobenzene-d5 (ISTD)	283382	9.8	249894	9.8	
1,4-Dichlorobenzene-d4 (ISTD)	138740	11.759	123313	11.759	

* 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 - 4c. Waste Characterization
Batch: 0010530 Batch Matrix: Soil
Preparation: EPA 5035A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	0010530-BLK1	VJ20011705.D	01/16/20 09:00	
LCS	0010530-BS1	VJ20011703.D	01/16/20 09:00	
PDI-WC-011420-02 (Dup)	0010530-DUP1	VJ20011708.D	01/14/20 09:30	
PDI-WC-011420-02	A0A0539-01	VJ20011707.D	01/14/20 09:30	
PDI-WC-011420-04	A0A0539-02	VJ20011712.D	01/14/20 10:35	

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.

METHOD BLANK DATA SHEET
5035A/8260C

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Soil	Laboratory ID:	0010530-BLK1	File ID:	VJ20011705.D
Prepared:	01/16/20 09:00	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	01/17/20 11:18	Instrument:	VOA-GCMS10		
Batch:	0010530	Sequence:	0A17017	Calibration:	A0A0801

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
67-64-1	Acetone	333	U
107-13-1	Acrylonitrile	33.3	U
71-43-2	Benzene	3.33	U
108-86-1	Bromobenzene	8.33	U
74-97-5	Bromochloromethane	16.7	U
75-27-4	Bromodichloromethane	16.7	U
75-25-2	Bromoform	33.3	U
74-83-9	Bromomethane	333	U
78-93-3	2-Butanone (MEK)	167	U
104-51-8	n-Butylbenzene	16.7	U
135-98-8	sec-Butylbenzene	16.7	U
98-06-6	tert-Butylbenzene	16.7	U
75-15-0	Carbon disulfide	167	U
56-23-5	Carbon tetrachloride	16.7	U
108-90-7	Chlorobenzene	8.33	U
75-00-3	Chloroethane	167	U
67-66-3	Chloroform	16.7	U
74-87-3	Chloromethane	83.3	U
95-49-8	2-Chlorotoluene	16.7	U
106-43-4	4-Chlorotoluene	16.7	U
124-48-1	Dibromochloromethane	33.3	U
96-12-8	1,2-Dibromo-3-chloropropane	83.3	U
106-93-4	1,2-Dibromoethane (EDB)	16.7	U
74-95-3	Dibromomethane	16.7	U
95-50-1	1,2-Dichlorobenzene	8.33	U
541-73-1	1,3-Dichlorobenzene	8.33	U
106-46-7	1,4-Dichlorobenzene	8.33	U
75-71-8	Dichlorodifluoromethane	33.3	U
75-34-3	1,1-Dichloroethane	8.33	U
107-06-2	1,2-Dichloroethane (EDC)	8.33	U
75-35-4	1,1-Dichloroethene	8.33	U
156-59-2	cis-1,2-Dichloroethene	8.33	U
156-60-5	trans-1,2-Dichloroethene	8.33	U
78-87-5	1,2-Dichloropropane	33.3	U
142-28-9	1,3-Dichloropropane	16.7	U

METHOD BLANK DATA SHEET

5035A/8260C

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Soil	Laboratory ID:	0010530-BLK1	File ID:	VJ20011705.D
Prepared:	01/16/20 09:00	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	01/17/20 11:18	Instrument:	VOA-GCMS10		
Batch:	0010530	Sequence:	0A17017	Calibration:	A0A0801

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
594-20-7	2,2-Dichloropropane	16.7	U
563-58-6	1,1-Dichloropropene	16.7	U
10061-01-5	cis-1,3-Dichloropropene	16.7	U
10061-02-6	trans-1,3-Dichloropropene	16.7	U
100-41-4	Ethylbenzene	8.33	U
87-68-3	Hexachlorobutadiene	33.3	U
591-78-6	2-Hexanone	167	U
98-82-8	Isopropylbenzene	16.7	U
99-87-6	4-Isopropyltoluene	16.7	U
75-09-2	Methylene chloride	83.3	U
108-10-1	4-Methyl-2-pentanone (MiBK)	167	U
1634-04-4	Methyl tert-butyl ether (MTBE)	16.7	U
91-20-3	Naphthalene	33.3	U
103-65-1	n-Propylbenzene	8.33	U
100-42-5	Styrene	16.7	U
630-20-6	1,1,1,2-Tetrachloroethane	8.33	U
79-34-5	1,1,2,2-Tetrachloroethane	16.7	U
127-18-4	Tetrachloroethene (PCE)	8.33	U
108-88-3	Toluene	16.7	U
87-61-6	1,2,3-Trichlorobenzene	83.3	U
120-82-1	1,2,4-Trichlorobenzene	83.3	U
71-55-6	1,1,1-Trichloroethane	8.33	U
79-00-5	1,1,2-Trichloroethane	8.33	U
79-01-6	Trichloroethene (TCE)	8.33	U
75-69-4	Trichlorofluoromethane	33.3	U
96-18-4	1,2,3-Trichloropropane	16.7	U
95-63-6	1,2,4-Trimethylbenzene	16.7	U
108-67-8	1,3,5-Trimethylbenzene	16.7	U
75-01-4	Vinyl chloride	8.33	U
179601-23-1	m,p-Xylene	16.7	U
95-47-6	o-Xylene	8.33	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	51.1	102	80 - 120	
Toluene-d8 (Surr)	50.0	48.9	98	80 - 120	

METHOD BLANK DATA SHEET

5035A/8260C

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Soil	Laboratory ID:	0010530-BLK1	File ID:	VJ20011705.D
Prepared:	01/16/20 09:00	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	01/17/20 11:18	Instrument:	VOA-GCMS10		
Batch:	0010530	Sequence:	0A17017	Calibration:	A0A0801

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
4-Bromofluorobenzene (Surr)	50.0	52.0	104	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	94406	6.083	99045	6.083	
Chlorobenzene-d5 (ISTD)	234186	9.8	249894	9.8	
1,4-Dichlorobenzene-d4 (ISTD)	106578	11.759	123313	11.759	

LCS / LCS DUPLICATE RECOVERY

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Soil		
Batch:	0010530	Laboratory ID:	0010530-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.
Acetone	2000	1810	91	80 - 120
Acrylonitrile	1000	810	81	80 - 120
Benzene	1000	1030	103	80 - 120
Bromobenzene	1000	1070	107	80 - 120
Bromochloromethane	1000	961	96	80 - 120
Bromodichloromethane	1000	1070	107	80 - 120
Bromoform	1000	1110	111	80 - 120
Bromomethane	1000	968	97	80 - 120
2-Butanone (MEK)	2000	1740	87	80 - 120
n-Butylbenzene	1000	992	99	80 - 120
sec-Butylbenzene	1000	1070	107	80 - 120
tert-Butylbenzene	1000	1030	103	80 - 120
Carbon disulfide	1000	978	98	80 - 120
Carbon tetrachloride	1000	1110	111	80 - 120
Chlorobenzene	1000	1030	103	80 - 120
Chloroethane	1000	938	94	80 - 120
Chloroform	1000	1050	105	80 - 120
Chloromethane	1000	856	86	80 - 120
2-Chlorotoluene	1000	1070	107	80 - 120
4-Chlorotoluene	1000	1030	103	80 - 120
Dibromochloromethane	1000	1070	107	80 - 120
1,2-Dibromo-3-chloropropane	1000	941	94	80 - 120
1,2-Dibromoethane (EDB)	1000	1040	104	80 - 120
Dibromomethane	1000	1080	108	80 - 120
1,2-Dichlorobenzene	1000	1080	108	80 - 120
1,3-Dichlorobenzene	1000	1080	108	80 - 120
1,4-Dichlorobenzene	1000	1000	100	80 - 120
Dichlorodifluoromethane	1000	916	92	80 - 120
1,1-Dichloroethane	1000	1030	103	80 - 120
1,2-Dichloroethane (EDC)	1000	1030	103	80 - 120

LCS / LCS DUPLICATE RECOVERY

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Soil		
Batch:	0010530	Laboratory ID:	0010530-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.
1,1-Dichloroethene	1000	996	100	80 - 120
cis-1,2-Dichloroethene	1000	1020	102	80 - 120
trans-1,2-Dichloroethene	1000	991	99	80 - 120
1,2-Dichloropropane	1000	985	98	80 - 120
1,3-Dichloropropane	1000	1010	101	80 - 120
2,2-Dichloropropane	1000	1120	112	80 - 120
1,1-Dichloropropene	1000	1030	103	80 - 120
cis-1,3-Dichloropropene	1000	964	96	80 - 120
trans-1,3-Dichloropropene	1000	1090	109	80 - 120
Ethylbenzene	1000	1030	103	80 - 120
Hexachlorobutadiene	1000	1090	109	80 - 120
2-Hexanone	2000	1600	80	80 - 120
Isopropylbenzene	1000	1070	107	80 - 120
4-Isopropyltoluene	1000	1120	112	80 - 120
Methylene chloride	1000	998	100	80 - 120
4-Methyl-2-pentanone (MiBK)	2000	1680	84	80 - 120
Methyl tert-butyl ether (MTBE)	1000	1010	101	80 - 120
Naphthalene	1000	914	91	80 - 120
n-Propylbenzene	1000	994	99	80 - 120
Styrene	1000	968	97	80 - 120
1,1,1,2-Tetrachloroethane	1000	1090	109	80 - 120
1,1,2,2-Tetrachloroethane	1000	963	96	80 - 120
Tetrachloroethene (PCE)	1000	1120	112	80 - 120
Toluene	1000	984	98	80 - 120
1,2,3-Trichlorobenzene	1000	1110	111	80 - 120
1,2,4-Trichlorobenzene	1000	1070	107	80 - 120
1,1,1-Trichloroethane	1000	1090	109	80 - 120
1,1,2-Trichloroethane	1000	1000	100	80 - 120
Trichloroethene (TCE)	1000	1150	115	80 - 120
Trichlorofluoromethane	1000	1090	109	80 - 120

LCS / LCS DUPLICATE RECOVERY

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Soil		
Batch:	0010530	Laboratory ID:	0010530-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.
1,2,3-Trichloropropane	1000	1020	102	80 - 120
1,2,4-Trimethylbenzene	1000	1120	112	80 - 120
1,3,5-Trimethylbenzene	1000	1110	111	80 - 120
Vinyl chloride	1000	947	95	80 - 120
m,p-Xylene	2000	2210	110	80 - 120
o-Xylene	1000	1090	109	80 - 120

* = Values outside of QC limits

DUPLICATES

PDI-WC-011420-02

5035A/8260C

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Soil
Batch: 0010530
Preparation: EPA 5035A
Source Sample Name: PDI-WC-011420-02

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 4c. Waste Charact
Laboratory ID: 0010530-DUP1
Lab Source ID: A0A0539-01
Initial/Final: 5.42 g / 5 mL
% Solids: 78.60

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (ug/kg dry)	C	DUPLICATE CONCENTRATION (ug/kg dry)	C	RPD %	Q	METHOD
Acetone	30	131		ND				5035A/8260C
Acrylonitrile	30	0.00		ND				5035A/8260C
Benzene	30	0.00		ND				5035A/8260C
Bromobenzene	30	0.00		ND				5035A/8260C
Bromochloromethane	30	0.00		ND				5035A/8260C
Bromodichloromethane	30	0.00		ND				5035A/8260C
Bromoform	30	0.00		ND				5035A/8260C
Bromomethane	30	0.00		ND				5035A/8260C
2-Butanone (MEK)	30	0.00		ND				5035A/8260C
n-Butylbenzene	30	7.89		ND				5035A/8260C
sec-Butylbenzene	30	0.00		ND				5035A/8260C
tert-Butylbenzene	30	13.3		ND				5035A/8260C
Carbon disulfide	30	0.00		ND				5035A/8260C
Carbon tetrachloride	30	0.00		ND				5035A/8260C
Chlorobenzene	30	0.00		ND				5035A/8260C
Chloroethane	30	18.8		ND				5035A/8260C
Chloroform	30	0.00		ND				5035A/8260C
Chloromethane	30	33.9		ND				5035A/8260C
2-Chlorotoluene	30	0.00		ND				5035A/8260C
4-Chlorotoluene	30	0.00		ND				5035A/8260C
Dibromochloromethane	30	0.00		ND				5035A/8260C
1,2-Dibromo-3-chloropropane	30	0.00		ND				5035A/8260C
1,2-Dibromoethane (EDB)	30	0.00		ND				5035A/8260C
Dibromomethane	30	0.00		ND				5035A/8260C
1,2-Dichlorobenzene	30	0.00		ND				5035A/8260C
1,3-Dichlorobenzene	30	0.00		ND				5035A/8260C
1,4-Dichlorobenzene	30	0.00		ND				5035A/8260C
Dichlorodifluoromethane	30	0.00		ND				5035A/8260C
1,1-Dichloroethane	30	0.00		ND				5035A/8260C
1,2-Dichloroethane (EDC)	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

DUPLICATES

5035A/8260C

PDI-WC-011420-02

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Soil
Batch: 0010530
Preparation: EPA 5035A
Source Sample Name: PDI-WC-011420-02

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 4c. Waste Charact
Laboratory ID: 0010530-DUP1
Lab Source ID: A0A0539-01
Initial/Final: 5.42 g / 5 mL
% Solids: 78.60

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (ug/kg dry)	C	DUPLICATE CONCENTRATION (ug/kg dry)	C	RPD %	Q	METHOD
trans-1,2-Dichloroethene	30	0.00		ND				5035A/8260C
1,2-Dichloropropane	30	0.00		ND				5035A/8260C
1,3-Dichloropropane	30	0.00		ND				5035A/8260C
2,2-Dichloropropane	30	0.00		ND				5035A/8260C
1,1-Dichloropropene	30	0.00		ND				5035A/8260C
cis-1,3-Dichloropropene	30	0.00		ND				5035A/8260C
trans-1,3-Dichloropropene	30	0.00		ND				5035A/8260C
Ethylbenzene	30	9.49		ND				5035A/8260C
Hexachlorobutadiene	30	0.00		ND				5035A/8260C
2-Hexanone	30	0.00		ND				5035A/8260C
Isopropylbenzene	30	0.00		ND				5035A/8260C
4-Isopropyltoluene	30	14.2		ND				5035A/8260C
Methylene chloride	30	0.00		ND				5035A/8260C
4-Methyl-2-pentanone (MiBK)	30	0.00		ND				5035A/8260C
Methyl tert-butyl ether (MTBE)	30	0.00		ND				5035A/8260C
Naphthalene	30	1500		4650		102	*	5035A/8260C
n-Propylbenzene	30	0.00		ND				5035A/8260C
Styrene	30	18.4		75.3		200	*	5035A/8260C
1,1,1,2-Tetrachloroethane	30	0.00		ND				5035A/8260C
1,1,2,2-Tetrachloroethane	30	31.3		ND				5035A/8260C
Tetrachloroethene (PCE)	30	12.4		ND				5035A/8260C
Toluene	30	0.00		ND				5035A/8260C
1,2,3-Trichlorobenzene	30	0.00		ND				5035A/8260C
1,2,4-Trichlorobenzene	30	0.00		ND				5035A/8260C
1,1,1-Trichloroethane	30	0.00		ND				5035A/8260C
1,1,2-Trichloroethane	30	0.00		ND				5035A/8260C
Trichloroethene (TCE)	30	0.00		ND				5035A/8260C
Trichlorofluoromethane	30	0.00		ND				5035A/8260C
1,2,3-Trichloropropane	30	0.00		ND				5035A/8260C
1,2,4-Trimethylbenzene	30	37.0		88.1		82	*	5035A/8260C
1,3,5-Trimethylbenzene	30	11.2		ND				5035A/8260C
Vinyl chloride	30	0.00		ND				5035A/8260C

DUPLICATES

5035A/8260C

PDI-WC-011420-02

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Soil
Batch: 0010530
Preparation: EPA 5035A
Source Sample Name: PDI-WC-011420-02

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 4c. Waste Charact
Laboratory ID: 0010530-DUP1
Lab Source ID: A0A0539-01
Initial/Final: 5.42 g / 5 mL
% Solids: 78.60

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (ug/kg dry)	C	DUPLICATE CONCENTRATION (ug/kg dry)	C	RPD %	Q	METHOD
m,p-Xylene	30	0.00		ND				5035A/8260C
o-Xylene	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 - 4c. Waste Characterization
Sequence:	0A06051	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0A0801

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0A06051-TUN1	VJ20010612.D	01/06/20 16:18
Initial Cal Blank	0A06051-ICB1	VJ20010613.D	01/06/20 16:45
Cal Standard	0A06051-CAL1	VJ20010614.D	01/06/20 17:12
Cal Standard	0A06051-CAL2	VJ20010615.D	01/06/20 17:39
Cal Standard	0A06051-CAL3	VJ20010616.D	01/06/20 18:05
Cal Standard	0A06051-CAL4	VJ20010617.D	01/06/20 18:32
Cal Standard	0A06051-CAL5	VJ20010618.D	01/06/20 18:59
Cal Standard	0A06051-CAL6	VJ20010619.D	01/06/20 19:26
Cal Standard	0A06051-CAL7	VJ20010620.D	01/06/20 19:53
Cal Standard	0A06051-CAL8	VJ20010621.D	01/06/20 20:20
Cal Standard	0A06051-CAL9	VJ20010622.D	01/06/20 20:47
Cal Standard	0A06051-CALA	VJ20010624.D	01/06/20 21:41
Cal Standard	0A06051-CALB	VJ20010626.D	01/06/20 22:34
Initial Cal Check	0A06051-ICV1	VJ20010629.D	01/06/20 23:55

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 - 4c. Waste Characterization
Sequence:	0A17017	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0A0801

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0A17017-TUN1	VJ20011702.D	01/17/20 09:57
Calibration Check	0A17017-CCV1	VJ20011703.D	01/17/20 10:24
Blank	0010530-BLK1	VJ20011705.D	01/17/20 11:18
PDI-WC-011420-02	A0A0539-01	VJ20011707.D	01/17/20 12:12
PDI-WC-011420-02 (Dup)	0010530-DUP1	VJ20011708.D	01/17/20 12:39
PDI-WC-011420-04	A0A0539-02	VJ20011712.D	01/17/20 14:26

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 - 4c. Waste Characterization
Lab File ID:	VJ20010612.D	Injection Date:	01/06/20
Instrument ID:	VOA-GCMS10	Injection Time:	16:18
Sequence:	0A06051	Lab Sample ID:	0A06051-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	127.07	PASS
m/z 96	5 - 9% of m/z 95	7.17	PASS
m/z 173	Less than 2% of m/z 174	0.00	PASS
m/z 174	50 - 200% of m/z 95	78.70	PASS
m/z 175	5 - 9% of m/z 174	7.38	PASS
m/z 176	95 - 105% of m/z 174	95.70	PASS
m/z 177	5 - 10% of m/z 176	6.78	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 - 4c. Waste Characterization
Lab File ID:	VJ20011702.D	Injection Date:	01/17/20
Instrument ID:	VOA-GCMS10	Injection Time:	09:57
Sequence:	0A17017	Lab Sample ID:	0A17017-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	113.86	PASS
m/z 96	5 - 9% of m/z 95	6.88	PASS
m/z 173	Less than 2% of m/z 174	0.20	PASS
m/z 174	50 - 200% of m/z 95	87.82	PASS
m/z 175	5 - 9% of m/z 174	7.04	PASS
m/z 176	95 - 105% of m/z 174	95.84	PASS
m/z 177	5 - 10% of m/z 176	6.48	PASS

INITIAL CALIBRATION DATA (Summary)

5035A/8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatic

Calibration: A0A0801 Date: 01/08/20 11:26 Instrument: VOA-GCMS10

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acetone	0.6322971	Ave	8.867673	3.859	7.974172E-02			20	
Acrylonitrile	0.6441279	Ave	8.21042	4.62675	6.599299E-02			20	
Benzene	4.580306	Ave	1.570432	5.996909	5.956941E-02			20	
Bromobenzene	0.9427326	Ave	7.581986	10.95764	2.640607E-02			20	
Bromochloromethane	0.8562299	Ave	4.583387	5.322333	3.397154E-02			20	
Bromodichloromethane	1.275205	Ave	12.65839	7.239667	4.997072E-02			20	
Bromoform	0.2663811	XXX	17.39133	10.433	3.353873E-03				
Bromomethane	0.9106016	XXX	63.52983	2.336	0.1482126				
2-Butanone (MEK)	0.9920596	Ave	10.28464	5.725714	5.110804E-02			20	
n-Butylbenzene	2.689324	Ave	6.416715	11.96764	2.510965E-02			20	
sec-Butylbenzene	3.51807	Ave	11.41918	11.54	0.0100477			20	
tert-Butylbenzene	1.629218	Ave	8.930752	11.4	3.611884E-03			20	
Carbon disulfide	2.182263	Ave	5.383032	3.148	0.1343903			20	
Carbon tetrachloride	1.354419	Ave	10.27231	5.5465	4.928592E-02			20	
Chlorobenzene	1.186266	Ave	2.456797	9.8166	3.350629E-02			20	
Chloroethane	0.2598788	Ave	9.161118	2.460167	0.2184268			20	
Chloroform	1.88466	Ave	4.452061	5.4092	4.570647E-02			20	
Chloromethane	1.434453	Ave	6.079339	1.889833	0.2685265			20	
2-Chlorotoluene	0.8190438	Ave	9.965064	11.11333	1.865422E-02			20	
4-Chlorotoluene	2.509104	Ave	11.19159	11.2426	1.033865E-02			20	
Dibromochloromethane	0.3737628	Ave	12.31664	9.058	3.335097E-02			20	
1,2-Dibromo-3-chloropropane	0.2871144	XXX	17.92482	12.69	1.281491E-02				
1,2-Dibromoethane (EDB)	0.4022334	Ave	8.43386	9.295	6.811305E-03			20	
Dibromomethane	0.6435546	Ave	7.900654	7.054556	0.0417717			20	
1,2-Dichlorobenzene	1.537679	Ave	8.778506	10.98855	33.16624			20	
1,3-Dichlorobenzene	1.685462	Ave	7.316947	10.64	33.16625			20	
1,4-Dichlorobenzene	1.823877	Ave	6.70763	11.771	1.646822E-02			20	
Dichlorodifluoromethane	0.9731808	Ave	14.46766	1.688	0.2686134			20	
1,1-Dichloroethane	1.715219	Ave	7.323739	4.5731	5.994302E-02			20	
1,2-Dichloroethane (EDC)	1.623178	Ave	6.331703	6.2014	5.390315E-02			20	
1,1-Dichloroethene	1.214666	Ave	3.594374	3.1366	0.1609633			20	
cis-1,2-Dichloroethene	1.384583	Ave	9.786792	5.1238	0.0555317			20	
trans-1,2-Dichloroethene	1.487832	Ave	1.975727	3.9396	0.1278086			20	

INITIAL CALIBRATION DATA (Summary)

5035A/8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatic

Calibration: A0A0801 Date: 01/08/20 11:26 Instrument: VOA-GCMS10

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,2-Dichloropropane	1.077419	Ave	5.588113	7.166	9.99608E-03			20	
1,3-Dichloropropane	0.6901989	Ave	8.180731	9.1544	1.277963E-02			20	
2,2-Dichloropropane	1.580391	Ave	1.698642	5.2326	7.864217E-02			20	
1,1-Dichloropropene	1.431876	Ave	9.31691	5.742556	5.310114E-02			20	
cis-1,3-Dichloropropene	0.6245134	Ave	12.12824	7.943667	3.246577E-02			20	
trans-1,3-Dichloropropene	0.59575	Ave	13.54944	8.6948	3.142712E-02			20	
Ethylbenzene	1.979093	Ave	6.378557	9.850091	2.419663E-02			20	
Hexachlorobutadiene	0.248947	Ave	11.21774	13.21167	1.906388E-02			20	
2-Hexanone	0.3720155	XXX	30.79228	9.539	3.570165E-02				
Isopropylbenzene	1.700252	Ave	16.88611	10.646	1.812987E-02			20	
4-Isopropyltoluene	2.878304	Ave	14.70665	11.65	1.481596E-02			20	
Methylene chloride	1.204451	XXX	30.39189	3.77275	6.961831E-02				
4-Methyl-2-pentanone (MiBK)	0.585013	Ave	12.8204	8.663	1.587307E-02			20	
Methyl tert-butyl ether (MTBE)	3.664239	Ave	4.138558	4.1012	0.116356			20	
Naphthalene	2.994634	XXX	23.78082	12.27945	33.16627				
n-Propylbenzene	4.362681	Ave	5.342807	10.989	2.843817E-02			20	
Styrene	0.8922625	XXX	28.34805	10.4162	1.772251E-02				
1,1,1,2-Tetrachloroethane	0.3971502	Ave	6.112852	9.879	5.496157E-03			20	
1,1,2,2-Tetrachloroethane	1.105795	Ave	8.953557	11.041	1.528496E-02			20	
Tetrachloroethene (PCE)	0.4541742	Ave	9.692656	8.669667	4.512827E-02			20	
Toluene	1.958749	Ave	4.073075	8.220273	3.683222E-02			20	
1,2,3-Trichlorobenzene	0.9643932	Ave	14.30783	13.669	6.505989E-03			20	
1,2,4-Trichlorobenzene	0.9505291	Ave	13.60914	13.23467	2.695141E-02			20	
1,1,1-Trichloroethane	1.736227	Ave	8.22434	5.615	5.209906E-02			20	
1,1,2-Trichloroethane	0.4036766	Ave	2.161195	8.867889	3.305032E-02			20	
Trichloroethene (TCE)	1.077114	Ave	12.5113	6.6149	4.907869E-02			20	
Trichlorofluoromethane	0.383813	Ave	7.688564	2.58725	0.1730399			20	
1,2,3-Trichloropropane	0.4175886	Ave	11.34684	11.14633	2.635447E-02			20	
1,2,4-Trimethylbenzene	2.919912	Ave	13.15065	11.455	1.449045E-02			20	
1,3,5-Trimethylbenzene	2.934075	Ave	11.34367	11.14991	2.439278E-02			20	
Vinyl chloride	1.082037	Ave	7.428837	1.99125	0.1567329			20	
m,p-Xylene	1.38995	Ave	11.82261	9.989	1.089821E-02			20	
o-Xylene	1.290995	Ave	17.21526	9.428	33.16625			20	

INITIAL CALIBRATION DATA (Summary)

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatic
Calibration: A0A0801
Date: 01/08/20 11:26
Instrument: VOA-GCMS10

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,4-Difluorobenzene (Surr)	2.916736	Ave	1.102017	6.645182	4.601862E-02			20	
Toluene-d8 (Surr)	1.386064	Ave	1.647783	8.162909	2.372653E-02			20	
4-Bromofluorobenzene (Surr)	0.7718339	Ave	2.58288	10.87645	2.154891E-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: A0A0801

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte

Instrument: VOA-GCMS10

Calibration Date: 01/08/20 11:26

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
Acetone	0.2	~~0~~	0.4	~~0~~	0.8	~~1.754515~~	2	~~1.128978~~	4	~~0.8909323~~	10	0.7360125
Acrylonitrile	0.1	~~0~~	0.2	~~0~~	0.4	~~0.3111627~~	1	0.5823428	2	0.5559324	5	0.6196941
Benzene	0.1	4.530969	0.2	4.597562	0.4	4.602178	1	4.529333	2	4.442581	5	4.535367
Bromobenzene	0.1	0.831202	0.2	0.8077266	0.4	0.9034295	1	1.050009	2	1.001521	5	0.9686276
Bromochloromethane	0.1	~~0~~	0.2	~~0~~	0.4	0.7983013	1	0.8780675	2	0.9006895	5	0.8596494
Bromodichloromethane	0.1	~~0~~	0.2	~~0~~	0.4	0.9754426	1	1.130176	2	1.195731	5	1.261069
Bromoform	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	0.2283472	2	0.2163046	5	0.2192965
Bromomethane	0.1	~~15.53878~~	0.2	~~9.289089~~	0.4	~~4.071919~~	1	2.081097	2	1.225235	5	0.8556243
2-Butanone (MEK)	0.2	~~7.825792~~	0.4	~~0~~	0.8	~~2.438607~~	2	~~1.466641~~	4	1.219311	10	0.9841554
n-Butylbenzene	0.1	2.540494	0.2	2.762597	0.4	2.49973	1	2.509587	2	2.498429	5	2.606009
sec-Butylbenzene	0.1	3.205456	0.2	2.833488	0.4	3.14074	1	3.256985	2	3.243473	5	3.584963
tert-Butylbenzene	0.1	~~0~~	0.2	1.508043	0.4	1.41686	1	1.511752	2	1.493602	5	1.594027
Carbon disulfide	0.1	~~0~~	0.2	2.346882	0.4	2.358776	1	2.271856	2	2.108966	5	2.040398
Carbon tetrachloride	0.1	~~0~~	0.2	~~0~~	0.4	~~0.8880374~~	1	1.132094	2	1.245447	5	1.256587
Chlorobenzene	0.1	~~0~~	0.2	1.156441	0.4	1.178367	1	1.259161	2	1.16028	5	1.18834
Chloroethane	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	~~0~~	2	0.2632141	5	0.2436146
Chloroform	0.1	~~0~~	0.2	1.677942	0.4	1.907765	1	1.99722	2	1.889659	5	1.90153
Chloromethane	0.1	~~8.089003~~	0.2	~~5.051725~~	0.4	~~2.906516~~	1	~~2.008723~~	2	1.542579	5	1.40195
2-Chlorotoluene	0.1	~~0~~	0.2	~~0~~	0.4	0.6347863	1	0.7834851	2	0.7944381	5	0.7957842
4-Chlorotoluene	0.1	~~0~~	0.2	1.883979	0.4	2.201007	1	2.406977	2	2.502563	5	2.560278
Dibromochloromethane	0.1	~~0~~	0.2	~~0~~	0.4	~~0.2352149~~	1	0.3176588	2	0.3374906	5	0.3338134
1,2-Dibromo-3-chloropropane	0.1	~~0~~	0.2	~~0~~	0.4	~~6.430841E-02~~	1	0.2169584	2	0.2407701	5	0.2520939
1,2-Dibromoethane (EDB)	0.1	~~0~~	0.2	~~7.985407E-02~~	0.4	0.3810207	1	0.3474931	2	0.3729867	5	0.387462
Dibromomethane	0.1	~~0~~	0.2	~~0~~	0.4	0.5127775	1	0.6714916	2	0.6323644	5	0.6636051
1,2-Dichlorobenzene	0.1	1.265985	0.2	1.293222	0.4	1.567258	1	1.573492	2	1.536589	5	1.549525
1,3-Dichlorobenzene	0.1	1.368286	0.2	1.576786	0.4	1.642976	1	1.723058	2	1.701718	5	1.753922
1,4-Dichlorobenzene	0.1	1.662404	0.2	2.085911	0.4	1.975928	1	1.910886	2	1.806499	5	1.818256
Dichlorodifluoromethane	0.1	~~0~~	0.2	~~0~~	0.4	0.8530753	1	0.9595475	2	0.8976694	5	0.8851727
1,1-Dichloroethane	0.1	~~0~~	0.2	1.373675	0.4	1.71897	1	1.800709	2	1.747946	5	1.720214
1,2-Dichloroethane (EDC)	0.1	~~0~~	0.2	1.344591	0.4	1.625738	1	1.694306	2	1.691494	5	1.676303
1,1-Dichloroethene	0.1	~~0~~	0.2	1.281948	0.4	1.274951	1	1.241373	2	1.23476	5	1.18825

INITIAL CALIBRATION DATA

5035A/8260C

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A0A0801

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte

Instrument: VOA-GCMS10

Calibration Date: 01/08/20 11:26

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
cis-1,2-Dichloroethene	0.1	~~0~~	0.2	1.026901	0.4	1.351868	1	1.379889	2	1.373453	5	1.380361
trans-1,2-Dichloroethene	0.1	~~0~~	0.2	1.512385	0.4	1.485889	1	1.551956	2	1.459874	5	1.460681
1,2-Dichloropropane	0.1	~~0~~	0.2	~~0~~	0.4	0.9463075	1	1.116277	2	1.033807	5	1.071795
1,3-Dichloropropane	0.1	~~0~~	0.2	0.5647511	0.4	0.6235718	1	0.6800691	2	0.6968889	5	0.6999123
2,2-Dichloropropane	0.1	~~0~~	0.2	1.588452	0.4	1.563971	1	1.614743	2	1.536074	5	1.548137
1,1-Dichloropropene	0.1	~~0~~	0.2	~~0~~	0.4	1.213185	1	1.318539	2	1.336514	5	1.368011
cis-1,3-Dichloropropene	0.1	~~0~~	0.2	~~0~~	0.4	0.5428742	1	0.5404599	2	0.5403916	5	0.5852472
trans-1,3-Dichloropropene	0.1	~~0~~	0.2	0.5070252	0.4	0.4901457	1	0.536635	2	0.5203326	5	0.5745841
Ethylbenzene	0.1	2.014842	0.2	1.794311	0.4	1.855584	1	1.889889	2	1.826664	5	1.930349
Hexachlorobutadiene	0.1	~~0~~	0.2	~~0~~	0.4	0.1856646	1	0.2221759	2	0.2647438	5	0.2631579
n-Hexane	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	0.1921971	2	0.2076906	5	0.1973251
2-Hexanone	0.2	~~0~~	0.4	~~0.1770259~~	0.8	0.2173331	2	0.2682219	4	0.2667294	10	0.3041382
Isopropylbenzene	0.1	~~1.405037~~	0.2	~~1.336353~~	0.4	~~1.227886~~	1	1.312518	2	1.330365	5	1.503419
4-Isopropyltoluene	0.1	2.702472	0.2	2.405994	0.4	2.341034	1	2.415673	2	2.550303	5	2.833844
Methylene chloride	0.1	~~12.02305~~	0.2	~~6.040593~~	0.4	~~3.687336~~	1	2.00441	2	1.472419	5	1.166752
4-Methyl-2-pentanone (MiBK)	0.2	~~0~~	0.4	~~0~~	0.8	~~0.4163258~~	2	~~0.4502876~~	4	~~0.4253065~~	10	0.4742105
Methyl tert-butyl ether (MTBE)	0.1	~~0~~	0.2	3.765303	0.4	3.730456	1	3.706384	2	3.396229	5	3.429633
Naphthalene	0.1	2.749361	0.2	2.32651	0.4	2.220715	1	2.403499	2	2.33888	5	2.591585
n-Propylbenzene	0.1	4.543904	0.2	4.079449	0.4	4.02135	1	4.35569	2	4.092885	5	4.28781
Styrene	0.1	~~0~~	0.2	0.5618648	0.4	0.6139431	1	0.6946038	2	0.6967965	5	0.8112081
1,1,1,2-Tetrachloroethane	0.1	~~0~~	0.2	~~0.2241686~~	0.4	0.3562612	1	0.3935833	2	0.3635581	5	0.3898316
1,1,2,2-Tetrachloroethane	0.1	~~0~~	0.2	0.8635801	0.4	1.00819	1	1.151749	2	1.143296	5	1.096232
Tetrachloroethene (PCE)	0.1	~~0~~	0.2	~~0~~	0.4	0.3525931	1	0.4637704	2	0.4203149	5	0.4485525
Toluene	0.1	2.133362	0.2	2.015594	0.4	1.859711	1	1.977479	2	1.864749	5	1.869629
1,2,3-Trichlorobenzene	0.1	~~0~~	0.2	~~0.5069774~~	0.4	0.7675521	1	0.8252246	2	0.8328787	5	0.8928191
1,2,4-Trichlorobenzene	0.1	~~0~~	0.2	~~0.7862446~~	0.4	0.8059297	1	0.8582683	2	0.8148984	5	0.8499566
1,1,1-Trichloroethane	0.1	~~0~~	0.2	1.434081	0.4	1.518521	1	1.753259	2	1.767461	5	1.764216
1,1,2-Trichloroethane	0.1	~~0~~	0.2	~~0~~	0.4	0.3828547	1	0.4046756	2	0.403861	5	0.3997912
Trichloroethene (TCE)	0.1	~~0~~	0.2	0.7271084	0.4	1.003412	1	1.146952	2	1.080502	5	1.074265
Trichlorofluoromethane	0.1	~~0~~	0.2	~~0~~	0.4	0.3228167	1	0.4030867	2	0.3742612	5	0.3833065
1,2,3-Trichloropropane	0.1	~~0~~	0.2	~~0~~	0.4	0.3018347	1	0.4739172	2	0.4368996	5	0.416414

INITIAL CALIBRATION DATA

5035A/8260C

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Calibration: A0A0801

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte
Instrument: VOA-GCMS10
Calibration Date: 01/08/20 11:26

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
1,1,2-Trichloro-1,2,2-trifluoroethan	0.1	~~0~~	0.2	~~0~~	0.4	0.8344288	1	0.8833397	2	0.9185779	5	0.8971568
1,2,4-Trimethylbenzene	0.1	3.026428	0.2	2.25562	0.4	2.436459	1	2.615675	2	2.622844	5	2.915881
1,3,5-Trimethylbenzene	0.1	2.749361	0.2	2.39955	0.4	2.557815	1	2.708719	2	2.683605	5	2.999557
Vinyl chloride	0.1	~~0~~	0.2	~~0~~	0.4	0.9684502	1	1.053489	2	1.054715	5	1.049016
m,p-Xylene	0.2	1.241594	0.4	1.262272	0.8	1.200146	2	1.233916	4	1.240239	10	1.344121
o-Xylene	0.1	1.078151	0.2	1.076587	0.4	1.022474	1	1.126627	2	1.154918	5	1.234214
Xylenes, total	0.3	1.187113	0.6	1.200377	1.2	1.140922	3	1.198153	6	1.211799	15	1.307485
trans-1,4-Dichloro-2-butene	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	~~9.826172E-02~~	2	~~0.1279285~~	5	0.1493222
1,4-Difluorobenzene (Surr)	50	2.950366	50	2.870105	50	2.955985	50	2.907832	50	2.906971	50	2.924354
Toluene-d8 (Surr)	50	1.39593	50	1.429161	50	1.365574	50	1.351781	50	1.356252	50	1.375103
4-Bromofluorobenzene (Surr)	50	0.7760102	50	0.7738709	50	0.7942131	50	0.796633	50	0.7874775	50	0.7844171

INITIAL CALIBRATION DATA (Continued)

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration: A0A0801
Instrument: VOA-GCMS10
Matrix:
Calibration Date: 01/08/20 11:26

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
Acetone	20	0.6232398	40	0.579546	100	0.6498718	200	0.5994155	400	0.6056968		
Acrylonitrile	10	0.654447	20	0.6666436	50	0.6944081	100	0.6959447	200	0.68361		
Benzene	10	4.569094	20	4.600589	50	4.721558	100	4.633483	200	4.620649		
Bromobenzene	10	0.9459382	20	0.9734557	50	0.9844902	100	0.9656541	200	0.9380045		
Bromochloromethane	10	0.8998706	20	0.8630336	50	0.8771738	100	0.8326885	200	0.7965951		
Bromodichloromethane	10	1.261798	20	1.313994	50	1.421715	100	1.439338	200	1.477582		
Bromoform	10	0.2459023	20	0.268383	50	0.2990982	100	0.3221982	200	0.3315189		
Bromomethane	10	0.6721914	20	0.567781	50	0.5108874	100	0.4613955	200	~~0~~		
2-Butanone (MEK)	20	0.9425426	40	0.9250817	100	0.9678063	200	0.9611137	400	0.9444064		
n-Butylbenzene	10	2.672633	20	2.847331	50	2.972177	100	2.90713	200	2.766448		
sec-Butylbenzene	10	3.711089	20	3.969637	50	4.029504	100	3.957072	200	3.766363		
tert-Butylbenzene	10	1.644574	20	1.780709	50	1.828851	100	1.785986	200	1.727775		
Carbon disulfide	10	2.072852	20	2.047106	50	2.223796	100	2.162333	200	2.189667		
Carbon tetrachloride	10	1.338722	20	1.365842	50	1.4826	100	1.48215	200	1.531911		
Chlorobenzene	10	1.17294	20	1.191025	50	1.200112	100	1.187232	200	1.168767		
Chloroethane	10	0.243045	20	0.2351384	50	0.277705	100	0.2965554	200	~~0~~		
Chloroform	10	1.935179	20	1.88235	50	1.930392	100	1.889359	200	1.835204		
Chloromethane	10	1.347189	20	1.335728	50	1.519837	100	1.459434	200	~~0~~		
2-Chlorotoluene	10	0.8343431	20	0.8898052	50	0.8938895	100	0.8863411	200	0.8585217		
4-Chlorotoluene	10	2.65417	20	2.743468	50	2.773392	100	2.731908	200	2.633299		
Dibromochloromethane	10	0.351545	20	0.3751325	50	0.408985	100	0.4262991	200	0.4391778		
1,2-Dibromo-3-chloropropane	10	0.2658468	20	0.2959798	50	0.3211428	100	0.3443443	200	0.359779		
1,2-Dibromoethane (EDB)	10	0.396506	20	0.411188	50	0.4368827	100	0.4420067	200	0.4445544		
Dibromomethane	10	0.6589188	20	0.6585164	50	0.6798006	100	0.6650702	200	0.6494468		
1,2-Dichlorobenzene	10	1.555536	20	1.657773	50	1.658887	100	1.644671	200	1.611533		
1,3-Dichlorobenzene	10	1.744379	20	1.810873	50	1.770078	100	1.757006	200	1.690998		
1,4-Dichlorobenzene	10	1.759117	20	1.788318	50	1.785439	100	1.758985	200	1.710906		
Dichlorodifluoromethane	10	0.9120014	20	0.88707	50	1.214655	100	1.176255	200	~~0~~		
1,1-Dichloroethane	10	1.774909	20	1.717042	50	1.810958	100	1.779752	200	1.708017		
1,2-Dichloroethane (EDC)	10	1.675483	20	1.639384	50	1.660946	100	1.622078	200	1.60146		
1,1-Dichloroethene	10	1.19025	20	1.168509	50	1.229344	100	1.16903	200	1.168247		

INITIAL CALIBRATION DATA (Continued)

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration: A0A0801
Instrument: VOA-GCMS10
Matrix:
Calibration Date: 01/08/20 11:26

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
cis-1,2-Dichloroethene	10	1.456034	20	1.434613	50	1.490395	100	1.492144	200	1.460169		
trans-1,2-Dichloroethene	10	1.495138	20	1.462702	50	1.506194	100	1.471367	200	1.472135		
1,2-Dichloropropane	10	1.067466	20	1.071787	50	1.129848	100	1.132117	200	1.127362		
1,3-Dichloropropane	10	0.7037913	20	0.7139377	50	0.7500436	100	0.737502	200	0.7315215		
2,2-Dichloropropane	10	1.579436	20	1.586568	50	1.623363	100	1.587839	200	1.575327		
1,1-Dichloropropene	10	1.419451	20	1.496984	50	1.57402	100	1.581232	200	1.578945		
cis-1,3-Dichloropropene	10	0.6195187	20	0.6746503	50	0.6802233	100	0.7088843	200	0.7283714		
trans-1,3-Dichloropropene	10	0.6035836	20	0.6594517	50	0.6907941	100	0.6895438	200	0.6854044		
Ethylbenzene	10	2.012296	20	2.070372	50	2.146492	100	2.136127	200	2.093102		
Hexachlorobutadiene	10	0.2454191	20	0.2655256	50	0.2660693	100	0.268327	200	0.2594398		
n-Hexane	10	0.2220658	20	0.2361744	50	0.260087	100	0.2525616	200	0.2538988		
2-Hexanone	20	0.3613047	40	0.4212476	100	0.4843583	200	0.5103706	400	0.5144358		
Isopropylbenzene	10	1.691745	20	1.823292	50	1.968739	100	2.00252	200	1.969419		
4-Isopropyltoluene	10	3.027436	20	3.305326	50	3.467477	100	3.370044	200	3.24174		
Methylene chloride	10	1.085877	20	1.000276	50	1.002365	100	0.9677905	200	0.9357152		
4-Methyl-2-pentanone (MiBK)	20	0.5160773	40	0.5841234	100	0.6359893	200	0.6566316	400	0.6430463		
Methyl tert-butyl ether (MTBE)	10	3.579597	20	3.635723	50	3.79867	100	3.781384	200	3.819011		
Naphthalene	10	2.944088	20	3.512057	50	3.88277	100	3.970974	200	4.00054		
n-Propylbenzene	10	4.377016	20	4.651964	50	4.70467	100	4.545293	200	4.329456		
Styrene	10	0.9187585	20	1.02484	50	1.159389	100	1.214566	200	1.226655		
1,1,1,2-Tetrachloroethane	10	0.4070255	20	0.4008614	50	0.424342	100	0.4208005	200	0.4180886		
1,1,2,2-Tetrachloroethane	10	1.147432	20	1.192917	50	1.167286	100	1.158637	200	1.12863		
Tetrachloroethene (PCE)	10	0.4625838	20	0.4788151	50	0.4891104	100	0.4866419	200	0.485186		
Toluene	10	1.930848	20	1.968223	50	2.001917	100	1.973172	200	1.95155		
1,2,3-Trichlorobenzene	10	0.974144	20	1.062248	50	1.102679	100	1.109557	200	1.112436		
1,2,4-Trichlorobenzene	10	0.9087671	20	1.00789	50	1.075554	100	1.11406	200	1.119438		
1,1,1-Trichloroethane	10	1.793795	20	1.792812	50	1.853225	100	1.842425	200	1.842479		
1,1,2-Trichloroethane	10	0.4042203	20	0.4101592	50	0.4129893	100	0.4087467	200	0.4057911		
Trichloroethene (TCE)	10	1.103621	20	1.11293	50	1.158435	100	1.178194	200	1.185724		
Trichlorofluoromethane	10	0.3878539	20	0.372243	50	0.4147384	100	0.4121974	200	0		
1,2,3-Trichloropropane	10	0.4212448	20	0.4402692	50	0.4377371	100	0.4208156	200	0.4091653		

INITIAL CALIBRATION DATA (Continued)

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration: A0A0801
Instrument: VOA-GCMS10
Matrix:
Calibration Date: 01/08/20 11:26

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
1,1,2-Trichloro-1,2,2-trifluoroethan	10	0.9155693	20	0.911544	50	0.9424616	100	0.9128648	200	0.9068493		
1,2,4-Trimethylbenzene	10	3.104439	20	3.354147	50	3.373578	100	3.290776	200	3.123185		
1,3,5-Trimethylbenzene	10	3.107346	20	3.344777	50	3.380268	100	3.265803	200	3.078028		
Vinyl chloride	10	1.058142	20	1.071442	50	1.221913	100	1.179132	200	0		
m,p-Xylene	20	1.462118	40	1.536285	100	1.597783	200	1.602113	400	1.568866		
o-Xylene	10	1.315109	20	1.440269	50	1.55917	100	1.603649	200	1.589781		
Xylenes, total	30	1.413115	60	1.504279	150	1.584912	300	1.602625	600	1.575838		
trans-1,4-Dichloro-2-butene	10	0.1590005	20	0.1805898	50	0.1982503	100	0.1958854	200	0.195642		
1,4-Difluorobenzene (Surr)	50	2.885551	50	2.874007	50	2.940924	50	2.908756	50	2.959247		
Toluene-d8 (Surr)	50	1.391406	50	1.40942	50	1.39165	50	1.387208	50	1.393222		
4-Bromofluorobenzene (Surr)	50	0.7512895	50	0.7719979	50	0.7705887	50	0.7520981	50	0.7315773		

SECOND-SOURCE CALIBRATION VERIFICATION

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Charac
Instrument ID:	VOA-GCMS10	Calibration:	A0A0801
Lab File ID:	VJ20010629.D		
Sequence:	0A06051	Inject Date:	01/06/20
Lab Sample ID:	0A06051-ICV1	Inject Time:	23:55

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acetone	40.0	39.8	-0.5	70 - 130
Acrylonitrile	20.0	19.8	-1.0	70 - 130
Benzene	20.0	20.2	0.9	70 - 130
Bromobenzene	20.0	19.9	-0.7	70 - 130
Bromochloromethane	20.0	19.4	-2.9	70 - 130
Bromodichloromethane	20.0	19.9	-0.7	70 - 130
Bromoform	20.0	19.9	-0.3	70 - 130
Bromomethane	20.0	17.3	-13.5	70 - 130
2-Butanone (MEK)	40.0	35.8	-10.6	70 - 130
n-Butylbenzene	20.0	20.4	1.9	70 - 130
sec-Butylbenzene	20.0	21.4	7.2	70 - 130
tert-Butylbenzene	20.0	20.9	4.5	70 - 130
Carbon disulfide	20.0	20.9	4.7	70 - 130
Carbon tetrachloride	20.0	20.6	3.1	70 - 130
Chlorobenzene	20.0	19.6	-2.1	70 - 130
Chloroethane	20.0	18.4	-8.2	70 - 130
Chloroform	20.0	19.9	-0.3	70 - 130
Chloromethane	20.0	20.0	-0.1	70 - 130
2-Chlorotoluene	20.0	20.5	2.3	70 - 130
4-Chlorotoluene	20.0	20.7	3.7	70 - 130
Dibromochloromethane	20.0	19.4	-2.9	70 - 130
1,2-Dibromo-3-chloropropane	20.0	18.1	-9.6	70 - 130
1,2-Dibromoethane (EDB)	20.0	20.0	0.2	70 - 130
Dibromomethane	20.0	19.8	-0.8	70 - 130
1,2-Dichlorobenzene	20.0	20.6	2.9	70 - 130
1,3-Dichlorobenzene	20.0	20.6	3.0	70 - 130
1,4-Dichlorobenzene	20.0	19.2	-4.1	70 - 130
Dichlorodifluoromethane	20.0	16.8	-15.9	70 - 130
1,1-Dichloroethane	20.0	21.5	7.3	70 - 130
1,2-Dichloroethane (EDC)	20.0	19.9	-0.4	70 - 130
1,1-Dichloroethene	20.0	21.3	6.4	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Charac
Instrument ID:	VOA-GCMS10	Calibration:	A0A0801
Lab File ID:	VJ20010629.D		
Sequence:	0A06051	Inject Date:	01/06/20
Lab Sample ID:	0A06051-ICV1	Inject Time:	23:55

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
cis-1,2-Dichloroethene	20.0	21.1	5.7	70 - 130
trans-1,2-Dichloroethene	20.0	20.7	3.5	70 - 130
1,2-Dichloropropane	20.0	20.2	1.2	70 - 130
1,3-Dichloropropane	20.0	20.1	0.7	70 - 130
2,2-Dichloropropane	20.0	18.3	-8.7	70 - 130
1,1-Dichloropropene	20.0	20.6	3.1	70 - 130
cis-1,3-Dichloropropene	20.0	19.1	-4.7	70 - 130
trans-1,3-Dichloropropene	20.0	21.5	7.3	70 - 130
Ethylbenzene	20.0	20.6	3.0	70 - 130
Hexachlorobutadiene	20.0	20.8	4.0	70 - 130
2-Hexanone	40.0	34.8	-13.0	70 - 130
Isopropylbenzene	20.0	20.8	4.2	70 - 130
4-Isopropyltoluene	20.0	22.0	10.0	70 - 130
Methylene chloride	20.0	20.4	1.8	70 - 130
4-Methyl-2-pentanone (MiBK)	40.0	36.4	-9.1	70 - 130
Methyl tert-butyl ether (MTBE)	20.0	19.4	-3.2	70 - 130
Naphthalene	20.0	18.4	-7.8	70 - 130
n-Propylbenzene	20.0	19.9	-0.6	70 - 130
Styrene	20.0	18.5	-7.3	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.0	-0.08	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.3	1.4	70 - 130
Tetrachloroethene (PCE)	20.0	21.0	4.9	70 - 130
Toluene	20.0	19.7	-1.5	70 - 130
1,2,3-Trichlorobenzene	20.0	21.0	5.2	70 - 130
1,2,4-Trichlorobenzene	20.0	20.1	0.6	70 - 130
1,1,1-Trichloroethane	20.0	20.5	2.7	70 - 130
1,1,2-Trichloroethane	20.0	19.8	-0.9	70 - 130
Trichloroethene (TCE)	20.0	21.0	5.2	70 - 130
Trichlorofluoromethane	20.0	19.0	-4.9	70 - 130
1,2,3-Trichloropropane	20.0	19.9	-0.7	70 - 130
1,2,4-Trimethylbenzene	20.0	21.6	7.9	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Charac
Instrument ID:	VOA-GCMS10	Calibration:	A0A0801
Lab File ID:	VJ20010629.D		
Sequence:	0A06051	Inject Date:	01/06/20
Lab Sample ID:	0A06051-ICV1	Inject Time:	23:55

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
1,3,5-Trimethylbenzene	20.0	21.8	9.2	70 - 130
Vinyl chloride	20.0	19.7	-1.3	70 - 130
m,p-Xylene	40.0	43.6	8.9	70 - 130
o-Xylene	20.0	21.7	8.4	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 - 4c. Waste Characterization
Sequence:	0A06051	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0A0801

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (0A06051-ICV1)				Lab File ID: VJ20010629.D		Analyzed: 01/06/20 23:55		
1,4-Difluorobenzene (Surr)	50.0	101	70 - 130	6.649	6.645182	0.0038	+/-1.0	
Toluene-d8 (Surr)	50.0	100	70 - 130	8.164	8.162909	0.0011	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	98	70 - 130	10.877	10.87645	0.0006	+/-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 - 4c. Waste Characterization
Sequence:	0A17017	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0A0801

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
LCS (0010530-BS1)			Lab File ID: VJ20011703.D		Analyzed: 01/17/20 10:24			
1,4-Difluorobenzene (Surr)	50.0	102	80 - 120	6.643	6.645182	-0.0022	+/-1.0	
Toluene-d8 (Surr)	50.0	94	80 - 120	8.158	8.162909	-0.0049	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	100	80 - 120	10.871	10.87645	-0.0054	+/-1.0	
Blank (0010530-BLK1)			Lab File ID: VJ20011705.D		Analyzed: 01/17/20 11:18			
1,4-Difluorobenzene (Surr)	50.0	102	80 - 120	6.649	6.645182	0.0038	+/-1.0	
Toluene-d8 (Surr)	50.0	98	80 - 120	8.164	8.162909	0.0011	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	104	80 - 120	10.877	10.87645	0.0006	+/-1.0	
PDI-WC-011420-02 (A0A0539-01)			Lab File ID: VJ20011707.D		Analyzed: 01/17/20 12:12			
1,4-Difluorobenzene (Surr)	50.0	102	80 - 120	6.649	6.645182	0.0038	+/-1.0	
Toluene-d8 (Surr)	50.0	95	80 - 120	8.164	8.162909	0.0011	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	103	80 - 120	10.871	10.87645	-0.0054	+/-1.0	
Duplicate (0010530-DUP1)			Lab File ID: VJ20011708.D		Analyzed: 01/17/20 12:39			
1,4-Difluorobenzene (Surr)	50.0	104	80 - 120	6.649	6.645182	0.0038	+/-1.0	
Toluene-d8 (Surr)	50.0	93	80 - 120	8.164	8.162909	0.0011	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	105	80 - 120	10.877	10.87645	0.0006	+/-1.0	
PDI-WC-011420-04 (A0A0539-02)			Lab File ID: VJ20011712.D		Analyzed: 01/17/20 14:26			
1,4-Difluorobenzene (Surr)	50.0	107	80 - 120	6.643	6.645182	-0.0022	+/-1.0	
Toluene-d8 (Surr)	50.0	94	80 - 120	8.164	8.162909	0.0011	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	104	80 - 120	10.871	10.87645	-0.0054	+/-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 - 4c. Waste Characterization
Sequence:	0A17017	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A0A0801

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (0010530-BS1)			Lab File ID: VJ20011703.D			Analyzed: 01/17/20 10:24			
Pentafluorobenzene (ISTD)	99045	6.083	99045	6.083	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	249894	9.8	249894	9.8	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	123313	11.759	123313	11.759	100	50 - 200	0.0000	+/-0.50	
Calibration Check (0A17017-CCV1)			Lab File ID: VJ20011703.D			Analyzed: 01/17/20 10:24			
Pentafluorobenzene (ISTD)	99045	6.083	108585	6.083	91	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	249894	9.8	257589	9.8	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	123313	11.759	120591	11.759	102	50 - 200	0.0000	+/-0.50	
Blank (0010530-BLK1)			Lab File ID: VJ20011705.D			Analyzed: 01/17/20 11:18			
Pentafluorobenzene (ISTD)	94406	6.083	99045	6.083	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	234186	9.8	249894	9.8	94	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	106578	11.759	123313	11.759	86	50 - 200	0.0000	+/-0.50	
PDI-WC-011420-02 (A0A0539-01)			Lab File ID: VJ20011707.D			Analyzed: 01/17/20 12:12			
Pentafluorobenzene (ISTD)	92795	6.083	99045	6.083	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	239801	9.8	249894	9.8	96	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	117501	11.759	123313	11.759	95	50 - 200	0.0000	+/-0.50	
Duplicate (0010530-DUP1)			Lab File ID: VJ20011708.D			Analyzed: 01/17/20 12:39			
Pentafluorobenzene (ISTD)	104610	6.083	99045	6.083	106	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	274951	9.8	249894	9.8	110	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	134877	11.759	123313	11.759	109	50 - 200	0.0000	+/-0.50	
Matrix Spike (0010530-MS1)			Lab File ID: VJ20011710.D			Analyzed: 01/17/20 13:33			
Pentafluorobenzene (ISTD)	115676	6.083	99045	6.083	117	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	303508	9.8	249894	9.8	121	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	145686	11.759	123313	11.759	118	50 - 200	0.0000	+/-0.50	
PDI-WC-011420-04 (A0A0539-02)			Lab File ID: VJ20011712.D			Analyzed: 01/17/20 14:26			
Pentafluorobenzene (ISTD)	104693	6.083	99045	6.083	106	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	283382	9.8	249894	9.8	113	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	138740	11.759	123313	11.759	113	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 - 4c. Waste Characterizatior

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-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/14/20 09:30	0.00	2.00	01/17/20 12:12	3.11	14.00	
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/14/20 10:35	0.00	2.00	01/17/20 14:26	3.16	14.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: GCMS

METHOD: EPA 8270D

ANALYSES DATA PACKAGE COVER PAGE

EPA 8270D

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 4c. Waste Characterization

Client Sample Id:	Lab Sample Id:	Matrix
PDI-WC-011420-02	A0A0539-01	Sediment
PDI-WC-011420-04	A0A0539-02	Sediment

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: 2/19/2020 12:29PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Acenaphthene	1.33	2.67	ug/kg
Acenaphthylene	1.33	2.67	ug/kg
Anthracene	1.33	2.67	ug/kg
Benz(a)anthracene	1.33	2.67	ug/kg
Benzo(a)pyrene	2.00	4.00	ug/kg
Benzo(b)fluoranthene	2.00	4.00	ug/kg
Benzo(k)fluoranthene	2.00	4.00	ug/kg
Benzo(g,h,i)perylene	1.33	2.67	ug/kg
Chrysene	1.33	2.67	ug/kg
Dibenz(a,h)anthracene	1.33	2.67	ug/kg
Fluoranthene	1.33	2.67	ug/kg
Fluorene	1.33	2.67	ug/kg
Indeno(1,2,3-cd)pyrene	1.33	2.67	ug/kg
1-Methylnaphthalene	2.67	5.33	ug/kg
2-Methylnaphthalene	2.67	5.33	ug/kg
Naphthalene	2.67	5.33	ug/kg
Phenanthrene	1.33	2.67	ug/kg
Pyrene	1.33	2.67	ug/kg
Carbazole	2.00	4.00	ug/kg
Dibenzofuran	1.33	2.67	ug/kg
4-Chloro-3-methylphenol	13.3	26.7	ug/kg
2-Chlorophenol	6.67	13.3	ug/kg
2,4-Dichlorophenol	6.67	13.3	ug/kg
2,4-Dimethylphenol	6.67	13.3	ug/kg
2,4-Dinitrophenol	33.3	66.7	ug/kg
4,6-Dinitro-2-methylphenol	33.3	66.7	ug/kg
2-Methylphenol	3.33	6.67	ug/kg
3+4-Methylphenol(s)	3.33	6.67	ug/kg
2-Nitrophenol	13.3	26.7	ug/kg
4-Nitrophenol	13.3	26.7	ug/kg
Pentachlorophenol (PCP)	13.3	26.7	ug/kg
Phenol	2.67	5.33	ug/kg
2,3,4,6-Tetrachlorophenol	6.67	13.3	ug/kg
2,3,5,6-Tetrachlorophenol	6.67	13.3	ug/kg
2,4,5-Trichlorophenol	6.67	13.3	ug/kg
2,4,6-Trichlorophenol	6.67	13.3	ug/kg
Bis(2-ethylhexyl)phthalate	20.0	40.0	ug/kg

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Butyl benzyl phthalate	6.67	13.3	ug/kg
Diethylphthalate	6.67	13.3	ug/kg
Dimethylphthalate	6.67	13.3	ug/kg
Di-n-butylphthalate	6.67	13.3	ug/kg
Di-n-octyl phthalate	10.7	13.3	ug/kg
N-Nitrosodimethylamine	3.33	6.67	ug/kg
N-Nitroso-di-n-propylamine	3.33	6.67	ug/kg
N-Nitrosodiphenylamine	3.33	6.67	ug/kg
Bis(2-Chloroethoxy) methane	3.33	6.67	ug/kg
Bis(2-Chloroethyl) ether	3.33	6.67	ug/kg
2,2'-Oxybis(1-Chloropropane)	3.33	6.67	ug/kg
Hexachlorobenzene	1.33	2.67	ug/kg
Hexachlorobutadiene	3.33	6.67	ug/kg
Hexachlorocyclopentadiene	6.67	13.3	ug/kg
Hexachloroethane	3.33	6.67	ug/kg
2-Chloronaphthalene	1.33	2.67	ug/kg
1,2-Dichlorobenzene	3.33	6.67	ug/kg
1,3-Dichlorobenzene	3.33	6.67	ug/kg
1,4-Dichlorobenzene	3.33	6.67	ug/kg
1,2,4-Trichlorobenzene	3.33	6.67	ug/kg
4-Bromophenyl phenyl ether	3.33	6.67	ug/kg
4-Chlorophenyl phenyl ether	3.33	6.67	ug/kg
Aniline	6.67	13.3	ug/kg
4-Chloroaniline	3.33	6.67	ug/kg
2-Nitroaniline	26.7	53.3	ug/kg
3-Nitroaniline	26.7	53.3	ug/kg
4-Nitroaniline	26.7	53.3	ug/kg
Nitrobenzene	13.3	26.7	ug/kg
2,4-Dinitrotoluene	13.3	26.7	ug/kg
2,6-Dinitrotoluene	13.3	26.7	ug/kg
Benzoic acid	167	333	ug/kg
Benzyl alcohol	6.67	13.3	ug/kg
Isophorone	3.33	6.67	ug/kg
Azobenzene (1,2-DPH)	3.33	6.67	ug/kg
Bis(2-Ethylhexyl) adipate	33.3	66.7	ug/kg
3,3'-Dichlorobenzidine	26.7	53.3	ug/kg
1,2-Dinitrobenzene	33.3	66.7	ug/kg

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
1,3-Dinitrobenzene	33.3	66.7	ug/kg
1,4-Dinitrobenzene	33.3	66.7	ug/kg
Pyridine	6.67	13.3	ug/kg

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

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Acenaphthene	1.33	2.67	ug/kg
Acenaphthylene	1.33	2.67	ug/kg
Anthracene	1.33	2.67	ug/kg
Benz(a)anthracene	1.33	2.67	ug/kg
Benzo(a)pyrene	2.00	4.00	ug/kg
Benzo(b)fluoranthene	2.00	4.00	ug/kg
Benzo(k)fluoranthene	2.00	4.00	ug/kg
Benzo(g,h,i)perylene	1.33	2.67	ug/kg
Chrysene	1.33	2.67	ug/kg
Dibenz(a,h)anthracene	1.33	2.67	ug/kg
Fluoranthene	1.33	2.67	ug/kg
Fluorene	1.33	2.67	ug/kg
Indeno(1,2,3-cd)pyrene	1.33	2.67	ug/kg
1-Methylnaphthalene	2.67	5.33	ug/kg
2-Methylnaphthalene	2.67	5.33	ug/kg
Naphthalene	2.67	5.33	ug/kg
Phenanthrene	1.33	2.67	ug/kg
Pyrene	1.33	2.67	ug/kg
Carbazole	2.00	4.00	ug/kg
Dibenzofuran	1.33	2.67	ug/kg
4-Chloro-3-methylphenol	13.3	26.7	ug/kg
2-Chlorophenol	6.67	13.3	ug/kg
2,4-Dichlorophenol	6.67	13.3	ug/kg
2,4-Dimethylphenol	6.67	13.3	ug/kg
2,4-Dinitrophenol	33.3	66.7	ug/kg
4,6-Dinitro-2-methylphenol	33.3	66.7	ug/kg
2-Methylphenol	3.33	6.67	ug/kg
3+4-Methylphenol(s)	3.33	6.67	ug/kg
2-Nitrophenol	13.3	26.7	ug/kg
4-Nitrophenol	13.3	26.7	ug/kg
Pentachlorophenol (PCP)	13.3	26.7	ug/kg
Phenol	2.67	5.33	ug/kg
2,3,4,6-Tetrachlorophenol	6.67	13.3	ug/kg
2,3,5,6-Tetrachlorophenol	6.67	13.3	ug/kg
2,4,5-Trichlorophenol	6.67	13.3	ug/kg
2,4,6-Trichlorophenol	6.67	13.3	ug/kg
Bis(2-ethylhexyl)phthalate	20.0	40.0	ug/kg

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

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

Client: Anchor QEA, LLC **Project:** Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Butyl benzyl phthalate	13.3	26.7	ug/kg
Diethylphthalate	13.3	26.7	ug/kg
Dimethylphthalate	13.3	26.7	ug/kg
Di-n-butylphthalate	13.3	26.7	ug/kg
Di-n-octyl phthalate	13.3	26.7	ug/kg
N-Nitrosodimethylamine	3.33	6.67	ug/kg
N-Nitroso-di-n-propylamine	3.33	6.67	ug/kg
N-Nitrosodiphenylamine	3.33	6.67	ug/kg
Bis(2-Chloroethoxy) methane	3.33	6.67	ug/kg
Bis(2-Chloroethyl) ether	3.33	6.67	ug/kg
2,2'-Oxybis(1-Chloropropane)	3.33	6.67	ug/kg
Hexachlorobenzene	1.33	2.67	ug/kg
Hexachlorobutadiene	3.33	6.67	ug/kg
Hexachlorocyclopentadiene	6.67	13.3	ug/kg
Hexachloroethane	3.33	6.67	ug/kg
2-Chloronaphthalene	1.33	2.67	ug/kg
1,2-Dichlorobenzene	3.33	6.67	ug/kg
1,3-Dichlorobenzene	3.33	6.67	ug/kg
1,4-Dichlorobenzene	3.33	6.67	ug/kg
1,2,4-Trichlorobenzene	3.33	6.67	ug/kg
4-Bromophenyl phenyl ether	3.33	6.67	ug/kg
4-Chlorophenyl phenyl ether	3.33	6.67	ug/kg
Aniline	6.67	13.3	ug/kg
4-Chloroaniline	3.33	6.67	ug/kg
2-Nitroaniline	26.7	53.3	ug/kg
3-Nitroaniline	26.7	53.3	ug/kg
4-Nitroaniline	26.7	53.3	ug/kg
Nitrobenzene	13.3	26.7	ug/kg
2,4-Dinitrotoluene	13.3	26.7	ug/kg
2,6-Dinitrotoluene	13.3	26.7	ug/kg
Benzoic acid	167	333	ug/kg
Benzyl alcohol	6.67	13.3	ug/kg
Isophorone	3.33	6.67	ug/kg
Azobenzene (1,2-DPH)	3.33	6.67	ug/kg
Bis(2-Ethylhexyl) adipate	33.3	66.7	ug/kg
3,3'-Dichlorobenzidine	26.7	53.3	ug/kg
1,2-Dinitrobenzene	33.3	66.7	ug/kg

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Soil

Analyte	MDL	MRL	Units
1,3-Dinitrobenzene	33.3	66.7	ug/kg
1,4-Dinitrobenzene	33.3	66.7	ug/kg
Pyridine	6.67	13.3	ug/kg

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

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-WC-011420-02

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-01RE2	File ID:	I01212007.D
Sampled:	01/14/20 09:30	Prepared:	01/20/20 10:08	Analyzed:	01/21/20 16:41
Solids:	78.60	Preparation:	EPA 3546	Initial/Final:	15.55 g / 2 mL
Batch:	0010574	Sequence:	0A21026	Calibration:	A9L0505
Instrument:	SV-GCMS9				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	20	3500	D
208-96-8	Acenaphthylene	20	715	D
120-12-7	Anthracene	20	5620	D
56-55-3	Benz(a)anthracene	20	6770	D
50-32-8	Benzo(a)pyrene	20	9030	D
205-99-2	Benzo(b)fluoranthene	20	7840	D
207-08-9	Benzo(k)fluoranthene	20	3080	D
191-24-2	Benzo(g,h,i)perylene	20	7140	D
218-01-9	Chrysene	20	7670	D
53-70-3	Dibenz(a,h)anthracene	20	707	D
206-44-0	Fluoranthene	20	17000	D
86-73-7	Fluorene	20	2830	D
193-39-5	Indeno(1,2,3-cd)pyrene	20	5790	D
90-12-0	1-Methylnaphthalene	20	944	D
91-57-6	2-Methylnaphthalene	20	1570	D
91-20-3	Naphthalene	20	2490	D
85-01-8	Phenanthrene	20	16200	D
129-00-0	Pyrene	20	20600	D
86-74-8	Carbazole	20	425	D
132-64-9	Dibenzofuran	20	334	D
59-50-7	4-Chloro-3-methylphenol	20	326	U
95-57-8	2-Chlorophenol	20	164	U
120-83-2	2,4-Dichlorophenol	20	164	U
105-67-9	2,4-Dimethylphenol	20	164	U
51-28-5	2,4-Dinitrophenol	20	817	U
534-52-1	4,6-Dinitro-2-methylphenol	20	817	U
95-48-7	2-Methylphenol	20	81.7	U
NA	3+4-Methylphenol(s)	20	81.7	U
88-75-5	2-Nitrophenol	20	326	U
100-02-7	4-Nitrophenol	20	655	U
87-86-5	Pentachlorophenol (PCP)	20	326	U
108-95-2	Phenol	20	65.5	U
58-90-2	2,3,4,6-Tetrachlorophenol	20	164	U
935-95-5	2,3,5,6-Tetrachlorophenol	20	164	U
95-95-4	2,4,5-Trichlorophenol	20	164	U
88-06-2	2,4,6-Trichlorophenol	20	164	U
117-81-7	Bis(2-ethylhexyl)phthalate	20	491	U
85-68-7	Butyl benzyl phthalate	20	245	U
84-66-2	Diethylphthalate	20	164	U
131-11-3	Dimethylphthalate	20	164	U

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-WC-011420-02

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-01RE2	File ID:	I01212007.D
Sampled:	01/14/20 09:30	Prepared:	01/20/20 10:08	Analyzed:	01/21/20 16:41
Solids:	78.60	Preparation:	EPA 3546	Initial/Final:	15.55 g / 2 mL
Batch:	0010574	Sequence:	0A21026	Calibration:	A9L0505
Instrument:	SV-GCMS9				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
84-74-2	Di-n-butylphthalate	20	164	U
117-84-0	Di-n-octyl phthalate	20	295	U
62-75-9	N-Nitrosodimethylamine	20	81.7	U
621-64-7	N-Nitroso-di-n-propylamine	20	81.7	U
86-30-6	N-Nitrosodiphenylamine	20	295	U
111-91-1	Bis(2-Chloroethoxy) methane	20	81.7	U
111-44-4	Bis(2-Chloroethyl) ether	20	81.7	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	81.7	U
118-74-1	Hexachlorobenzene	20	32.6	U
87-68-3	Hexachlorobutadiene	20	81.7	U
77-47-4	Hexachlorocyclopentadiene	20	164	U
67-72-1	Hexachloroethane	20	81.7	U
91-58-7	2-Chloronaphthalene	20	32.6	U
95-50-1	1,2-Dichlorobenzene	20	81.7	U
541-73-1	1,3-Dichlorobenzene	20	81.7	U
106-46-7	1,4-Dichlorobenzene	20	81.7	U
120-82-1	1,2,4-Trichlorobenzene	20	81.7	U
101-55-3	4-Bromophenyl phenyl ether	20	81.7	U
7005-72-3	4-Chlorophenyl phenyl ether	20	81.7	U
62-53-3	Aniline	20	164	U
106-47-8	4-Chloroaniline	20	81.7	U
88-74-4	2-Nitroaniline	20	655	U
99-09-2	3-Nitroaniline	20	655	U
100-01-6	4-Nitroaniline	20	655	U
98-95-3	Nitrobenzene	20	326	U
121-14-2	2,4-Dinitrotoluene	20	326	U
606-20-2	2,6-Dinitrotoluene	20	326	U
65-85-0	Benzoic acid	20	4100	U
100-51-6	Benzyl alcohol	20	164	U
78-59-1	Isophorone	20	81.7	U
103-33-3	Azobenzene (1,2-DPH)	20	81.7	U
103-23-1	Bis(2-Ethylhexyl) adipate	20	817	U
91-94-1	3,3'-Dichlorobenzidine	20	655	U
528-29-0	1,2-Dinitrobenzene	20	817	U
99-65-0	1,3-Dinitrobenzene	20	817	U
100-25-4	1,4-Dinitrobenzene	20	817	U
110-86-1	Pyridine	20	164	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	409	246	60	37 - 122	
2-Fluorobiphenyl (Surr)	409	299	73	44 - 115	

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-WC-011420-02

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-01RE2	File ID:	I01212007.D
Sampled:	01/14/20 09:30	Prepared:	01/20/20 10:08	Analyzed:	01/21/20 16:41
Solids:	78.60	Preparation:	EPA 3546	Initial/Final:	15.55 g / 2 mL
Batch:	0010574	Sequence:	0A21026	Calibration:	A9L0505
Instrument:	SV-GCMS9				

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Phenol-d6 (Surr)	409	205	50	33 - 122	
p-Terphenyl-d14 (Surr)	409	332	81	54 - 127	
2-Fluorophenol (Surr)	409	223	54	35 - 115	
2,4,6-Tribromophenol (Surr)	409	374	91	39 - 132	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	134123	6.53	105429	6.53	
Naphthalene-d8 (ISTD)	483418	7.787	398025	7.787	
Acenaphthene-d10 (ISTD)	216664	9.568	194436	9.568	
Phenanthrene-d10 (ISTD)	370511	11.076	367843	11.077	
Chrysene-d12 (ISTD)	351202	14.794	356044	14.783	
Perylene-d12 (ISTD)	356315	18.27	336088	18.26	
Dibenz(a,h)anthracene-d14 (ISTD)	320900	20.661	280756	20.651	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-WC-011420-04

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-02RE1	File ID:	I01202015.D
Sampled:	01/14/20 10:35	Prepared:	01/20/20 10:08	Analyzed:	01/20/20 17:51
Solids:	81.70	Preparation:	EPA 3546	Initial/Final:	15.52 g / 2 mL
Batch:	0010574	Sequence:	0A20029	Calibration:	A9L0505
Instrument:	SV-GCMS9				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	40	17800	D
208-96-8	Acenaphthylene	40	1340	D
120-12-7	Anthracene	40	10800	D
56-55-3	Benz(a)anthracene	40	11300	D
50-32-8	Benzo(a)pyrene	40	14800	D
205-99-2	Benzo(b)fluoranthene	40	12900	D
207-08-9	Benzo(k)fluoranthene	40	4650	D
191-24-2	Benzo(g,h,i)perylene	40	10800	D
218-01-9	Chrysene	40	12800	D
53-70-3	Dibenz(a,h)anthracene	40	1210	D
206-44-0	Fluoranthene	40	28500	D
86-73-7	Fluorene	40	10300	D
193-39-5	Indeno(1,2,3-cd)pyrene	40	8860	D
90-12-0	1-Methylnaphthalene	40	7390	D
91-57-6	2-Methylnaphthalene	40	12300	D
91-20-3	Naphthalene	40	14200	D
85-01-8	Phenanthrene	40	37600	D
129-00-0	Pyrene	40	34800	D
86-74-8	Carbazole	40	1580	D
132-64-9	Dibenzofuran	40	1440	D
59-50-7	4-Chloro-3-methylphenol	40	629	U
95-57-8	2-Chlorophenol	40	316	U
120-83-2	2,4-Dichlorophenol	40	316	U
105-67-9	2,4-Dimethylphenol	40	316	U
51-28-5	2,4-Dinitrophenol	40	1580	U
534-52-1	4,6-Dinitro-2-methylphenol	40	1580	U
95-48-7	2-Methylphenol	40	158	U
NA	3+4-Methylphenol(s)	40	158	U
88-75-5	2-Nitrophenol	40	629	U
100-02-7	4-Nitrophenol	40	1260	U
87-86-5	Pentachlorophenol (PCP)	40	629	U
108-95-2	Phenol	40	126	U
58-90-2	2,3,4,6-Tetrachlorophenol	40	316	U
935-95-5	2,3,5,6-Tetrachlorophenol	40	316	U
95-95-4	2,4,5-Trichlorophenol	40	316	U
88-06-2	2,4,6-Trichlorophenol	40	316	U
117-81-7	Bis(2-ethylhexyl)phthalate	40	946	U
85-68-7	Butyl benzyl phthalate	40	473	U
84-66-2	Diethylphthalate	40	316	U
131-11-3	Dimethylphthalate	40	316	U

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-WC-011420-04

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-02RE1	File ID:	I01202015.D
Sampled:	01/14/20 10:35	Prepared:	01/20/20 10:08	Analyzed:	01/20/20 17:51
Solids:	81.70	Preparation:	EPA 3546	Initial/Final:	15.52 g / 2 mL
Batch:	0010574	Sequence:	0A20029	Calibration:	A9L0505
Instrument:	SV-GCMS9				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
84-74-2	Di-n-butylphthalate	40	316	U
117-84-0	Di-n-octyl phthalate	40	568	U
62-75-9	N-Nitrosodimethylamine	40	158	U
621-64-7	N-Nitroso-di-n-propylamine	40	158	U
86-30-6	N-Nitrosodiphenylamine	40	804	U
111-91-1	Bis(2-Chloroethoxy) methane	40	158	U
111-44-4	Bis(2-Chloroethyl) ether	40	158	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	40	158	U
118-74-1	Hexachlorobenzene	40	62.9	U
87-68-3	Hexachlorobutadiene	40	158	U
77-47-4	Hexachlorocyclopentadiene	40	316	U
67-72-1	Hexachloroethane	40	158	U
91-58-7	2-Chloronaphthalene	40	62.9	U
95-50-1	1,2-Dichlorobenzene	40	158	U
541-73-1	1,3-Dichlorobenzene	40	158	U
106-46-7	1,4-Dichlorobenzene	40	158	U
120-82-1	1,2,4-Trichlorobenzene	40	158	U
101-55-3	4-Bromophenyl phenyl ether	40	158	U
7005-72-3	4-Chlorophenyl phenyl ether	40	158	U
62-53-3	Aniline	40	316	U
106-47-8	4-Chloroaniline	40	158	U
88-74-4	2-Nitroaniline	40	1260	U
99-09-2	3-Nitroaniline	40	1260	U
100-01-6	4-Nitroaniline	40	1260	U
98-95-3	Nitrobenzene	40	629	U
121-14-2	2,4-Dinitrotoluene	40	1260	U
606-20-2	2,6-Dinitrotoluene	40	629	U
65-85-0	Benzoic acid	40	7900	U
100-51-6	Benzyl alcohol	40	316	U
78-59-1	Isophorone	40	158	U
103-33-3	Azobenzene (1,2-DPH)	40	158	U
103-23-1	Bis(2-Ethylhexyl) adipate	40	1580	U
91-94-1	3,3'-Dichlorobenzidine	40	1260	U
528-29-0	1,2-Dinitrobenzene	40	1580	U
99-65-0	1,3-Dinitrobenzene	40	1580	U
100-25-4	1,4-Dinitrobenzene	40	1580	U
110-86-1	Pyridine	40	316	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	394	297	75	37 - 122	D
2-Fluorobiphenyl (Surr)	394	330	84	44 - 115	D

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-WC-011420-04

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	A0A0539-02RE1	File ID:	I01202015.D
Sampled:	01/14/20 10:35	Prepared:	01/20/20 10:08	Analyzed:	01/20/20 17:51
Solids:	81.70	Preparation:	EPA 3546	Initial/Final:	15.52 g / 2 mL
Batch:	0010574	Sequence:	0A20029	Calibration:	A9L0505	Instrument:	SV-GCMS9

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Phenol-d6 (Surr)	394	191	48	33 - 122	D
p-Terphenyl-d14 (Surr)	394	373	95	54 - 127	D
2-Fluorophenol (Surr)	394	232	59	35 - 115	D
2,4,6-Tribromophenol (Surr)	394	508	129	39 - 132	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	127426	6.53	113358	6.525	
Naphthalene-d8 (ISTD)	436881	7.793	401344	7.787	
Acenaphthene-d10 (ISTD)	196625	9.568	193731	9.563	
Phenanthrene-d10 (ISTD)	340143	11.082	357674	11.077	
Chrysene-d12 (ISTD)	329412	14.794	347695	14.783	
Perylene-d12 (ISTD)	331710	18.271	345670	18.26	
Dibenz(a,h)anthracene-d14 (ISTD)	298330	20.667	302210	20.656	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Batch: 0010574 Batch Matrix: Sediment Preparation: EPA 3546

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	0010574-BLK1	I01202009.D	01/20/20 10:08	
LCS	0010574-BS1	I01202010.D	01/20/20 10:08	
PDI-WC-011420-02	A0A0539-01RE2	I01212007.D	01/20/20 10:08	
PDI-WC-011420-04	A0A0539-02RE1	I01202015.D	01/20/20 10:08	

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 8270D

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	0010574-BLK1	File ID:	I01202009.D
Prepared:	01/20/20 10:08	Preparation:	EPA 3546	Initial/Final:	16 g / 2 mL
Analyzed:	01/20/20 14:22	Instrument:	SV-GCMS9		
Batch:	0010574	Sequence:	0A20029	Calibration:	A9L0505

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
83-32-9	Acenaphthene	1.25	U
208-96-8	Acenaphthylene	1.25	U
120-12-7	Anthracene	1.25	U
56-55-3	Benz(a)anthracene	1.25	U
50-32-8	Benzo(a)pyrene	1.87	U
205-99-2	Benzo(b)fluoranthene	1.87	U
207-08-9	Benzo(k)fluoranthene	1.87	U
191-24-2	Benzo(g,h,i)perylene	1.25	U
218-01-9	Chrysene	1.25	U
53-70-3	Dibenz(a,h)anthracene	1.25	U
206-44-0	Fluoranthene	1.25	U
86-73-7	Fluorene	1.25	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.25	U
90-12-0	1-Methylnaphthalene	2.50	U
91-57-6	2-Methylnaphthalene	2.50	U
91-20-3	Naphthalene	2.50	U
85-01-8	Phenanthrene	1.25	U
129-00-0	Pyrene	1.25	U
86-74-8	Carbazole	1.87	U
132-64-9	Dibenzofuran	1.25	U
59-50-7	4-Chloro-3-methylphenol	12.5	U
95-57-8	2-Chlorophenol	6.25	U
120-83-2	2,4-Dichlorophenol	6.25	U
105-67-9	2,4-Dimethylphenol	6.25	U
51-28-5	2,4-Dinitrophenol	31.2	U
534-52-1	4,6-Dinitro-2-methylphenol	31.2	U
95-48-7	2-Methylphenol	3.12	U
NA	3+4-Methylphenol(s)	3.12	U
88-75-5	2-Nitrophenol	12.5	U
100-02-7	4-Nitrophenol	12.5	U
87-86-5	Pentachlorophenol (PCP)	12.5	U
108-95-2	Phenol	2.50	U
58-90-2	2,3,4,6-Tetrachlorophenol	6.25	U
935-95-5	2,3,5,6-Tetrachlorophenol	6.25	U
95-95-4	2,4,5-Trichlorophenol	6.25	U

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	0010574-BLK1	File ID:	I01202009.D
Prepared:	01/20/20 10:08	Preparation:	EPA 3546	Initial/Final:	16 g / 2 mL
Analyzed:	01/20/20 14:22	Instrument:	SV-GCMS9		
Batch:	0010574	Sequence:	0A20029	Calibration:	A9L0505

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
88-06-2	2,4,6-Trichlorophenol	6.25	U
117-81-7	Bis(2-ethylhexyl)phthalate	18.7	U
85-68-7	Butyl benzyl phthalate	9.37	U
84-66-2	Diethylphthalate	6.25	U
131-11-3	Dimethylphthalate	6.25	U
84-74-2	Di-n-butylphthalate	6.25	U
117-84-0	Di-n-octyl phthalate	11.2	U
62-75-9	N-Nitrosodimethylamine	3.12	U
621-64-7	N-Nitroso-di-n-propylamine	3.12	U
86-30-6	N-Nitrosodiphenylamine	3.12	U
111-91-1	Bis(2-Chloroethoxy) methane	3.12	U
111-44-4	Bis(2-Chloroethyl) ether	3.12	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	3.12	U
118-74-1	Hexachlorobenzene	1.25	U
87-68-3	Hexachlorobutadiene	3.12	U
77-47-4	Hexachlorocyclopentadiene	6.25	U
67-72-1	Hexachloroethane	3.12	U
91-58-7	2-Chloronaphthalene	1.25	U
95-50-1	1,2-Dichlorobenzene	3.12	U
541-73-1	1,3-Dichlorobenzene	3.12	U
106-46-7	1,4-Dichlorobenzene	3.12	U
120-82-1	1,2,4-Trichlorobenzene	3.12	U
101-55-3	4-Bromophenyl phenyl ether	3.12	U
7005-72-3	4-Chlorophenyl phenyl ether	3.12	U
62-53-3	Aniline	6.25	U
106-47-8	4-Chloroaniline	3.12	U
88-74-4	2-Nitroaniline	25.0	U
99-09-2	3-Nitroaniline	25.0	U
100-01-6	4-Nitroaniline	25.0	U
98-95-3	Nitrobenzene	12.5	U
121-14-2	2,4-Dinitrotoluene	12.5	U
606-20-2	2,6-Dinitrotoluene	12.5	U
65-85-0	Benzoic acid	157	U
100-51-6	Benzyl alcohol	6.25	U
78-59-1	Isophorone	3.12	U

METHOD BLANK DATA SHEET

EPA 8270D

Laboratory:	Apex Laboratories			SDG:	Gasco PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	0010574-BLK1	File ID:	I01202009.D
Prepared:	01/20/20 10:08	Preparation:	EPA 3546	Initial/Final:	16 g / 2 mL
Analyzed:	01/20/20 14:22	Instrument:	SV-GCMS9		
Batch:	0010574	Sequence:	0A20029	Calibration:	A9L0505

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
103-33-3	Azobenzene (1,2-DPH)	3.12	U
103-23-1	Bis(2-Ethylhexyl) adipate	31.2	U
91-94-1	3,3'-Dichlorobenzidine	25.0	U
528-29-0	1,2-Dinitrobenzene	31.2	U
99-65-0	1,3-Dinitrobenzene	31.2	U
100-25-4	1,4-Dinitrobenzene	31.2	U
110-86-1	Pyridine	6.25	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	312	237	76	37 - 122	
2-Fluorobiphenyl (Surr)	312	221	71	44 - 115	
Phenol-d6 (Surr)	312	213	68	33 - 122	
p-Terphenyl-d14 (Surr)	312	278	89	54 - 127	
2-Fluorophenol (Surr)	312	220	71	35 - 115	
2,4,6-Tribromophenol (Surr)	312	268	86	39 - 132	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	123119	6.525	113358	6.525	
Naphthalene-d8 (ISTD)	451408	7.787	401344	7.787	
Acenaphthene-d10 (ISTD)	214689	9.563	193731	9.563	
Phenanthrene-d10 (ISTD)	367992	11.077	357674	11.077	
Chrysene-d12 (ISTD)	376121	14.789	347695	14.783	
Perylene-d12 (ISTD)	352732	18.26	345670	18.26	
Dibenz(a,h)anthracene-d14 (ISTD)	295091	20.656	302210	20.656	

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment		
Batch:	0010574	Laboratory ID:	0010574-BS1
Preparation:	EPA 3546	Initial/Final:	15 g / 2 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Acenaphthene	533	436	82	40 - 122
Acenaphthylene	533	456	85	32 - 132
Anthracene	533	500	94	47 - 123
Benz(a)anthracene	533	548	103	49 - 126
Benzo(a)pyrene	533	538	101	45 - 129
Benzo(b)fluoranthene	533	574	108	45 - 132
Benzo(k)fluoranthene	533	548	103	47 - 132
Benzo(g,h,i)perylene	533	529	99	43 - 134
Chrysene	533	505	95	50 - 124
Dibenz(a,h)anthracene	533	505	95	45 - 134
Fluoranthene	533	565	106	50 - 127
Fluorene	533	469	88	43 - 125
Indeno(1,2,3-cd)pyrene	533	516	97	45 - 133
1-Methylnaphthalene	533	436	82	40 - 120
2-Methylnaphthalene	533	450	84	38 - 122
Naphthalene	533	426	80	35 - 123
Phenanthrene	533	460	86	50 - 121
Pyrene	533	537	101	47 - 127
Carbazole	533	510	96	50 - 122
Dibenzofuran	533	443	83	44 - 120
4-Chloro-3-methylphenol	533	504	95	45 - 122
2-Chlorophenol	533	467	87	34 - 121
2,4-Dichlorophenol	533	507	95	40 - 122
2,4-Dimethylphenol	533	491	92	30 - 127
2,4-Dinitrophenol	533	645	121	5 - 137
4,6-Dinitro-2-methylphenol	533	663	124	29 - 132
2-Methylphenol	533	457	86	32 - 122
3+4-Methylphenol(s)	533	463	87	34 - 120
2-Nitrophenol	533	505	95	36 - 123
4-Nitrophenol	533	557	105	30 - 132

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment		
Batch:	0010574	Laboratory ID:	0010574-BS1
Preparation:	EPA 3546	Initial/Final:	15 g / 2 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Pentachlorophenol (PCP)	533	574	108	25 - 133
Phenol	533	470	88	34 - 120
2,3,4,6-Tetrachlorophenol	533	516	97	44 - 125
2,3,5,6-Tetrachlorophenol	533	558	105	40 - 120
2,4,5-Trichlorophenol	533	514	96	41 - 124
2,4,6-Trichlorophenol	533	500	94	39 - 126
Bis(2-ethylhexyl)phthalate	533	554	104	51 - 133
Butyl benzyl phthalate	533	598	112	48 - 132
Diethylphthalate	533	519	97	50 - 124
Dimethylphthalate	533	506	95	48 - 124
Di-n-butylphthalate	533	592	111	51 - 128
Di-n-octyl phthalate	533	679	127	44 - 140
N-Nitrosodimethylamine	533	483	91	23 - 120
N-Nitroso-di-n-propylamine	533	452	85	36 - 120
N-Nitrosodiphenylamine	533	488	91	38 - 127
Bis(2-Chloroethoxy) methane	533	459	86	36 - 121
Bis(2-Chloroethyl) ether	533	448	84	31 - 120
2,2'-Oxybis(1-Chloropropane)	533	386	72	33 - 131
Hexachlorobenzene	533	472	89	44 - 122
Hexachlorobutadiene	533	462	87	32 - 123
Hexachlorocyclopentadiene	533	442	83	5 - 140
Hexachloroethane	533	481	90	28 - 120
2-Chloronaphthalene	533	445	83	41 - 120
1,2-Dichlorobenzene	533	416	78	33 - 120
1,3-Dichlorobenzene	533	446	84	30 - 120
1,4-Dichlorobenzene	533	421	79	31 - 120
1,2,4-Trichlorobenzene	533	447	84	34 - 120
4-Bromophenyl phenyl ether	533	505	95	46 - 124
4-Chlorophenyl phenyl ether	533	473	89	45 - 121
Aniline	533	316	59	7 - 120

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment		
Batch:	0010574	Laboratory ID:	0010574-BS1
Preparation:	EPA 3546	Initial/Final:	15 g / 2 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
4-Chloroaniline	533	264	50	16 - 120
2-Nitroaniline	533	529	99	44 - 127
3-Nitroaniline	533	461	86	33 - 120
4-Nitroaniline	533	545	102	35 - 120
Nitrobenzene	533	448	84	34 - 122
2,4-Dinitrotoluene	533	527	99	48 - 126
2,6-Dinitrotoluene	533	542	102	46 - 124
Benzoic acid	1070	398	37	5 - 140
Benzyl alcohol	533	435	81	29 - 122
Isophorone	533	472	89	30 - 122
Azobenzene (1,2-DPH)	533	476	89	39 - 125
Bis(2-Ethylhexyl) adipate	533	630	118	60 - 121
3,3'-Dichlorobenzidine	1070	2700	253 *	22 - 121
1,2-Dinitrobenzene	533	529	99	44 - 120
1,3-Dinitrobenzene	533	543	102	42 - 127
1,4-Dinitrobenzene	533	568	106	37 - 132
Pyridine	533	407	76	5 - 120

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A20029	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9L0505

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0A20029-TUN1	I01202001.D	01/20/20 08:01
Calibration Check	0A20029-CCV1	I01202002.D	01/20/20 08:28
Calibration Blank	0A20029-CCB1	I01202003.D	01/20/20 09:03
Blank	0010574-BLK1	I01202009.D	01/20/20 14:22
LCS	0010574-BS1	I01202010.D	01/20/20 14:57
PDI-WC-011420-04	A0A0539-02RE1	I01202015.D	01/20/20 17:51

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 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A21026	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9L0505

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0A21026-TUN1	I01212001.D	01/21/20 13:18
Calibration Check	0A21026-CCV1	I01212002.D	01/21/20 13:45
Calibration Blank	0A21026-CCB1	I01212003.D	01/21/20 14:20
PDI-WC-011420-02	A0A0539-01RE2	I01212007.D	01/21/20 16:41

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 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	9L03048	Instrument:	SV-GCMS9
Matrix:	Soil	Calibration:	A9L0505

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9L03048-TUN1	I12031910.D	12/03/19 15:02
Initial Cal Blank	9L03048-ICB1	I12031911.D	12/03/19 15:29
Cal Standard	9L03048-CAL1	I12031912.D	12/03/19 16:03
Cal Standard	9L03048-CAL2	I12031913.D	12/03/19 16:38
Cal Standard	9L03048-CAL3	I12031914.D	12/03/19 17:12
Cal Standard	9L03048-CAL4	I12031915.D	12/03/19 17:46
Cal Standard	9L03048-CAL5	I12031916.D	12/03/19 18:20
Cal Standard	9L03048-CAL6	I12031917.D	12/03/19 18:54
Cal Standard	9L03048-CAL7	I12031918.D	12/03/19 19:28
Cal Standard	9L03048-CAL8	I12031919.D	12/03/19 20:02
Cal Standard	9L03048-CAL9	I12031920.D	12/03/19 20:36
Cal Standard	9L03048-CALA	I12031921.D	12/03/19 21:10
Initial Cal Check	9L03048-ICV1	I12031923.D	12/03/19 22:18

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 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Lab File ID:	I01202001.D	Injection Date:	01/20/20
Instrument ID:	SV-GCMS9	Injection Time:	08:01
Sequence:	0A20029	Lab Sample ID:	0A20029-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	0.00	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.51	PASS
m/z 197	Less than 2% of m/z 198	0.00	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	6.92	PASS
m/z 365	1 - 100% of m/z 198	4.75	PASS
m/z 441	Less than 150% of m/z 443	48.93	PASS
m/z 442	0.1 - 200% of m/z 198	166.15	PASS
m/z 443	15 - 24% of m/z 442	20.29	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Lab File ID:	I01212001.D	Injection Date:	01/21/20
Instrument ID:	SV-GCMS9	Injection Time:	13:18
Sequence:	0A21026	Lab Sample ID:	0A21026-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	0.00	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.56	PASS
m/z 197	Less than 2% of m/z 198	0.00	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	7.01	PASS
m/z 365	1 - 100% of m/z 198	4.81	PASS
m/z 441	Less than 150% of m/z 443	48.19	PASS
m/z 442	0.1 - 200% of m/z 198	160.94	PASS
m/z 443	15 - 24% of m/z 442	20.32	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Lab File ID:	I12031910.D	Injection Date:	12/03/19
Instrument ID:	SV-GCMS9	Injection Time:	15:02
Sequence:	9L03048	Lab Sample ID:	9L03048-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	0.00	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.47	PASS
m/z 197	Less than 2% of m/z 198	0.00	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	6.93	PASS
m/z 365	1 - 100% of m/z 198	4.47	PASS
m/z 441	Less than 150% of m/z 443	42.99	PASS
m/z 442	0.1 - 200% of m/z 198	147.93	PASS
m/z 443	15 - 24% of m/z 442	19.89	PASS

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatic

Calibration: A9L0505 Date: 12/05/19 11:21 Instrument: SV-GCMS9

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acenaphthene	1.278943	Ave	11.84147	9.703	3.480771E-02			20	
Acenaphthylene	1.921847	Ave	13.40823	9.527	2.857965E-02			20	
Anthracene	1.004901	Ave	12.6413	11.2605	3.125738E-02			20	
Benz(a)anthracene	1.039996	Ave	8.067942	14.9699	5.619645E-02			20	
Benzo(a)pyrene	0.8608217	XXX	23.87843	18.3476	0.1025716				
Benzo(b)fluoranthene	0.9978961	XXX	21.9933	17.5704	0.0983678				
Benzo(k)fluoranthene	0.971301	XXX	16.917	17.6384	0.1000371				
Benzo(g,h,i)perylene	1.083236	Ave	14.56629	21.4273	0.1249972			20	
Chrysene	1.016087	Ave	3.425919	15.0515	9.024527E-02			20	
Dibenz(a,h)anthracene	1.007469	Ave	4.675945	20.9581	0.1015045			20	
Fluoranthene	1.105809	Ave	12.80207	12.4812	3.338442E-02			20	
Fluorene	1.305758	Ave	13.66533	10.2277	4.612354E-02			20	
Indeno(1,2,3-cd)pyrene	1.100776	Ave	4.792371	20.8907	0.1035983			20	
1-Methylnaphthalene	0.6906904	Ave	9.779055	8.7087	2.918234E-02			20	
2-Methylnaphthalene	0.7310578	Ave	7.941547	8.6071	3.328158E-02			20	
Naphthalene	1.027275	Ave	12.16154	7.9122	3.460071E-02			20	
Phenanthrene	1.083861	Ave	13.53718	11.2082	0.0414572			20	
Pyrene	1.121376	Ave	13.31066	12.7753	4.601009E-02			20	
Carbazole	0.8210822	XXX	18.64649	6.8489	86.0663				
Dibenzofuran	1.715762	Ave	11.44275	9.8763	0.0491397			20	
4-Chloro-3-methylphenol	0.2613597	XXX	22.276	8.441111	9.451893E-03				
2-Chlorophenol	1.397703	Ave	8.240109	6.4231	4.393156E-02			20	
2,4-Dichlorophenol	0.2399307	XXX	23.12142	7.7468	0.0610919				
2,4-Dimethylphenol	0.2867251	Ave	8.697492	7.544111	6.493026E-02			20	
2,4-Dinitrophenol	9.021709E-02	XXX	63.69513	9.722572	6.605423E-02				
4,6-Dinitro-2-methylphenol	0.1472384	XXX	41.35926	10.27214	9.157028E-02				
2-Methylphenol	1.069714	Ave	9.151016	6.864	3.595535E-02			20	
3+4-Methylphenol(s)	1.326596	Ave	12.29261	7.0155	7.993426E-02			20	
2-Nitrophenol	0.1661337	XXX	25.84329	7.506778	3.721651E-02				
4-Nitrophenol	0.1943127	XXX	42.06561	9.77825	8.794635E-02				
Pentachlorophenol (PCP)	0.1082644	XXX	42.42597	10.99288	2.689777E-02				
Phenol	1.922059	Ave	9.44506	6.2744	0.1218066			20	
2,3,4,6-Tetrachlorophenol	0.2872712	XXX	31.08617	10.00333	0.0274255				

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatic

Calibration: A9L0505 Date: 12/05/19 11:21 Instrument: SV-GCMS9

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
2,3,5,6-Tetrachlorophenol	0.2583071	XXX	37.27689	9.959444	2.815074E-02				
2,4,5-Trichlorophenol	0.3400341	XXX	20.67442	8.927667	2.664191E-02				
2,4,6-Trichlorophenol	0.3491485	XXX	21.64176	8.892333	2.166891E-02				
Bis(2-ethylhexyl)phthalate	0.6033678	XXX	31.11809	15.14638	4.050426E-02				
Butyl benzyl phthalate	0.4589006	XXX	34.42678	13.80175	3.910684E-02				
Diethylphthalate	1.23924	Ave	13.16463	10.0978	6.742407E-02			20	
Dimethylphthalate	1.370666	Ave	9.894805	9.3839	0.1086856			20	
Di-n-butylphthalate	1.05237	Ave	13.24109	11.76325	1.916441E-02			20	
Di-n-octyl phthalate	0.8857736	XXX	50.23947	16.81988	6.095267E-02				
N-Nitrosodimethylamine	1.029111	Ave	11.80432	3.955	0.236737			20	
N-Nitroso-di-n-propylamine	1.017792	Ave	9.881893	7.0202	0.102469			20	
N-Nitrosodiphenylamine	0.6030236	Ave	14.31085	10.33711	5.555364E-02			20	
Bis(2-Chloroethoxy) methane	0.4201727	Ave	7.87307	7.6341	5.064119E-02			20	
Bis(2-Chloroethyl) ether	1.596304	Ave	6.394264	6.3611	5.682948E-02			20	
2,2'-Oxybis(1-Chloropropane)	1.998067	Ave	13.18075	6.889333	0.0290897			20	
Hexachlorobenzene	0.2859751	Ave	9.850469	10.7963	4.302851E-02			20	
Hexachlorobutadiene	0.1684219	Ave	5.805926	8.044	1.803934E-02			20	
Hexachlorocyclopentadiene	0.3397939	XXX	18.27129	8.777	7.745043E-03				
Hexachloroethane	0.4404031	Ave	6.723751	7.1332	4.317847E-02			20	
2-Chloronaphthalene	1.253669	Ave	13.38745	9.103	0.0337826			20	
1,2-Dichlorobenzene	1.489433	Ave	9.524404	6.7968	3.825942E-02			20	
1,3-Dichlorobenzene	1.541489	Ave	5.80586	6.573	2.132692E-02			20	
1,4-Dichlorobenzene	1.508539	Ave	7.801629	6.6428	1.354432E-02			20	
1,2,4-Trichlorobenzene	0.3274888	Ave	7.609906	7.834	2.831983E-02			20	
4-Bromophenyl phenyl ether	0.2269347	Ave	6.100873	10.7198	2.737111E-02			20	
4-Chlorophenyl phenyl ether	0.6515183	Ave	8.624327	10.221	3.157704E-02			20	
Aniline	1.995147	Ave	11.43534	3.1517	105.4093			20	
4-Chloroaniline	0.3406332	Ave	11.44052	4.7748	86.0663			20	
2-Nitroaniline	0.3904871	Ave	14.08769	9.202286	0.0669669			20	
3-Nitroaniline	0.2887427	Ave	14.85213	4.8055	106.9045			20	
4-Nitroaniline	0.2744206	Ave	7.903455	10.24143	0.1118302			20	
Nitrobenzene	1.389916	Ave	9.694738	7.1897	6.161243E-02			20	
2,4-Dinitrotoluene	0.3652368	XXX	23.87898	9.853625	8.248147E-02				

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatic

Calibration: A9L0505 Date: 12/05/19 11:21 Instrument: SV-GCMS9

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
2,6-Dinitrotoluene	0.3063357	Ave	12.03935	9.44275	7.912865E-02			20	
Benzoic acid	0.143166	XXX	53.96289	7.673667	0.760446				
Benzyl alcohol	0.7410578	XXX	24.02806	6.759667	6.163903E-02				
Isophorone	0.7129904	Ave	7.892641	7.425	9.740245E-02			20	
Azobenzene (1,2-DPH)	0.7061094	Ave	13.91672	10.38011	4.377673E-02			20	
Bis(2-Ethylhexyl) adipate	0.374617	XXX	38.20604	13.9755	3.852575E-02				
3,3'-Dichlorobenzidine	0.1745089	XXX	20.82696	14.93583	5.891093E-02				
1,2-Dinitrobenzene	0.150639	Ave	9.556614	9.503143	0.1204624			20	
1,3-Dinitrobenzene	0.2094618	Ave	14.37494	9.413286	8.229325E-02			20	
1,4-Dinitrobenzene	0.1621795	XXX	33.55686	9.3295	6.748459E-02				
Pyridine	1.656234	Ave	13.20563	4.0036	0.9930149			20	
Nitrobenzene-d5 (Surr)	1.365043	Ave	7.167059	7.1696	5.398848E-02			20	
2-Fluorobiphenyl (Surr)	1.514726	Ave	11.80542	8.9763	2.243647E-02			20	
Phenol-d6 (Surr)	1.728584	Ave	12.3899	6.2617	9.195087E-02			20	
p-Terphenyl-d14 (Surr)	0.9172074	Ave	10.37128	12.9835	3.467299E-02			20	
2-Fluorophenol (Surr)	1.330564	Ave	12.87588	5.359	4.832153E-02			20	
2,4,6-Tribromophenol (Surr)	0.1145359	XXX	24.51955	10.47322	0.0253472				

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 8270D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9L0505

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte

Instrument: SV-GCMS9

Calibration Date: 12/05/19 11:21

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
Acenaphthene	20	1.404866	50	1.34088	100	1.388175	200	1.420913	500	1.410133	1000	1.327557
Acenaphthylene	20	1.698714	50	1.913071	100	2.113196	200	2.17296	500	2.237944	1000	2.130065
Anthracene	20	0.9051074	50	0.9700624	100	1.058482	200	1.146364	500	1.175049	1000	1.120117
Benz(a)anthracene	20	0.9760714	50	0.879535	100	0.9302005	200	1.044451	500	1.134152	1000	1.097432
Benzo(a)pyrene	20	0.6134685	50	0.5340066	100	0.6056771	200	0.7836431	500	0.9951001	1000	1.009565
Benzo(b)fluoranthene	20	0.7387134	50	0.6503507	100	0.7348449	200	0.9014068	500	1.084963	1000	1.121144
Benzo(k)fluoranthene	20	0.7796887	50	0.667835	100	0.807299	200	0.9675491	500	1.120615	1000	1.124137
Benzo(b+k)fluoranthene(s)	40	0.7592011	100	0.7125262	200	0.8137087	400	0.9754408	1000	1.144602	2000	1.15583
Benzo(g,h,i)perylene	20	0.8095068	50	0.8363492	100	0.9704402	200	1.11176	500	1.25005	1000	1.213407
Chrysene	20	0.949248	50	1.01678	100	1.026624	200	1.048701	500	1.069169	1000	1.036273
Dibenz(a,h)anthracene	20	0.9312261	50	0.969692	100	0.9814783	200	1.021478	500	1.081783	1000	1.056115
Fluoranthene	20	0.8692721	50	0.964369	100	1.067627	200	1.199837	500	1.289234	1000	1.258533
Fluorene	20	1.253472	50	1.39847	100	1.431169	200	1.51422	500	1.485461	1000	1.408297
Indeno(1,2,3-cd)pyrene	20	1.035347	50	0.9996636	100	1.050441	200	1.117831	500	1.126518	1000	1.116888
1-Methylnaphthalene	20	0.6789349	50	0.7307962	100	0.7528337	200	0.7399775	500	0.7753685	1000	0.7183703
2-Methylnaphthalene	20	0.7086821	50	0.7515383	100	0.7586511	200	0.777436	500	0.8035549	1000	0.7690332
Naphthalene	20	1.076147	50	1.122846	100	1.131394	200	1.137121	500	1.139216	1000	1.061441
Phenanthrene	20	1.226206	50	1.193126	100	1.188072	200	1.19998	500	1.187355	1000	1.12123
Pyrene	20	0.9267505	50	1.030792	100	1.152153	200	1.28326	500	1.338151	1000	1.268508
Carbazole	20	0.6326172	50	0.7361963	100	0.8542495	200	0.9563501	500	1.038574	1000	0.9730717
Dibenzofuran	20	1.749973	50	1.792701	100	1.854733	200	1.924969	500	1.902446	1000	1.824123
4-Chloro-3-methylphenol	20	~~9.915716E-02~~	50	0.1514654	100	0.1902598	200	0.2236995	500	0.2793761	1000	0.2911068
2-Chlorophenol	20	1.192473	50	1.235875	100	1.378639	200	1.431481	500	1.528673	1000	1.521223
2,4-Dichlorophenol	20	0.1297792	50	0.1736546	100	0.194975	200	0.236466	500	0.2764513	1000	0.2824409
2,4-Dimethylphenol	20	~~0.1924815~~	50	0.2417898	100	0.2607423	200	0.2845582	500	0.3154372	1000	0.3093014
2,4-Dinitrophenol	20	~~0~~	50	~~0~~	100	~~0~~	200	1.205164E-02	500	3.392963E-02	1000	5.732968E-02
4,6-Dinitro-2-methylphenol	20	~~0~~	50	~~1.285268E-02~~	100	~~2.512139E-02~~	200	4.839291E-02	500	9.095809E-02	1000	0.1249252
2-Methylphenol	20	0.8952794	50	1.040299	100	1.097925	200	1.144065	500	1.189625	1000	1.166971
3+4-Methylphenol(s)	20	1.018596	50	1.257201	100	1.392142	200	1.407659	500	1.547197	1000	1.477126
2-Nitrophenol	20	~~7.290968E-02~~	50	9.056567E-02	100	0.1104695	200	0.1332825	500	0.1775303	1000	0.1987883
4-Nitrophenol	20	~~0~~	50	~~3.361469E-02~~	100	5.986639E-02	200	8.976605E-02	500	0.1670303	1000	0.2027192

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9L0505

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte

Instrument: SV-GCMS9

Calibration Date: 12/05/19 11:21

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
Pentachlorophenol (PCP)	20	~~3.902854E-02~~	50	~~2.992668E-02~~	100	3.230541E-02	200	5.311668E-02	500	8.904246E-02	1000	0.1125996
Phenol	20	1.600651	50	1.750302	100	1.838272	200	1.961051	500	2.144891	1000	2.115726
2,3,4,6-Tetrachlorophenol	20	~~8.821391E-02~~	50	0.1211118	100	0.1629766	200	0.24681	500	0.3236917	1000	0.3339007
2,3,5,6-Tetrachlorophenol	20	~~5.364359E-02~~	50	0.0961479	100	0.1203577	200	0.1981687	500	0.2701537	1000	0.3027804
2,4,5-Trichlorophenol	20	~~0.1293407~~	50	0.2172597	100	0.2379658	200	0.3032788	500	0.3695301	1000	0.3932486
2,4,6-Trichlorophenol	20	~~0.1746397~~	50	0.2123163	100	0.2473394	200	0.3019742	500	0.3795395	1000	0.3954416
Bis(2-ethylhexyl)phthalate	20	~~0.2097436~~	50	~~0.2051023~~	100	0.2543948	200	0.3821868	500	0.581642	1000	0.6606633
Butyl benzyl phthalate	20	~~0.1456656~~	50	~~0.1606813~~	100	0.1912368	200	0.2783988	500	0.4000578	1000	0.4611483
Diethylphthalate	20	1.15751	50	1.211118	100	1.330059	200	1.438245	500	1.445859	1000	1.360642
Dimethylphthalate	20	1.204597	50	1.368563	100	1.445042	200	1.519314	500	1.546339	1000	1.476687
Di-n-butylphthalate	20	~~0.6088453~~	50	~~0.6883136~~	100	0.8111756	200	1.000864	500	1.16111	1000	1.202383
Di-n-octyl phthalate	20	~~0.2732969~~	50	~~0.2429828~~	100	0.2521694	200	0.3324198	500	0.603388	1000	0.8444666
N-Nitrosodimethylamine	20	0.7645637	50	0.9274262	100	1.003142	200	0.9891013	500	1.039265	1000	1.041139
N-Nitroso-di-n-propylamine	20	0.9840675	50	1.033537	100	1.084422	200	1.082723	500	1.163021	1000	1.097264
N-Nitrosodiphenylamine	20	0.4552147	50	0.5645193	100	0.6399865	200	0.6858405	500	0.7150744	1000	0.6702977
Bis(2-Chloroethoxy) methane	20	0.389046	50	0.412309	100	0.4345909	200	0.4500123	500	0.4689434	1000	0.4492503
Bis(2-Chloroethyl) ether	20	1.630247	50	1.704529	100	1.686878	200	1.638139	500	1.655582	1000	1.633029
2,2'-Oxybis(1-Chloropropane)	20	2.097618	50	2.273572	100	2.251941	200	2.244893	500	2.093063	1000	1.978482
Hexachlorobenzene	20	0.2912949	50	0.3097776	100	0.3153097	200	0.315059	500	0.3089285	1000	0.2915877
Hexachlorobutadiene	20	0.1496107	50	0.1590627	100	0.1738486	200	0.1827865	500	0.1773178	1000	0.1753208
Hexachlorocyclopentadiene	20	0.2360318	50	0.256312	100	0.2828344	200	0.3160759	500	0.3559788	1000	0.3803591
Hexachloroethane	20	0.3724165	50	0.4103978	100	0.4271729	200	0.4622715	500	0.4694551	1000	0.4482623
2-Chloronaphthalene	20	1.234399	50	1.379685	100	1.408673	200	1.405382	500	1.424788	1000	1.325579
1,2-Dichlorobenzene	20	1.567356	50	1.605701	100	1.567426	200	1.645763	500	1.602867	1000	1.536875
1,3-Dichlorobenzene	20	1.421842	50	1.588536	100	1.589239	200	1.646239	500	1.654547	1000	1.588538
1,4-Dichlorobenzene	20	1.434174	50	1.630148	100	1.6204	200	1.616461	500	1.622721	1000	1.549667
1,2,4-Trichlorobenzene	20	0.316428	50	0.3499622	100	0.3425534	200	0.3511244	500	0.3546856	1000	0.3408296
4-Bromophenyl phenyl ether	20	0.2054321	50	0.2151801	100	0.2225238	200	0.238918	500	0.249116	1000	0.2402045
4-Chlorophenyl phenyl ether	20	0.6890221	50	0.6549922	100	0.6916506	200	0.7030949	500	0.7121115	1000	0.6722682
Aniline	20	1.547625	50	1.796596	100	2.02628	200	2.110297	500	2.292196	1000	2.241016
4-Chloroaniline	20	0.2779317	50	0.3154725	100	0.3498405	200	0.3553298	500	0.4008337	1000	0.3837086

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9L0505

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte

Instrument: SV-GCMS9

Calibration Date: 12/05/19 11:21

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
2-Nitroaniline	20	~~0.1478179~~	50	~~0.2016882~~	100	~~0.2127194~~	200	0.2755103	500	0.3676308	1000	0.4021016
3-Nitroaniline	20	~~0.1037109~~	50	~~0.1547264~~	100	0.2125944	200	0.2689254	500	0.3177117	1000	0.3311963
4-Nitroaniline	20	~~9.179015E-02~~	50	~~0.1364361~~	100	~~0.1638514~~	200	0.2307826	500	0.2777507	1000	0.2847244
Nitrobenzene	20	1.268929	50	1.348227	100	1.463035	200	1.540349	500	1.576658	1000	1.508405
2,4-Dinitrotoluene	20	~~0.1150357~~	50	~~0.1483001~~	100	0.1923473	200	0.2702921	500	0.3758181	1000	0.4050482
2,6-Dinitrotoluene	20	~~0.1323209~~	50	~~0.1656018~~	100	0.2283422	200	0.2810392	500	0.3341118	1000	0.3356901
Benzoic acid	40	~~0~~	100	~~0~~	200	~~4.255892E-03~~	400	~~9.507302E-03~~	1000	3.179871E-02	2000	7.581718E-02
Benzyl alcohol	20	~~0.250333~~	50	0.4925814	100	0.4518424	200	0.6074683	500	0.7690413	1000	0.8307616
Isophorone	20	0.601359	50	0.6561489	100	0.6862091	200	0.743432	500	0.7940177	1000	0.7598715
Azobenzene (1,2-DPH)	20	0.5829445	50	0.676343	100	0.7532766	200	0.8041394	500	0.846462	1000	0.7733349
Benzidine	40	~~0.1642747~~	100	~~8.510856E-02~~	200	0.1544464	400	0.194422	1000	0.4034111	2000	0.5201774
Bis(2-Ethylhexyl) adipate	20	~~0.1333716~~	50	~~0.1190175~~	100	0.1371233	200	0.2018972	500	0.3202569	1000	0.3824012
3,3'-Dichlorobenzidine	40	~~0.1378421~~	100	~~0.1528694~~	200	~~0.1841469~~	400	0.2195226	1000	0.2062661	2000	0.1790532
1,2-Dinitrobenzene	20	~~3.635843E-02~~	50	~~7.068972E-02~~	100	~~9.748599E-02~~	200	0.1204542	500	0.1505788	1000	0.1593418
1,3-Dinitrobenzene	20	~~5.423963E-02~~	50	~~7.093689E-02~~	100	~~0.1082344~~	200	0.1483469	500	0.1927213	1000	0.2157028
1,4-Dinitrobenzene	20	~~4.649111E-02~~	50	~~6.228605E-02~~	100	7.273954E-02	200	9.802825E-02	500	0.1347176	1000	0.1677912
Pyridine	20	1.397179	50	1.391399	100	1.525617	200	1.359657	500	1.668046	1000	1.765368
2,3,5-Trimethylnaphthalene	20	1.029361	50	1.119666	100	1.184205	200	1.242064	500	1.233478	1000	1.159846
2,6-Dimethylnaphthalene	20	1.203405	50	1.258326	100	1.334808	200	1.364195	500	1.383826	1000	1.301025
Benzo(e)pyrene	20	0.808294	50	0.7549297	100	0.8766699	200	0.9902402	500	1.117131	1000	1.119655
1,1'-Biphenyl	20	1.652223	50	1.860919	100	1.880355	200	1.914843	500	1.909786	1000	1.804681
Perylene	20	0.8747821	50	0.8694764	100	0.8786983	200	0.9227981	500	0.9683917	1000	0.9349186
Nitrobenzene-d5 (Surr)	20	1.193706	50	1.285809	100	1.382274	200	1.401108	500	1.492512	1000	1.479369
2-Fluorobiphenyl (Surr)	20	1.533611	50	1.639458	100	1.657137	200	1.680396	500	1.678182	1000	1.592355
Phenol-d6 (Surr)	20	1.321955	50	1.456418	100	1.586642	200	1.651718	500	1.845945	1000	1.856815
p-Terphenyl-d14 (Surr)	20	0.6921911	50	0.8205623	100	0.8835218	200	0.9561633	500	0.9974821	1000	0.9812226
2-Fluorophenol (Surr)	20	~~0.9372071~~	50	1.022093	100	1.16674	200	1.210887	500	1.330969	1000	1.314099
2,4,6-Tribromophenol (Surr)	20	~~5.180152E-02~~	50	6.175115E-02	100	7.744448E-02	200	0.1001649	500	0.1230215	1000	0.1286649

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration: A9L0505
Instrument: SV-GCMS9
Matrix:
Calibration Date: 12/05/19 11:21

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
Acenaphthene	2000	1.26596	4000	1.159872	6000	1.068934	8000	1.002144				
Acenaphthylene	2000	2.02427	4000	1.818147	6000	1.64015	8000	1.469951				
Anthracene	2000	1.063908	4000	0.9477686	6000	0.8609046	8000	0.8012488				
Benz(a)anthracene	2000	1.106533	4000	1.093325	6000	1.081786	8000	1.056474				
Benzo(a)pyrene	2000	1.056006	4000	1.034434	6000	1.002132	8000	0.9741844				
Benzo(b)fluoranthene	2000	1.187815	4000	1.205976	6000	1.197272	8000	1.156475				
Benzo(k)fluoranthene	2000	1.133295	4000	1.074344	6000	1.028863	8000	1.009384				
Benzo(b+k)fluoranthene(s)	4000	1.190687	8000	1.169657	12000	1.142252	16000	1.111357				
Benzo(g,h,i)perylene	2000	1.212203	4000	1.176722	6000	1.146694	8000	1.105227				
Chrysene	2000	1.021817	4000	1.012697	6000	1.007242	8000	0.97232				
Dibenz(a,h)anthracene	2000	1.050521	4000	1.020271	6000	0.997796	8000	0.9643267				
Fluoranthene	2000	1.235395	4000	1.142205	6000	1.053424	8000	0.9781974				
Fluorene	2000	1.328791	4000	1.176219	6000	1.078973	8000	0.9825064				
Indeno(1,2,3-cd)pyrene	2000	1.126428	4000	1.150393	6000	1.15342	8000	1.130834				
1-Methylnaphthalene	2000	0.6973411	4000	0.6432003	6000	0.6002208	8000	0.5698602				
2-Methylnaphthalene	2000	0.7597744	4000	0.704941	6000	0.6625533	8000	0.6144137				
Naphthalene	2000	1.023112	4000	0.9262319	6000	0.8622285	8000	0.7930137				
Phenanthrene	2000	1.059818	4000	0.9536837	6000	0.8893843	8000	0.8197501				
Pyrene	2000	1.198261	4000	1.084985	6000	1.002696	8000	0.9282028				
Carbazole	2000	0.9306291	4000	0.8024304	6000	0.6815271	8000	0.6051766				
Dibenzofuran	2000	1.739881	4000	1.574368	6000	1.454762	8000	1.339661				
4-Chloro-3-methylphenol	2000	0.3042553	4000	0.3078525	6000	0.3062547	8000	0.2979672				
2-Chlorophenol	2000	1.485295	4000	1.469068	6000	1.402697	8000	1.331603				
2,4-Dichlorophenol	2000	0.2919205	4000	0.2823697	6000	0.2749388	8000	0.2563111				
2,4-Dimethylphenol	2000	0.312028	4000	0.2973668	6000	0.2863053	8000	0.2729966				
2,4-Dinitrophenol	2000	0.0940239	4000	0.1266688	6000	0.1495876	8000	0.1579284				
4,6-Dinitro-2-methylphenol	2000	0.1665777	4000	0.1915291	6000	0.2053218	8000	0.2029638				
2-Methylphenol	2000	1.130449	4000	1.088305	6000	1.001256	8000	0.9429606				
3+4-Methylphenol(s)	2000	1.435774	4000	1.36054	6000	1.230776	8000	1.138949				
2-Nitrophenol	2000	0.1920996	4000	0.197811	6000	0.20172	8000	0.1929368				
4-Nitrophenol	2000	0.2444899	4000	0.2579114	6000	0.2677463	8000	0.2649724				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration: A9L0505
Instrument: SV-GCMS9
Matrix:
Calibration Date: 12/05/19 11:21

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
Pentachlorophenol (PCP)	2000	0.1319852	4000	0.1451691	6000	0.1514884	8000	0.1504084				
Phenol	2000	2.086935	4000	2.048508	6000	1.909598	8000	1.764656				
2,3,4,6-Tetrachlorophenol	2000	0.360269	4000	0.3515338	6000	0.3462622	8000	0.3388849				
2,3,5,6-Tetrachlorophenol	2000	0.3329215	4000	0.3338876	6000	0.3379433	8000	0.3324031				
2,4,5-Trichlorophenol	2000	0.3992105	4000	0.3957039	6000	0.3851116	8000	0.3589977				
2,4,6-Trichlorophenol	2000	0.4146204	4000	0.4060803	6000	0.3944944	8000	0.3905307				
Bis(2-ethylhexyl)phthalate	2000	0.724337	4000	0.750824	6000	0.7524555	8000	0.7204393				
Butyl benzyl phthalate	2000	0.5377955	4000	0.5866806	6000	0.6125344	8000	0.6033526				
Diethylphthalate	2000	1.29515	4000	1.14766	6000	1.046239	8000	0.9599152				
Dimethylphthalate	2000	1.427406	4000	1.320017	6000	1.242637	8000	1.156056				
Di-n-butylphthalate	2000	1.198949	4000	1.100459	6000	1.017009	8000	0.9270085				
Di-n-octyl phthalate	2000	1.122406	4000	1.3099	6000	1.317271	8000	1.304168				
N-Nitrosodimethylamine	2000	1.062182	4000	1.125797	6000	1.180426	8000	1.158066				
N-Nitroso-di-n-propylamine	2000	1.037931	4000	0.9749049	6000	0.8880389	8000	0.8320152				
N-Nitrosodiphenylamine	2000	0.625207	4000	0.5614319	6000	0.5096405	8000	~~0.4727123~~				
Bis(2-Chloroethoxy) methane	2000	0.4350923	4000	0.410239	6000	0.3882385	8000	0.3640056				
Bis(2-Chloroethyl) ether	2000	1.552835	4000	1.613853	6000	1.471379	8000	1.37657				
2,2'-Oxybis(1-Chloropropane)	2000	1.79226	4000	1.70945	6000	1.541322	8000	~~1.406787~~				
Hexachlorobenzene	2000	0.2793122	4000	0.260404	6000	0.2498132	8000	0.2382644				
Hexachlorobutadiene	2000	0.1707931	4000	0.1674733	6000	0.1663487	8000	0.1616573				
Hexachlorocyclopentadiene	2000	0.3936182	4000	0.3980398	6000	0.3938298	8000	0.3848594				
Hexachloroethane	2000	0.457141	4000	0.4499854	6000	0.4604258	8000	0.4465026				
2-Chloronaphthalene	2000	1.244161	4000	1.130566	6000	1.032327	8000	0.9511285				
1,2-Dichlorobenzene	2000	1.452114	4000	1.386432	6000	1.303979	8000	1.225819				
1,3-Dichlorobenzene	2000	1.550824	4000	1.510554	6000	1.467033	8000	1.397539				
1,4-Dichlorobenzene	2000	1.494371	4000	1.440382	6000	1.37596	8000	1.301106				
1,2,4-Trichlorobenzene	2000	0.3304716	4000	0.3085221	6000	0.2973301	8000	0.2829807				
4-Bromophenyl phenyl ether	2000	0.2354771	4000	0.2272626	6000	0.2224495	8000	0.212783				
4-Chlorophenyl phenyl ether	2000	0.6608209	4000	0.6061272	6000	0.580507	8000	0.5445884				
Aniline	2000	2.165324	4000	2.022586	6000	1.93465	8000	1.814899				
4-Chloroaniline	2000	0.3715061	4000	0.3380667	6000	0.3006177	8000	0.3130245				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration: A9L0505
Instrument: SV-GCMS9
Matrix:
Calibration Date: 12/05/19 11:21

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
2-Nitroaniline	2000	0.4293724	4000	0.4297245	6000	0.4205253	8000	0.4085449				
3-Nitroaniline	2000	0.3414379	4000	0.3049143	6000	0.2697531	8000	0.2634086				
4-Nitroaniline	2000	0.2995065	4000	0.2854527	6000	0.2753113	8000	0.267416				
Nitrobenzene	2000	1.411907	4000	1.361191	6000	1.256416	8000	1.164042				
2,4-Dinitrotoluene	2000	0.4322672	4000	0.430378	6000	0.4195088	8000	0.3962347				
2,6-Dinitrotoluene	2000	0.3346613	4000	0.3235934	6000	0.3123221	8000	0.3009252				
Benzoic acid	4000	0.1333221	8000	0.1809865	12000	0.2157217	16000	0.2213497				
Benzyl alcohol	2000	0.8943573	4000	0.9243051	6000	0.8713862	8000	0.8277769				
Isophorone	2000	0.7563084	4000	0.7244497	6000	0.7148583	8000	0.6932492				
Azobenzene (1,2-DPH)	2000	0.7215569	4000	0.6278694	6000	0.5690578	8000	~~0.5181774~~				
Benzidine	4000	0.5857982	8000	0.5573895	12000	0.481371	16000	0.4605004				
Bis(2-Ethylhexyl) adipate	2000	0.4510771	4000	0.4968504	6000	0.5087191	8000	0.4986109				
3,3'-Dichlorobenzidine	4000	0.1747857	8000	0.144217	12000	0.123209	16000	~~0.1223381~~				
1,2-Dinitrobenzene	2000	0.1610658	4000	0.1608381	6000	0.1557578	8000	0.1464368				
1,3-Dinitrobenzene	2000	0.2320991	4000	0.2301236	6000	0.228374	8000	0.2188651				
1,4-Dinitrobenzene	2000	0.1969809	4000	0.2053369	6000	0.2127738	8000	0.2090679				
Pyridine	2000	1.834107	4000	1.856385	6000	1.916297	8000	1.848283				
2,3,5-Trimethylnaphthalene	2000	1.120377	4000	1.012994	6000	0.9275177	8000	0.8622539				
2,6-Dimethylnaphthalene	2000	1.244351	4000	1.112701	6000	1.024011	8000	0.9500894				
Benzo(e)pyrene	2000	1.16006	4000	1.142492	6000	1.113431	8000	1.082392				
1,1'-Biphenyl	2000	1.710728	4000	1.539448	6000	1.400158	8000	1.27657				
Perylene	2000	0.9469582	4000	0.9166002	6000	0.8956912	8000	0.8754828				
Nitrobenzene-d5 (Surr)	2000	1.428352	4000	1.407095	6000	1.326045	8000	1.254163				
2-Fluorobiphenyl (Surr)	2000	1.5354	4000	1.38235	6000	1.272272	8000	1.1761				
Phenol-d6 (Surr)	2000	1.887041	4000	1.962471	6000	1.900837	8000	1.816				
p-Terphenyl-d14 (Surr)	2000	0.9739951	4000	0.9635003	6000	0.9679083	8000	0.9355275				
2-Fluorophenol (Surr)	2000	1.433499	4000	1.464263	6000	1.536044	8000	1.496484				
2,4,6-Tribromophenol (Surr)	2000	0.1343763	4000	0.1355148	6000	0.136119	8000	0.133766				

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Charac
Instrument ID:	SV-GCMS9	Calibration:	A9L0505
Lab File ID:	I12031923.D		
Sequence:	9L03048	Inject Date:	12/03/19
Lab Sample ID:	9L03048-ICV1	Inject Time:	22:18

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acenaphthene	1000	1030	3.1	70 - 130
Acenaphthylene	1000	1100	10.4	70 - 130
Anthracene	1000	1110	10.8	70 - 130
Benz(a)anthracene	1000	1110	10.6	70 - 130
Benzo(a)pyrene	1000	1050	4.7	70 - 130
Benzo(b)fluoranthene	1000	1070	6.7	70 - 130
Benzo(k)fluoranthene	1000	1090	9.0	70 - 130
Benzo(g,h,i)perylene	1000	1110	11.5	70 - 130
Chrysene	1000	1010	1.4	70 - 130
Dibenz(a,h)anthracene	1000	1040	4.3	70 - 130
Fluoranthene	1000	1140	13.8	70 - 130
Fluorene	1000	1070	6.9	70 - 130
Indeno(1,2,3-cd)pyrene	1000	1000	0.3	70 - 130
1-Methylnaphthalene	1000	1060	6.0	70 - 130
2-Methylnaphthalene	1000	1060	6.3	70 - 130
Naphthalene	1000	1040	3.6	70 - 130
Phenanthrene	1000	1030	2.5	70 - 130
Pyrene	1000	1150	14.6	70 - 130
Carbazole	1000	1190	19.2	70 - 130
Dibenzofuran	1000	1050	4.7	70 - 130
4-Chloro-3-methylphenol	1000	1030	2.8	70 - 130
2-Chlorophenol	1000	1080	7.7	70 - 130
2,4-Dichlorophenol	1000	1110	10.8	70 - 130
2,4-Dimethylphenol	1000	1030	3.4	70 - 130
2,4-Dinitrophenol	1000	956	-4.4	70 - 130
4,6-Dinitro-2-methylphenol	1000	1110	10.7	70 - 130
2-Methylphenol	1000	1110	10.5	70 - 130
3+4-Methylphenol(s)	1000	1140	13.5	70 - 130
2-Nitrophenol	1000	1120	12.0	70 - 130
4-Nitrophenol	1000	1060	6.0	70 - 130
Pentachlorophenol (PCP)	1000	1060	5.7	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Charac
Instrument ID:	SV-GCMS9	Calibration:	A9L0505
Lab File ID:	I12031923.D		
Sequence:	9L03048	Inject Date:	12/03/19
Lab Sample ID:	9L03048-ICV1	Inject Time:	22:18

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Phenol	1000	1090	9.0	70 - 130
2,3,4,6-Tetrachlorophenol	1000	1040	3.5	70 - 130
2,3,5,6-Tetrachlorophenol	1000	1080	8.1	70 - 130
2,4,5-Trichlorophenol	1000	1080	7.5	70 - 130
2,4,6-Trichlorophenol	1000	1060	5.5	70 - 130
Bis(2-ethylhexyl)phthalate	1000	1050	4.8	70 - 130
Butyl benzyl phthalate	1000	1020	1.6	70 - 130
Diethylphthalate	1000	1100	10.1	70 - 130
Dimethylphthalate	1000	1090	8.8	70 - 130
Di-n-butylphthalate	1000	1160	16.2	70 - 130
Di-n-octyl phthalate	1000	1030	3.3	70 - 130
N-Nitrosodimethylamine	1000	978	-2.2	70 - 130
N-Nitroso-di-n-propylamine	1000	1070	7.4	70 - 130
N-Nitrosodiphenylamine	1000	1090	9.1	70 - 130
Bis(2-Chloroethoxy) methane	1000	1070	7.5	70 - 130
Bis(2-Chloroethyl) ether	1000	1010	1.1	70 - 130
2,2'-Oxybis(1-Chloropropane)	1000	930	-7.0	70 - 130
Hexachlorobenzene	1000	1040	3.8	70 - 130
Hexachlorobutadiene	1000	1060	6.0	70 - 130
Hexachlorocyclopentadiene	1000	1090	8.8	70 - 130
Hexachloroethane	1000	1060	6.3	70 - 130
2-Chloronaphthalene	1000	1040	4.2	70 - 130
1,2-Dichlorobenzene	1000	1010	1.0	70 - 130
1,3-Dichlorobenzene	1000	1030	2.9	70 - 130
1,4-Dichlorobenzene	1000	1010	1.3	70 - 130
1,2,4-Trichlorobenzene	1000	1040	4.1	70 - 130
4-Bromophenyl phenyl ether	1000	1060	6.3	70 - 130
4-Chlorophenyl phenyl ether	1000	1040	3.7	70 - 130
Aniline	1000	1110	10.9	70 - 130
4-Chloroaniline	1000	1160	15.8	70 - 130
2-Nitroaniline	1000	1050	4.7	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Charac
Instrument ID:	SV-GCMS9	Calibration:	A9L0505
Lab File ID:	I12031923.D		
Sequence:	9L03048	Inject Date:	12/03/19
Lab Sample ID:	9L03048-ICV1	Inject Time:	22:18

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
3-Nitroaniline	1000	1140	13.5	70 - 130
4-Nitroaniline	1000	1040	4.2	70 - 130
Nitrobenzene	1000	1080	8.2	70 - 130
2,4-Dinitrotoluene	1000	1020	2.3	70 - 130
2,6-Dinitrotoluene	1000	1110	11.4	70 - 130
Benzoic acid	2000	1830	-8.3	70 - 130
Benzyl alcohol	1000	910	-9.0	70 - 130
Isophorone	1000	1050	5.2	70 - 130
Azobenzene (1,2-DPH)	1000	1070	7.3	70 - 130
Bis(2-Ethylhexyl) adipate	1000	1040	3.8	70 - 130
3,3'-Dichlorobenzidine	2000	2020	1.0	70 - 130
1,2-Dinitrobenzene	1000	1030	3.3	70 - 130
1,3-Dinitrobenzene	1000	1070	7.4	70 - 130
1,4-Dinitrobenzene	1000	1090	9.1	70 - 130
Pyridine	1000	892	-10.8	70 - 130
Nitrobenzene-d5 (Surr)	1000	1090	8.8	70 - 130
2-Fluorobiphenyl (Surr)	1000	1080	8.2	70 - 130
Phenol-d6 (Surr)	1000	1060	6.4	70 - 130
p-Terphenyl-d14 (Surr)	1000	1090	8.9	70 - 130
2-Fluorophenol (Surr)	1000	1010	1.1	70 - 130
2,4,6-Tribromophenol (Surr)	1000	1070	6.7	70 - 130

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID:	SV-GCMS9	Calibration:	A9L0505
Lab File ID:	I01202002.D	Calibration Date:	12/05/19 11:21
Sequence:	0A20029	Injection Date:	01/20/20
Lab Sample ID:	0A20029-CCV1	Injection Time:	08:28

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Acenaphthene	Ave	1000	1030		1.278943	1.320243	3.2	20
Acenaphthylene	Ave	1000	1080		1.921847	2.066536	7.5	20
Anthracene	Ave	1000	1090		1.004901	1.097351	9.2	20
Benz(a)anthracene	Ave	1000	1130		1.039996	1.174317	12.9	20
Benzo(a)pyrene	XXX	1000	1070	6.5				20
Benzo(b)fluoranthene	XXX	1000	1150	15.4				20
Benzo(k)fluoranthene	XXX	1000	1110	10.8				20
Benzo(g,h,i)perylene	Ave	1000	1120		1.083236	1.208835	11.6	20
Chrysene	Ave	1000	1010		1.016087	1.029989	1.4	20
Dibenz(a,h)anthracene	Ave	1000	1010		1.007469	1.017035	0.9	20
Fluoranthene	Ave	1000	1170		1.105809	1.297701	17.4	20
Fluorene	Ave	1000	1110		1.305758	1.453799	11.3	20
Indeno(1,2,3-cd)pyrene	Ave	1000	1020		1.100776	1.12807	2.5	20
1-Methylnaphthalene	Ave	1000	1050		0.6906904	0.7261153	5.1	20
2-Methylnaphthalene	Ave	1000	1060		0.7310578	0.7730226	5.7	20
Naphthalene	Ave	1000	1020		1.027275	1.052603	2.5	20
Phenanthrene	Ave	1000	1010		1.083861	1.097771	1.3	20
Pyrene	Ave	1000	1160		1.121376	1.302678	16.2	20
Carbazole	XXX	1000	990	-1.0				20
Dibenzofuran	Ave	1000	1050		1.715762	1.801219	5.0	20
4-Chloro-3-methylphenol	XXX	1000	1130	12.8				20
2-Chlorophenol	Ave	1000	1070		1.397703	1.494116	6.9	20
2,4-Dichlorophenol	XXX	1000	1140	14.1				20
2,4-Dimethylphenol	Ave	1000	1140		0.2867251	0.3274348	14.2	20
2,4-Dinitrophenol	XXX	1000	1350	35.0 *				20
4,6-Dinitro-2-methylphenol	XXX	1000	1320	31.7 *				20
2-Methylphenol	Ave	1000	1040		1.069714	1.107588	3.5	20
3+4-Methylphenol(s)	Ave	1000	1080		1.326596	1.431747	7.9	20
2-Nitrophenol	XXX	1000	1280	27.5 *				20
4-Nitrophenol	XXX	1000	1070	6.5				20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID:	SV-GCMS9	Calibration:	A9L0505
Lab File ID:	I01202002.D	Calibration Date:	12/05/19 11:21
Sequence:	0A20029	Injection Date:	01/20/20
Lab Sample ID:	0A20029-CCV1	Injection Time:	08:28

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Pentachlorophenol (PCP)	XXX	1000	1110	10.6				20
Phenol	Ave	1000	1060		1.922059	2.043173	6.3	20
2,3,4,6-Tetrachlorophenol	XXX	1000	1060	5.8				20
2,3,5,6-Tetrachlorophenol	XXX	1000	1120	11.7				20
2,4,5-Trichlorophenol	XXX	1000	1120	11.6				20
2,4,6-Trichlorophenol	XXX	1000	1110	10.7				20
Bis(2-ethylhexyl)phthalate	XXX	1000	1010	1.1				20
Butyl benzyl phthalate	XXX	1000	1080	8.3				20
Diethylphthalate	Ave	1000	1130		1.23924	1.396989	12.7	20
Dimethylphthalate	Ave	1000	1100		1.370666	1.511591	10.3	20
Di-n-butylphthalate	Ave	1000	1180		1.05237	1.244871	18.3	20
Di-n-octyl phthalate	XXX	1000	1150	14.9				20
N-Nitrosodimethylamine	Ave	1000	1140		1.029111	1.17622	14.3	20
N-Nitroso-di-n-propylamine	Ave	1000	1070		1.017792	1.091956	7.3	20
N-Nitrosodiphenylamine	Ave	1000	1090		0.6030236	0.6597852	9.4	20
Bis(2-Chloroethoxy) methane	Ave	1000	1090		0.4201727	0.4573932	8.9	20
Bis(2-Chloroethyl) ether	Ave	1000	1180		1.596304	1.879232	17.7	20
2,2'-Oxybis(1-Chloropropane)	Ave	1000	1010		1.998067	2.012668	0.7	20
Hexachlorobenzene	Ave	1000	1040		0.2859751	0.2963313	3.6	20
Hexachlorobutadiene	Ave	1000	1100		0.1684219	0.1853821	10.1	20
Hexachlorocyclopentadiene	XXX	1000	1220	21.8 *				20
Hexachloroethane	Ave	1000	1130		0.4404031	0.4985268	13.2	20
2-Chloronaphthalene	Ave	1000	1060		1.253669	1.325828	5.8	20
1,2-Dichlorobenzene	Ave	1000	997		1.489433	1.484518	-0.3	20
1,3-Dichlorobenzene	Ave	1000	1050		1.541489	1.620847	5.1	20
1,4-Dichlorobenzene	Ave	1000	1010		1.508539	1.52201	0.9	20
1,2,4-Trichlorobenzene	Ave	1000	1070		0.3274888	0.3492067	6.6	20
4-Bromophenyl phenyl ether	Ave	1000	1070		0.2269347	0.2418963	6.6	20
4-Chlorophenyl phenyl ether	Ave	1000	1080		0.6515183	0.7015398	7.7	20
Aniline	Ave	1000	798		1.995147	1.5929	-20.2*	20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID:	SV-GCMS9	Calibration:	A9L0505
Lab File ID:	I01202002.D	Calibration Date:	12/05/19 11:21
Sequence:	0A20029	Injection Date:	01/20/20
Lab Sample ID:	0A20029-CCV1	Injection Time:	08:28

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
4-Chloroaniline	Ave	1000	920		0.3406332	0.313397	-8.0	20
2-Nitroaniline	Ave	1000	1080		0.3904871	0.4226995	8.2	20
3-Nitroaniline	Ave	1000	1030		0.2887427	0.2980112	3.2	20
4-Nitroaniline	Ave	1000	1040		0.2744206	0.284064	3.5	20
Nitrobenzene	Ave	1000	1050		1.389916	1.455072	4.7	20
2,4-Dinitrotoluene	XXX	1000	1100	9.5				20
2,6-Dinitrotoluene	Ave	1000	1160		0.3063357	0.3567627	16.5	20
Benzoic acid	XXX	2000	2290	14.4				20
Benzyl alcohol	XXX	1000	889	-11.1				20
Isophorone	Ave	1000	1110		0.7129904	0.7909076	10.9	20
Azobenzene (1,2-DPH)	Ave	1000	1100		0.7061094	0.7766681	10.0	20
Bis(2-Ethylhexyl) adipate	XXX	1000	1160	16.1				20
3,3'-Dichlorobenzidine	XXX	2000	1810	-9.4				20
1,2-Dinitrobenzene	Ave	1000	1080		0.150639	0.1627308	8.0	20
1,3-Dinitrobenzene	Ave	1000	1140		0.2094618	0.2383924	13.8	20
1,4-Dinitrobenzene	XXX	1000	1190	19.3				20
Pyridine	Ave	1000	1140		1.656234	1.884296	13.8	20

** Quadratic Curve fit may be weighted (1/a or 1/a2).

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID:	SV-GCMS9	Calibration:	A9L0505
Lab File ID:	I01212002.D	Calibration Date:	12/05/19 11:21
Sequence:	0A21026	Injection Date:	01/21/20
Lab Sample ID:	0A21026-CCV1	Injection Time:	13:45

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Acenaphthene	Ave	1000	1020		1.278943	1.307176	2.2	20
Acenaphthylene	Ave	1000	1060		1.921847	2.044827	6.4	20
Anthracene	Ave	1000	1070		1.004901	1.075742	7.0	20
Benz(a)anthracene	Ave	1000	1130		1.039996	1.171945	12.7	20
Benzo(a)pyrene	XXX	1000	1080	7.7				20
Benzo(b)fluoranthene	XXX	1000	1150	15.1				20
Benzo(k)fluoranthene	XXX	1000	1160	16.5				20
Benzo(g,h,i)perylene	Ave	1000	1040		1.083236	1.129151	4.2	20
Chrysene	Ave	1000	1020		1.016087	1.031373	1.5	20
Dibenz(a,h)anthracene	Ave	1000	1040		1.007469	1.043931	3.6	20
Fluoranthene	Ave	1000	1160		1.105809	1.278719	15.6	20
Fluorene	Ave	1000	1110		1.305758	1.452787	11.3	20
Indeno(1,2,3-cd)pyrene	Ave	1000	998		1.100776	1.098171	-0.2	20
1-Methylnaphthalene	Ave	1000	1050		0.6906904	0.7231506	4.7	20
2-Methylnaphthalene	Ave	1000	1070		0.7310578	0.7804485	6.8	20
Naphthalene	Ave	1000	1040		1.027275	1.070033	4.2	20
Phenanthrene	Ave	1000	1010		1.083861	1.096441	1.2	20
Pyrene	Ave	1000	1150		1.121376	1.284407	14.5	20
Carbazole	XXX	1000	970	-3.0				20
Dibenzofuran	Ave	1000	1070		1.715762	1.833344	6.9	20
4-Chloro-3-methylphenol	XXX	1000	1110	10.9				20
2-Chlorophenol	Ave	1000	1090		1.397703	1.517078	8.5	20
2,4-Dichlorophenol	XXX	1000	1120	12.4				20
2,4-Dimethylphenol	Ave	1000	1100		0.2867251	0.3157189	10.1	20
2,4-Dinitrophenol	XXX	1000	1130	12.6				20
4,6-Dinitro-2-methylphenol	XXX	1000	1260	25.6 *				20
2-Methylphenol	Ave	1000	1100		1.069714	1.172448	9.6	20
3+4-Methylphenol(s)	Ave	1000	1140		1.326596	1.508522	13.7	20
2-Nitrophenol	XXX	1000	1270	27.1 *				20
4-Nitrophenol	XXX	1000	1020	2.1				20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID:	SV-GCMS9	Calibration:	A9L0505
Lab File ID:	I01212002.D	Calibration Date:	12/05/19 11:21
Sequence:	0A21026	Injection Date:	01/21/20
Lab Sample ID:	0A21026-CCV1	Injection Time:	13:45

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Pentachlorophenol (PCP)	XXX	1000	994	-0.6				20
Phenol	Ave	1000	1110		1.922059	2.130514	10.8	20
2,3,4,6-Tetrachlorophenol	XXX	1000	1000	0.1				20
2,3,5,6-Tetrachlorophenol	XXX	1000	1110	10.8				20
2,4,5-Trichlorophenol	XXX	1000	1090	8.8				20
2,4,6-Trichlorophenol	XXX	1000	1080	7.8				20
Bis(2-ethylhexyl)phthalate	XXX	1000	991	-0.9				20
Butyl benzyl phthalate	XXX	1000	1070	7.3				20
Diethylphthalate	Ave	1000	1170		1.23924	1.446389	16.7	20
Dimethylphthalate	Ave	1000	1120		1.370666	1.540527	12.4	20
Di-n-butylphthalate	Ave	1000	1180		1.05237	1.237702	17.6	20
Di-n-octyl phthalate	XXX	1000	1190	19.5				20
N-Nitrosodimethylamine	Ave	1000	1170		1.029111	1.201681	16.8	20
N-Nitroso-di-n-propylamine	Ave	1000	1110		1.017792	1.133673	11.4	20
N-Nitrosodiphenylamine	Ave	1000	1080		0.6030236	0.6517618	8.1	20
Bis(2-Chloroethoxy) methane	Ave	1000	1100		0.4201727	0.463991	10.4	20
Bis(2-Chloroethyl) ether	Ave	1000	1360		1.596304	2.164186	35.6*	20
2,2'-Oxybis(1-Chloropropane)	Ave	1000	1030		1.998067	2.06262	3.2	20
Hexachlorobenzene	Ave	1000	1040		0.2859751	0.2986981	4.4	20
Hexachlorobutadiene	Ave	1000	1100		0.1684219	0.1854607	10.1	20
Hexachlorocyclopentadiene	XXX	1000	964	-3.6				20
Hexachloroethane	Ave	1000	1110		0.4404031	0.4898652	11.2	20
2-Chloronaphthalene	Ave	1000	1050		1.253669	1.320126	5.3	20
1,2-Dichlorobenzene	Ave	1000	1010		1.489433	1.510268	1.4	20
1,3-Dichlorobenzene	Ave	1000	1060		1.541489	1.633403	6.0	20
1,4-Dichlorobenzene	Ave	1000	1020		1.508539	1.538647	2.0	20
1,2,4-Trichlorobenzene	Ave	1000	1060		0.3274888	0.3455562	5.5	20
4-Bromophenyl phenyl ether	Ave	1000	1080		0.2269347	0.2449741	7.9	20
4-Chlorophenyl phenyl ether	Ave	1000	1090		0.6515183	0.7073073	8.6	20
Aniline	Ave	1000	727		1.995147	1.450682	-27.3*	20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID:	SV-GCMS9	Calibration:	A9L0505
Lab File ID:	I01212002.D	Calibration Date:	12/05/19 11:21
Sequence:	0A21026	Injection Date:	01/21/20
Lab Sample ID:	0A21026-CCV1	Injection Time:	13:45

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
4-Chloroaniline	Ave	1000	931		0.3406332	0.3169952	-6.9	20
2-Nitroaniline	Ave	1000	1120		0.3904871	0.436483	11.8	20
3-Nitroaniline	Ave	1000	1040		0.2887427	0.300109	3.9	20
4-Nitroaniline	Ave	1000	1020		0.2744206	0.2789813	1.7	20
Nitrobenzene	Ave	1000	1140		1.389916	1.591042	14.5	20
2,4-Dinitrotoluene	XXX	1000	1090	8.8				20
2,6-Dinitrotoluene	Ave	1000	1140		0.3063357	0.3489889	13.9	20
Benzoic acid	XXX	2000	1920	-4.1				20
Benzyl alcohol	XXX	1000	980	-2.0				20
Isophorone	Ave	1000	1100		0.7129904	0.7810313	9.5	20
Azobenzene (1,2-DPH)	Ave	1000	1100		0.7061094	0.7754721	9.8	20
Bis(2-Ethylhexyl) adipate	XXX	1000	1160	16.4				20
3,3'-Dichlorobenzidine	XXX	2000	1850	-7.3				20
1,2-Dinitrobenzene	Ave	1000	1100		0.150639	0.1657512	10.0	20
1,3-Dinitrobenzene	Ave	1000	1120		0.2094618	0.2343496	11.9	20
1,4-Dinitrobenzene	XXX	1000	1210	20.8 *				20
Pyridine	Ave	1000	1100		1.656234	1.813941	9.5	20

** Quadratic Curve fit may be weighted (1/a or 1/a2).

* = Values outside of QC limits

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A20029	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9L0505

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (0A20029-CCV1)			Lab File ID: I01202002.D		Analyzed: 01/20/20 08:28			
Nitrobenzene-d5 (Surr)	1000	105	80 - 120	7.071	7.1696	-0.0986	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	105	80 - 120	8.873	8.9763	-0.1033	+/-1.0	
Phenol-d6 (Surr)	1000	107	80 - 120	6.177	6.2617	-0.0847	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	110	80 - 120	12.836	12.9835	-0.1475	+/-1.0	
2-Fluorophenol (Surr)	1000	110	80 - 120	5.273	5.359	-0.0860	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	110	80 - 120	10.365	10.47322	-0.1082	+/-1.0	
Calibration Blank (0A20029-CCB1)			Lab File ID: I01202003.D		Analyzed: 01/20/20 09:03			
Nitrobenzene-d5 (Surr)			37 - 122	0	7.1696	-7.1696	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 115	0	8.9763	-8.9763	+/-1.0	
Phenol-d6 (Surr)			33 - 122	0	6.2617	-6.2617	+/-1.0	
p-Terphenyl-d14 (Surr)			54 - 127	0	12.9835	-12.9835	+/-1.0	
2-Fluorophenol (Surr)			35 - 115	0	5.359	-5.3590	+/-1.0	
2,4,6-Tribromophenol (Surr)			39 - 132	0	10.47322	-10.4732	+/-1.0	
Blank (0010574-BLK1)			Lab File ID: I01202009.D		Analyzed: 01/20/20 14:22			
Nitrobenzene-d5 (Surr)	312	76	37 - 122	7.07	7.1696	-0.0996	+/-1.0	
2-Fluorobiphenyl (Surr)	312	71	44 - 115	8.873	8.9763	-0.1033	+/-1.0	
Phenol-d6 (Surr)	312	68	33 - 122	6.183	6.2617	-0.0787	+/-1.0	
p-Terphenyl-d14 (Surr)	312	89	54 - 127	12.842	12.9835	-0.1415	+/-1.0	
2-Fluorophenol (Surr)	312	71	35 - 115	5.284	5.359	-0.0750	+/-1.0	
2,4,6-Tribromophenol (Surr)	312	86	39 - 132	10.365	10.47322	-0.1082	+/-1.0	
LCS (0010574-BS1)			Lab File ID: I01202010.D		Analyzed: 01/20/20 14:57			
Nitrobenzene-d5 (Surr)	333	78	37 - 122	7.071	7.1696	-0.0986	+/-1.0	
2-Fluorobiphenyl (Surr)	333	78	44 - 115	8.873	8.9763	-0.1033	+/-1.0	
Phenol-d6 (Surr)	333	85	33 - 122	6.183	6.2617	-0.0787	+/-1.0	
p-Terphenyl-d14 (Surr)	333	99	54 - 127	12.842	12.9835	-0.1415	+/-1.0	
2-Fluorophenol (Surr)	333	87	35 - 115	5.284	5.359	-0.0750	+/-1.0	
2,4,6-Tribromophenol (Surr)	333	93	39 - 132	10.371	10.47322	-0.1022	+/-1.0	
PDI-WC-011420-04 (A0A0539-02RE1)			Lab File ID: I01202015.D		Analyzed: 01/20/20 17:51			
Nitrobenzene-d5 (Surr)	394	75	37 - 122	7.076	7.1696	-0.0936	+/-1.0	
2-Fluorobiphenyl (Surr)	394	84	44 - 115	8.878	8.9763	-0.0983	+/-1.0	
Phenol-d6 (Surr)	394	48	33 - 122	6.193	6.2617	-0.0687	+/-1.0	
p-Terphenyl-d14 (Surr)	394	95	54 - 127	12.842	12.9835	-0.1415	+/-1.0	
2-Fluorophenol (Surr)	394	59	35 - 115	5.295	5.359	-0.0640	+/-1.0	
2,4,6-Tribromophenol (Surr)	394	129	39 - 132	10.371	10.47322	-0.1022	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A21026	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9L0505

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (0A21026-CCV1)			Lab File ID: I01212002.D		Analyzed: 01/21/20 13:45			
Nitrobenzene-d5 (Surr)	1000	113	80 - 120	7.07	7.1696	-0.0996	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	104	80 - 120	8.873	8.9763	-0.1033	+/-1.0	
Phenol-d6 (Surr)	1000	110	80 - 120	6.177	6.2617	-0.0847	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	114	80 - 120	12.836	12.9835	-0.1475	+/-1.0	
2-Fluorophenol (Surr)	1000	104	80 - 120	5.279	5.359	-0.0800	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	107	80 - 120	10.365	10.47322	-0.1082	+/-1.0	
Calibration Blank (0A21026-CCB1)			Lab File ID: I01212003.D		Analyzed: 01/21/20 14:20			
Nitrobenzene-d5 (Surr)			37 - 122	7.012	7.1696	-0.1576	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 115	0	8.9763	-8.9763	+/-1.0	
Phenol-d6 (Surr)			33 - 122	0	6.2617	-6.2617	+/-1.0	
p-Terphenyl-d14 (Surr)			54 - 127	0	12.9835	-12.9835	+/-1.0	
2-Fluorophenol (Surr)			35 - 115	0	5.359	-5.3590	+/-1.0	
2,4,6-Tribromophenol (Surr)			39 - 132	0	10.47322	-10.4732	+/-1.0	
PDI-WC-011420-02 (A0A0539-01RE2)			Lab File ID: I01212007.D		Analyzed: 01/21/20 16:41			
Nitrobenzene-d5 (Surr)	409	60	37 - 122	7.076	7.1696	-0.0936	+/-1.0	
2-Fluorobiphenyl (Surr)	409	73	44 - 115	8.873	8.9763	-0.1033	+/-1.0	
Phenol-d6 (Surr)	409	50	33 - 122	6.188	6.2617	-0.0737	+/-1.0	
p-Terphenyl-d14 (Surr)	409	81	54 - 127	12.842	12.9835	-0.1415	+/-1.0	
2-Fluorophenol (Surr)	409	54	35 - 115	5.284	5.359	-0.0750	+/-1.0	
2,4,6-Tribromophenol (Surr)	409	91	39 - 132	10.365	10.47322	-0.1082	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	9L03048	Instrument:	SV-GCMS9
Matrix:	Soil	Calibration:	A9L0505

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9L03048-ICV1)			Lab File ID: I12031923.D		Analyzed: 12/03/19 22:18			
Nitrobenzene-d5 (Surr)	1000	109	70 - 130	7.167	7.1696	-0.0026	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	108	70 - 130	8.974	8.9763	-0.0023	+/-1.0	
Phenol-d6 (Surr)	1000	106	70 - 130	6.257	6.2617	-0.0047	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	109	70 - 130	12.981	12.9835	-0.0025	+/-1.0	
2-Fluorophenol (Surr)	1000	101	70 - 130	5.353	5.359	-0.0060	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	107	70 - 130	10.467	10.47322	-0.0062	+/-1.0	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A20029	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9L0505

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (0A20029-CCV1)			Lab File ID: I01202002.D			Analyzed: 01/20/20 08:28			
1,4-Dichlorobenzene-d4 (ISTD)	113358	6.525	81140	6.626	140	50 - 200	-0.1010	+/-0.50	
Naphthalene-d8 (ISTD)	401344	7.787	310642	7.889	129	50 - 200	-0.1020	+/-0.50	
Acenaphthene-d10 (ISTD)	193731	9.563	148649	9.67	130	50 - 200	-0.1070	+/-0.50	
Phenanthrene-d10 (ISTD)	357674	11.077	266040	11.184	134	50 - 200	-0.1070	+/-0.50	
Chrysene-d12 (ISTD)	347695	14.783	260632	14.986	133	50 - 200	-0.2030	+/-0.50	
Perylene-d12 (ISTD)	345670	18.26	252576	18.484	137	50 - 200	-0.2240	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	302210	20.656	215522	20.881	140	50 - 200	-0.2250	+/-0.50	
Calibration Blank (0A20029-CCB1)			Lab File ID: I01202003.D			Analyzed: 01/20/20 09:03			
1,4-Dichlorobenzene-d4 (ISTD)	120707	6.525	113358	6.525	106	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	469002	7.787	401344	7.787	117	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	226557	9.563	193731	9.563	117	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	380219	11.077	357674	11.077	106	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	378156	14.783	347695	14.783	109	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	363639	18.255	345670	18.26	105	50 - 200	-0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	299892	20.651	302210	20.656	99	50 - 200	-0.0050	+/-0.50	
Blank (0010574-BLK1)			Lab File ID: I01202009.D			Analyzed: 01/20/20 14:22			
1,4-Dichlorobenzene-d4 (ISTD)	123119	6.525	113358	6.525	109	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	451408	7.787	401344	7.787	112	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	214689	9.563	193731	9.563	111	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	367992	11.077	357674	11.077	103	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	376121	14.789	347695	14.783	108	50 - 200	0.0060	+/-0.50	
Perylene-d12 (ISTD)	352732	18.26	345670	18.26	102	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	295091	20.656	302210	20.656	98	50 - 200	0.0000	+/-0.50	
LCS (0010574-BS1)			Lab File ID: I01202010.D			Analyzed: 01/20/20 14:57			
1,4-Dichlorobenzene-d4 (ISTD)	115241	6.53	113358	6.525	102	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	409172	7.787	401344	7.787	102	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	195594	9.568	193731	9.563	101	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	371571	11.077	357674	11.077	104	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	349950	14.789	347695	14.783	101	50 - 200	0.0060	+/-0.50	
Perylene-d12 (ISTD)	355244	18.265	345670	18.26	103	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	321224	20.661	302210	20.656	106	50 - 200	0.0050	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A20029	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9L0505

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
PDI-WC-011420-04 (A0A0539-02RE1)			Lab File ID: I01202015.D			Analyzed: 01/20/20 17:51			
1,4-Dichlorobenzene-d4 (ISTD)	127426	6.53	113358	6.525	112	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	436881	7.793	401344	7.787	109	50 - 200	0.0060	+/-0.50	
Acenaphthene-d10 (ISTD)	196625	9.568	193731	9.563	101	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	340143	11.082	357674	11.077	95	50 - 200	0.0050	+/-0.50	
Chrysene-d12 (ISTD)	329412	14.794	347695	14.783	95	50 - 200	0.0110	+/-0.50	
Perylene-d12 (ISTD)	331710	18.271	345670	18.26	96	50 - 200	0.0110	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	298330	20.667	302210	20.656	99	50 - 200	0.0110	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A21026	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9L0505

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (0A21026-CCV1)			Lab File ID: I01212002.D			Analyzed: 01/21/20 13:45			
1,4-Dichlorobenzene-d4 (ISTD)	105429	6.53	81140	6.626	130	50 - 200	-0.0960	+/-0.50	
Naphthalene-d8 (ISTD)	398025	7.787	310642	7.889	128	50 - 200	-0.1020	+/-0.50	
Acenaphthene-d10 (ISTD)	194436	9.568	148649	9.67	131	50 - 200	-0.1020	+/-0.50	
Phenanthrene-d10 (ISTD)	367843	11.077	266040	11.184	138	50 - 200	-0.1070	+/-0.50	
Chrysene-d12 (ISTD)	356044	14.783	260632	14.986	137	50 - 200	-0.2030	+/-0.50	
Perylene-d12 (ISTD)	336088	18.26	252576	18.484	133	50 - 200	-0.2240	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	280756	20.651	215522	20.881	130	50 - 200	-0.2300	+/-0.50	
Calibration Blank (0A21026-CCB1)			Lab File ID: I01212003.D			Analyzed: 01/21/20 14:20			
1,4-Dichlorobenzene-d4 (ISTD)	122775	6.53	105429	6.53	116	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	475676	7.787	398025	7.787	120	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	224433	9.568	194436	9.568	115	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	383644	11.077	367843	11.077	104	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	378228	14.783	356044	14.783	106	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	337092	18.26	336088	18.26	100	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	259963	20.651	280756	20.651	93	50 - 200	0.0000	+/-0.50	
Duplicate (0010574-DUP2)			Lab File ID: I01212005.D			Analyzed: 01/21/20 15:31			
1,4-Dichlorobenzene-d4 (ISTD)	128235	6.53	105429	6.53	122	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	459887	7.787	398025	7.787	116	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	219690	9.563	194436	9.568	113	50 - 200	-0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	359561	11.077	367843	11.077	98	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	331758	14.783	356044	14.783	93	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	313018	18.265	336088	18.26	93	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	262631	20.656	280756	20.651	94	50 - 200	0.0050	+/-0.50	
PDI-WC-011420-02 (A0A0539-01RE2)			Lab File ID: I01212007.D			Analyzed: 01/21/20 16:41			
1,4-Dichlorobenzene-d4 (ISTD)	134123	6.53	105429	6.53	127	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	483418	7.787	398025	7.787	121	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	216664	9.568	194436	9.568	111	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	370511	11.076	367843	11.077	101	50 - 200	-0.0010	+/-0.50	
Chrysene-d12 (ISTD)	351202	14.794	356044	14.783	99	50 - 200	0.0110	+/-0.50	
Perylene-d12 (ISTD)	356315	18.27	336088	18.26	106	50 - 200	0.0100	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	320900	20.661	280756	20.651	114	50 - 200	0.0100	+/-0.50	

HOLDING TIME SUMMARY

EPA 8270D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatior

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-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/20/20 10:08	6.03	14.00	01/21/20 16:41	1.27	40.00	
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/20/20 10:08	5.98	14.00	01/20/20 17:51	0.32	40.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: METALS

METHOD: EPA 6020A

ANALYSES DATA PACKAGE COVER PAGE

EPA 6020A

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 4c. Waste Characterization

Client Sample Id:	Lab Sample Id:	Matrix
PDI-WC-011420-02	A0A0539-01	Sediment
PDI-WC-011420-04	A0A0539-02	Sediment

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: 2/19/2020 12:29PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 6020A

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Arsenic	0.250	0.500	mg/kg
Barium	0.250	0.500	mg/kg
Cadmium	0.0500	0.100	mg/kg
Chromium	0.250	0.500	mg/kg
Lead	0.0500	0.100	mg/kg
Mercury	0.0200	0.0400	mg/kg
Selenium	0.250	0.500	mg/kg
Silver	0.0500	0.100	mg/kg

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

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-WC-011420-02

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-01
File ID: 0A24028-046
Sampled: 01/14/20 09:30
Prepared: 01/24/20 10:03
Analyzed: 01/24/20 17:43
Solids: 78.60
Preparation: EPA 3051A
Initial/Final: 0.49 g / 50 mL
Batch: 0010756
Sequence: 0A24028
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-38-2	Arsenic	3.20	5		EPA 6020A
7440-39-3	Barium	99.8	5		EPA 6020A
7440-43-9	Cadmium	0.107	5	J	EPA 6020A
7440-47-3	Chromium	24.9	5		EPA 6020A
7439-92-1	Lead	7.31	5		EPA 6020A
7439-97-6	Mercury	0.0549	5		EPA 6020A
7782-49-2	Selenium	0.364	5	J	EPA 6020A
7440-22-4	Silver	0.133	5		EPA 6020A

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-WC-011420-04

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-02
File ID: 0A24028-047
Sampled: 01/14/20 10:35
Prepared: 01/24/20 10:03
Analyzed: 01/24/20 17:48
Solids: 81.70
Preparation: EPA 3051A
Initial/Final: 0.486 g / 50 mL
Batch: 0010756
Sequence: 0A24028
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-38-2	Arsenic	3.59	5		EPA 6020A
7440-39-3	Barium	117	5		EPA 6020A
7440-43-9	Cadmium	0.136	5		EPA 6020A
7440-47-3	Chromium	28.7	5		EPA 6020A
7439-92-1	Lead	8.00	5		EPA 6020A
7439-97-6	Mercury	0.0482	5	J	EPA 6020A
7782-49-2	Selenium	0.398	5	J	EPA 6020A
7440-22-4	Silver	0.101	5	J	EPA 6020A

PREPARATION BATCH SUMMARY

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Batch: 0010756 Batch Matrix: Sediment Preparation: EPA 3051A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	0010756-BLK1	0A24028-042	01/24/20 10:03	
Blank	0010756-BLK2	0A24028-053	01/24/20 10:03	
LCS	0010756-BS1	0A24028-043	01/24/20 10:03	
PDI-WC-011420-04 (Dup)	0010756-DUP1	0A24028-048	01/24/20 10:03	
PDI-WC-011420-04 (MS)	0010756-MS1	0A24028-054	01/24/20 10:03	
PDI-WC-011420-02	A0A0539-01	0A24028-046	01/24/20 10:03	
PDI-WC-011420-04	A0A0539-02	0A24028-047	01/24/20 10:03	

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 6020A

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	0010756-BLK1	File ID:	0A24028-042
Prepared:	01/24/20 10:03	Preparation:	EPA 3051A	Initial/Final:	0.52 g / 50 mL
Analyzed:	01/24/20 17:24	Instrument:	ICPMS6		
Batch:	0010756	Sequence:	0A24028	Calibration:	UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
7439-92-1	Lead	0.0481	U
7439-97-6	Mercury	0.0192	U
7782-49-2	Selenium	0.240	U
7440-22-4	Silver	0.0481	U

METHOD BLANK DATA SHEET

EPA 6020A

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment	Laboratory ID:	0010756-BLK2	File ID:	0A24028-053
Prepared:	01/24/20 10:03	Preparation:	EPA 3051A	Initial/Final:	0.52 g / 50 mL
Analyzed:	01/24/20 18:19	Instrument:	ICPMS6		
Batch:	0010756	Sequence:	0A24028	Calibration:	UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
7440-38-2	Arsenic	0.240	U
7440-39-3	Barium	0.240	U
7440-43-9	Cadmium	0.0481	U
7440-47-3	Chromium	0.240	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment		
Batch:	0010756	Laboratory ID:	0010756-BS1
Preparation:	EPA 3051A	Initial/Final:	0.5 g / 50 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Arsenic	25.0	24.5	98	80 - 120
Barium	25.0	23.8	95	80 - 120
Cadmium	25.0	23.7	95	80 - 120
Chromium	25.0	24.2	97	80 - 120
Lead	25.0	25.3	101	80 - 120
Mercury	0.500	0.500	100	80 - 120
Selenium	12.5	11.8	94	80 - 120
Silver	12.5	12.4	99	80 - 120

* = Values outside of QC limits

DUPLICATES

PDI-WC-011420-04

EPA 6020A

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Sediment
Batch: 0010756
Preparation: EPA 3051A
Source Sample Name: PDI-WC-011420-04

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 4c. Waste Charact
Laboratory ID: 0010756-DUP1
Lab Source ID: A0A0539-02
Initial/Final: 0.51 g / 50 mL
% Solids: 81.70

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/kg dry)	C	DUPLICATE CONCENTRATION (mg/kg dry)	C	RPD %	Q	METHOD
Arsenic	40	3.59		3.14		13		EPA 6020A
Barium	40	117		119		2		EPA 6020A
Cadmium	40	0.136		0.0894		42	*	EPA 6020A
Chromium	40	28.7		25.3		13		EPA 6020A
Lead	40	8.00		5.17		43	*	EPA 6020A
Mercury	40	0.0482		0.0306		45	*	EPA 6020A
Selenium	40	0.398		0.339		16		EPA 6020A
Silver	40	0.101		ND				EPA 6020A

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 6020A

PDI-WC-011420-04

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Sediment		
Batch:	0010756	Laboratory ID:	0010756-MS1
Preparation:	EPA 3051A	Initial/Final:	0.513 g / 50 mL

Source Sample Name: PDI-WC-011420-04

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. (*=Out)	QC LIMITS REC.
Arsenic	29.8	3.59	30.2	89	75 - 125
Barium	29.8	117	147	98	75 - 125
Cadmium	29.8	0.136	27.5	92	75 - 125
Chromium	29.8	28.7	52.1	78	75 - 125
Lead	29.8	8.00	34.4	89	75 - 125
Mercury	0.596	0.0482	0.587	90	75 - 125
Selenium	14.9	0.398	13.4	87	75 - 125
Silver	14.9	0.101	13.8	92	75 - 125

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A24028	Instrument:	ICPMS6
Matrix:	Sediment	Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	0A24028-ICV1	0A24028-017	01/24/20 14:17
Initial Cal Blank	0A24028-ICB1	0A24028-018	01/24/20 14:21
Instrument RL Check	0A24028-CRL1	0A24028-019	01/24/20 14:26
Instrument RL Check	0A24028-CRL2	0A24028-020	01/24/20 14:30
Instrument RL Check	0A24028-CRL3	0A24028-021	01/24/20 14:35
Calibration Check	0A24028-CCV1	0A24028-034	01/24/20 15:49
Calibration Blank	0A24028-CCB1	0A24028-035	01/24/20 15:54
Instrument RL Check	0A24028-CRL4	0A24028-036	01/24/20 16:07
Instrument RL Check	0A24028-CRL5	0A24028-037	01/24/20 16:12
Instrument RL Check	0A24028-CRL6	0A24028-038	01/24/20 16:16
Blank	0010756-BLK1	0A24028-042	01/24/20 17:24
LCS	0010756-BS1	0A24028-043	01/24/20 17:29
PDI-WC-011420-02	A0A0539-01	0A24028-046	01/24/20 17:43
PDI-WC-011420-04	A0A0539-02	0A24028-047	01/24/20 17:48
PDI-WC-011420-04 (Dup)	0010756-DUP1	0A24028-048	01/24/20 17:52
Calibration Blank	0A24028-CCB2	0A24028-050	01/24/20 18:01
Calibration Check	0A24028-CCV3	0A24028-052	01/24/20 18:11
Blank	0010756-BLK2	0A24028-053	01/24/20 18:19
PDI-WC-011420-04 (MS)	0010756-MS1	0A24028-054	01/24/20 18:24
Calibration Check	0A24028-CCV4	0A24028-062	01/24/20 19:05
Calibration Blank	0A24028-CCB3	0A24028-063	01/24/20 19:09
Calibration Check	0A24028-CCV5	0A24028-074	01/24/20 20:02
Calibration Blank	0A24028-CCB4	0A24028-075	01/24/20 20:06
Calibration Check	0A24028-CCV6	0A24028-086	01/24/20 21:02
Calibration Blank	0A24028-CCB5	0A24028-087	01/24/20 21:06
Calibration Check	0A24028-CCV7	0A24028-098	01/24/20 21:57
Calibration Blank	0A24028-CCB6	0A24028-099	01/24/20 22:02
Instrument RL Check	0A24028-CRL7	0A24028-100	01/24/20 22:07
Instrument RL Check	0A24028-CRL8	0A24028-101	01/24/20 22:11
Instrument RL Check	0A24028-CRL9	0A24028-102	01/24/20 22:16
Instrument RL Check	0A24028-CRLA	0A24028-103	01/24/20 22:21
Calibration Check	0A24028-CCV8	0A24028-114	01/24/20 23:12
Calibration Blank	0A24028-CCB7	0A24028-115	01/24/20 23:17

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A24028	Instrument:	ICPMS6
Matrix:	Sediment	Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0A24028-CCV9	0A24028-126	01/25/20 00:08
Calibration Blank	0A24028-CCB8	0A24028-127	01/25/20 00:13
Instrument RL Check	0A24028-CRLB	0A24028-128	01/25/20 00:18
Instrument RL Check	0A24028-CRLC	0A24028-129	01/25/20 00:22
Instrument RL Check	0A24028-CRLD	0A24028-130	01/25/20 00:27
Instrument RL Check	0A24028-CRLE	0A24028-131	01/25/20 00:32
Calibration Check	0A24028-CCVA	0A24028-140	01/25/20 01:14
Calibration Blank	0A24028-CCB9	0A24028-141	01/25/20 01:18
Instrument RL Check	0A24028-CRLF	0A24028-142	01/25/20 01:23
Instrument RL Check	0A24028-CRLG	0A24028-143	01/25/20 01:28
Instrument RL Check	0A24028-CRLH	0A24028-144	01/25/20 01:33
Instrument RL Check	0A24028-CRLI	0A24028-145	01/25/20 01:37

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.

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Control Limt: +/- 10.00%
Sequence: 0A24028

Lab Sample ID	Analyte	True	Found	%R	Units	Method
0A24028-ICV1	Arsenic	100	96.5	97	ug/L	EPA 6020A
	Barium	100	99.3	99	ug/L	EPA 6020A
	Cadmium	100	95.5	96	ug/L	EPA 6020A
	Chromium	100	100	100	ug/L	EPA 6020A
	Lead	100	100	100	ug/L	EPA 6020A
	Mercury	800	788	99	ng/L	EPA 6020A
	Selenium	40.0	41.9	105	ug/L	EPA 6020A
	Silver	40.0	36.7	92	ug/L	EPA 6020A
0A24028-CCV1	Arsenic	100	94.3	94	ug/L	EPA 6020A
	Barium	100	96.1	96	ug/L	EPA 6020A
	Cadmium	100	94.1	94	ug/L	EPA 6020A
	Chromium	100	96.6	97	ug/L	EPA 6020A
	Lead	100	98.8	99	ug/L	EPA 6020A
	Mercury	800	810	101	ng/L	EPA 6020A
	Selenium	40.0	40.8	102	ug/L	EPA 6020A
	Silver	40.0	36.6	91	ug/L	EPA 6020A
0A24028-CCV3	Arsenic	100	94.9	95	ug/L	EPA 6020A
	Barium	100	97.8	98	ug/L	EPA 6020A
	Cadmium	100	95.5	96	ug/L	EPA 6020A
	Chromium	100	97.6	98	ug/L	EPA 6020A
	Lead	100	100	100	ug/L	EPA 6020A
	Mercury	800	820	103	ng/L	EPA 6020A
	Selenium	40.0	41.3	103	ug/L	EPA 6020A
	Silver	40.0	36.7	92	ug/L	EPA 6020A
0A24028-CCV4	Arsenic	100	99.5	100	ug/L	EPA 6020A
	Barium	100	99.0	99	ug/L	EPA 6020A
	Cadmium	100	94.9	95	ug/L	EPA 6020A
	Chromium	100	98.5	99	ug/L	EPA 6020A
	Lead	100	99.1	99	ug/L	EPA 6020A
	Mercury	800	804	101	ng/L	EPA 6020A
	Selenium	40.0	40.8	102	ug/L	EPA 6020A
	Silver	40.0	37.1	93	ug/L	EPA 6020A
0A24028-CCV5	Arsenic	100	93.5	94	ug/L	EPA 6020A
	Barium	100	97.0	97	ug/L	EPA 6020A
	Cadmium	100	91.7	92	ug/L	EPA 6020A
	Chromium	100	95.3	95	ug/L	EPA 6020A
	Lead	100	101	101	ug/L	EPA 6020A
	Mercury	800	803	100	ng/L	EPA 6020A
	Selenium	40.0	40.3	101	ug/L	EPA 6020A
	Silver	40.0	37.2	93	ug/L	EPA 6020A
0A24028-CCV6	Lead	100	99.8	100	ug/L	EPA 6020A
	Mercury	800	796	100	ng/L	EPA 6020A
	Selenium	40.0	41.1	103	ug/L	EPA 6020A
	Silver	40.0	37.6	94	ug/L	EPA 6020A
0A24028-CCV7	Arsenic	100	93.9	94	ug/L	EPA 6020A
	Barium	100	96.7	97	ug/L	EPA 6020A

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Control Limt: +/- 10.00%
Sequence: 0A24028

Lab Sample ID	Analyte	True	Found	%R	Units	Method
0A24028-CCV7	Cadmium	100	95.5	96	ug/L	EPA 6020A
	Chromium	100	97.6	98	ug/L	EPA 6020A
	Lead	100	103	103	ug/L	EPA 6020A
	Mercury	800	829	104	ng/L	EPA 6020A
	Selenium	40.0	41.4	103	ug/L	EPA 6020A
	Silver	40.0	37.1	93	ug/L	EPA 6020A
0A24028-CCV8	Arsenic	100	95.6	96	ug/L	EPA 6020A
	Barium	100	98.4	98	ug/L	EPA 6020A
	Cadmium	100	96.6	97	ug/L	EPA 6020A
	Chromium	100	97.4	97	ug/L	EPA 6020A
	Lead	100	102	102	ug/L	EPA 6020A
	Mercury	800	835	104	ng/L	EPA 6020A
	Selenium	40.0	42.2	105	ug/L	EPA 6020A
	Silver	40.0	37.0	93	ug/L	EPA 6020A
0A24028-CCV9	Arsenic	100	94.2	94	ug/L	EPA 6020A
	Barium	100	96.2	96	ug/L	EPA 6020A
	Cadmium	100	96.4	96	ug/L	EPA 6020A
	Chromium	100	96.4	96	ug/L	EPA 6020A
	Lead	100	102	102	ug/L	EPA 6020A
	Mercury	800	827	103	ng/L	EPA 6020A
	Selenium	40.0	41.3	103	ug/L	EPA 6020A
	Silver	40.0	36.9	92	ug/L	EPA 6020A
0A24028-CCVA	Arsenic	100	93.8	94	ug/L	EPA 6020A
	Barium	100	96.7	97	ug/L	EPA 6020A
	Cadmium	100	95.1	95	ug/L	EPA 6020A
	Chromium	100	95.7	96	ug/L	EPA 6020A
	Lead	100	102	102	ug/L	EPA 6020A
	Mercury	800	820	103	ng/L	EPA 6020A
	Selenium	40.0	41.8	105	ug/L	EPA 6020A
	Silver	40.0	36.4	91	ug/L	EPA 6020A

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Instrument ID: ICPMS6
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence: 0A24028
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	RL	Units	C	Method
0A24028-ICB1	Mercury	ND	40.0 (Inst)	ng/L		EPA 6020A
	Lead	ND	0.100 (Inst)	ug/L		EPA 6020A
	Silver	ND	0.100 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.500 (Inst)	ug/L		EPA 6020A
	Barium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.100 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Selenium	ND	0.500 (Inst)	ug/L		EPA 6020A
0A24028-CCB1	Mercury	ND	40.0 (Inst)	ng/L		EPA 6020A
	Lead	ND	0.100 (Inst)	ug/L		EPA 6020A
	Silver	ND	0.100 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.500 (Inst)	ug/L		EPA 6020A
	Barium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.100 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Selenium	ND	0.500 (Inst)	ug/L		EPA 6020A
0A24028-CCB2	Chromium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Selenium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Barium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.500 (Inst)	ug/L		EPA 6020A
	Mercury	ND	40.0 (Inst)	ng/L		EPA 6020A
	Cadmium	ND	0.100 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.100 (Inst)	ug/L		EPA 6020A
	Silver	ND	0.100 (Inst)	ug/L		EPA 6020A
0A24028-CCB3	Selenium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.100 (Inst)	ug/L		EPA 6020A
	Silver	ND	0.100 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.500 (Inst)	ug/L		EPA 6020A
	Barium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.100 (Inst)	ug/L		EPA 6020A
	Mercury	ND	40.0 (Inst)	ng/L		EPA 6020A
0A24028-CCB4	Lead	ND	0.100 (Inst)	ug/L		EPA 6020A

INSTRUMENT BLANKS
EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Instrument ID: ICPMS6
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence: 0A24028
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	RL	Units	C	Method
0A24028-CCB4	Silver	ND	0.100 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.500 (Inst)	ug/L		EPA 6020A
	Barium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.100 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Selenium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Mercury	ND	40.0 (Inst)	ng/L		EPA 6020A
0A24028-CCB5	Silver	ND	0.100 (Inst)	ug/L		EPA 6020A
	Mercury	ND	40.0 (Inst)	ng/L		EPA 6020A
	Arsenic	ND	0.500 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.100 (Inst)	ug/L		EPA 6020A
	Barium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.100 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Selenium	ND	0.500 (Inst)	ug/L		EPA 6020A
0A24028-CCB6	Mercury	ND	40.0 (Inst)	ng/L		EPA 6020A
	Chromium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.100 (Inst)	ug/L		EPA 6020A
	Silver	ND	0.100 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.500 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.100 (Inst)	ug/L		EPA 6020A
	Selenium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Barium	ND	0.500 (Inst)	ug/L		EPA 6020A
0A24028-CCB7	Mercury	ND	40.0 (Inst)	ng/L		EPA 6020A
	Lead	ND	0.100 (Inst)	ug/L		EPA 6020A
	Silver	ND	0.100 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.500 (Inst)	ug/L		EPA 6020A
	Barium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.100 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Selenium	ND	0.500 (Inst)	ug/L		EPA 6020A
0A24028-CCB8	Mercury	ND	40.0 (Inst)	ng/L		EPA 6020A
	Barium	ND	0.500 (Inst)	ug/L		EPA 6020A

INSTRUMENT BLANKS
EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Instrument ID: ICPMS6
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence: 0A24028
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	RL	Units	C	Method
0A24028-CCB8	Cadmium	ND	0.100 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Selenium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Silver	ND	0.100 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.100 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.500 (Inst)	ug/L		EPA 6020A
0A24028-CCB9	Mercury	ND	40.0 (Inst)	ng/L		EPA 6020A
	Cadmium	ND	0.100 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.100 (Inst)	ug/L		EPA 6020A
	Silver	ND	0.100 (Inst)	ug/L		EPA 6020A
	Barium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Selenium	ND	0.500 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.500 (Inst)	ug/L		EPA 6020A

(Inst) indicates on-Instrument Result and Reporting Level. Used for non-digested Instrument Blanks.

CRDL STANDARD

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 0A24028

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0A24028-CRL1	Arsenic	0.180	0.188	104	ug/L	70 - 130
	Barium	0.180	0.174	97	ug/L	70 - 130
	Cadmium	0.180	0.189	105	ug/L	70 - 130
	Chromium	0.180	0.139	77	ug/L	70 - 130
	Lead	0.180	0.185	103	ug/L	70 - 130
	Selenium	0.180	0.164	91	ug/L	70 - 130
	Silver	0.180	0.180	100	ug/L	70 - 130
0A24028-CRL2	Arsenic	0.900	0.915	102	ug/L	70 - 130
	Barium	0.900	0.871	97	ug/L	70 - 130
	Cadmium	0.900	0.878	98	ug/L	70 - 130
	Chromium	0.900	0.886	98	ug/L	70 - 130
	Lead	0.900	0.876	97	ug/L	70 - 130
	Mercury	36.0	37.1	103	ng/L	70 - 130
	Selenium	0.900	0.873	97	ug/L	70 - 130
	Silver	0.900	0.839	93	ug/L	70 - 130
0A24028-CRL3	Arsenic	1.80	1.79	99	ug/L	70 - 130
	Barium	1.80	1.76	98	ug/L	70 - 130
	Cadmium	1.80	1.71	95	ug/L	70 - 130
	Chromium	1.80	1.62	90	ug/L	70 - 130
	Lead	1.80	1.76	98	ug/L	70 - 130
	Mercury	72.0	71.1	99	ng/L	70 - 130
	Selenium	1.80	1.80	100	ug/L	70 - 130
	Silver	1.80	1.75	97	ug/L	70 - 130
0A24028-CRL4	Arsenic	0.180	0.177	98	ug/L	70 - 130
	Barium	0.180	0.166	92	ug/L	70 - 130
	Cadmium	0.180	0.177	99	ug/L	70 - 130
	Lead	0.180	0.178	99	ug/L	70 - 130
	Selenium	0.180	0.184	102	ug/L	70 - 130

CRDL STANDARD

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 0A24028

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0A24028-CRL4	Silver	0.180	0.172	96	ug/L	70 - 130
0A24028-CRL5	Arsenic	0.900	0.888	99	ug/L	70 - 130
	Barium	0.900	0.852	95	ug/L	70 - 130
	Cadmium	0.900	0.865	96	ug/L	70 - 130
	Chromium	0.900	0.778	86	ug/L	70 - 130
	Lead	0.900	0.890	99	ug/L	70 - 130
	Mercury	36.0	37.9	105	ng/L	70 - 130
	Selenium	0.900	0.914	102	ug/L	70 - 130
	Silver	0.900	0.853	95	ug/L	70 - 130
0A24028-CRL6	Arsenic	1.80	1.81	100	ug/L	70 - 130
	Barium	1.80	1.73	96	ug/L	70 - 130
	Cadmium	1.80	1.73	96	ug/L	70 - 130
	Chromium	1.80	1.60	89	ug/L	70 - 130
	Lead	1.80	1.77	98	ug/L	70 - 130
	Mercury	72.0	74.3	103	ng/L	70 - 130
	Selenium	1.80	1.82	101	ug/L	70 - 130
	Silver	1.80	1.70	95	ug/L	70 - 130
0A24028-CRL7	Arsenic	0.180	0.220	122	ug/L	70 - 130
	Barium	0.180	0.196	109	ug/L	70 - 130
	Cadmium	0.180	0.200	111	ug/L	70 - 130
	Lead	0.180	0.185	103	ug/L	70 - 130
	Selenium	0.180	0.204	113	ug/L	70 - 130
	Silver	0.180	0.175	97	ug/L	70 - 130
0A24028-CRL8	Arsenic	0.900	0.880	98	ug/L	70 - 130
	Barium	0.900	0.832	92	ug/L	70 - 130
	Cadmium	0.900	0.841	93	ug/L	70 - 130
	Chromium	0.900	0.644	72	ug/L	70 - 130
	Lead	0.900	0.888	99	ug/L	70 - 130

CRDL STANDARD

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 0A24028

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0A24028-CRL8	Mercury	36.0	39.1	109	ng/L	70 - 130
	Selenium	0.900	0.880	98	ug/L	70 - 130
	Silver	0.900	0.862	96	ug/L	70 - 130
0A24028-CRL9	Arsenic	1.80	1.76	98	ug/L	70 - 130
	Barium	1.80	1.70	94	ug/L	70 - 130
	Cadmium	1.80	1.69	94	ug/L	70 - 130
	Chromium	1.80	1.47	82	ug/L	70 - 130
	Lead	1.80	1.73	96	ug/L	70 - 130
	Mercury	72.0	71.1	99	ng/L	70 - 130
	Selenium	1.80	1.79	99	ug/L	70 - 130
	Silver	1.80	1.69	94	ug/L	70 - 130
0A24028-CRLA	Arsenic	3.60	3.52	98	ug/L	70 - 130
	Barium	3.60	3.48	97	ug/L	70 - 130
	Cadmium	3.60	3.40	95	ug/L	70 - 130
	Chromium	3.60	3.11	86	ug/L	70 - 130
	Lead	3.60	3.65	101	ug/L	70 - 130
	Mercury	144	153	106	ng/L	70 - 130
	Selenium	3.60	3.67	102	ug/L	70 - 130
	Silver	3.60	3.56	99	ug/L	70 - 130
0A24028-CRLB	Arsenic	0.180	0.223	124	ug/L	70 - 130
	Barium	0.180	0.170	94	ug/L	70 - 130
	Cadmium	0.180	0.166	92	ug/L	70 - 130
	Lead	0.180	0.181	101	ug/L	70 - 130
	Mercury	7.20	9.94	138 *	ng/L	70 - 130
	Selenium	0.180	0.179	100	ug/L	70 - 130
	Silver	0.180	0.174	97	ug/L	70 - 130
0A24028-CRLC	Arsenic	0.900	0.889	99	ug/L	70 - 130
	Barium	0.900	0.809	90	ug/L	70 - 130

CRDL STANDARD

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 0A24028

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0A24028-CRLC	Cadmium	0.900	0.848	94	ug/L	70 - 130
	Lead	0.900	0.906	101	ug/L	70 - 130
	Mercury	36.0	37.0	103	ng/L	70 - 130
	Selenium	0.900	0.936	104	ug/L	70 - 130
	Silver	0.900	0.880	98	ug/L	70 - 130
0A24028-CRLD	Arsenic	1.80	1.79	99	ug/L	70 - 130
	Barium	1.80	1.64	91	ug/L	70 - 130
	Cadmium	1.80	1.66	92	ug/L	70 - 130
	Chromium	1.80	1.46	81	ug/L	70 - 130
	Lead	1.80	1.84	102	ug/L	70 - 130
	Mercury	72.0	74.6	104	ng/L	70 - 130
	Selenium	1.80	1.78	99	ug/L	70 - 130
	Silver	1.80	1.76	98	ug/L	70 - 130
0A24028-CRLE	Arsenic	3.60	3.56	99	ug/L	70 - 130
	Barium	3.60	3.32	92	ug/L	70 - 130
	Cadmium	3.60	3.49	97	ug/L	70 - 130
	Chromium	3.60	3.10	86	ug/L	70 - 130
	Lead	3.60	3.63	101	ug/L	70 - 130
	Mercury	144	149	104	ng/L	70 - 130
	Selenium	3.60	3.54	98	ug/L	70 - 130
	Silver	3.60	3.53	98	ug/L	70 - 130
0A24028-CRLF	Arsenic	0.180	0.196	109	ug/L	70 - 130
	Barium	0.180	0.172	96	ug/L	70 - 130
	Cadmium	0.180	0.162	90	ug/L	70 - 130
	Lead	0.180	0.183	101	ug/L	70 - 130
	Selenium	0.180	0.195	108	ug/L	70 - 130
	Silver	0.180	0.167	93	ug/L	70 - 130
0A24028-CRLG	Arsenic	0.900	0.897	100	ug/L	70 - 130

CRDL STANDARD

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 0A24028

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0A24028-CRLG	Barium	0.900	0.827	92	ug/L	70 - 130
	Cadmium	0.900	0.824	92	ug/L	70 - 130
	Lead	0.900	0.878	98	ug/L	70 - 130
	Mercury	36.0	36.0	100	ng/L	70 - 130
	Selenium	0.900	0.871	97	ug/L	70 - 130
	Silver	0.900	0.858	95	ug/L	70 - 130
0A24028-CRLH	Arsenic	1.80	1.76	98	ug/L	70 - 130
	Barium	1.80	1.68	93	ug/L	70 - 130
	Cadmium	1.80	1.68	93	ug/L	70 - 130
	Chromium	1.80	1.43	79	ug/L	70 - 130
	Lead	1.80	1.73	96	ug/L	70 - 130
	Mercury	72.0	71.6	99	ng/L	70 - 130
	Selenium	1.80	1.73	96	ug/L	70 - 130
	Silver	1.80	1.69	94	ug/L	70 - 130
0A24028-CRLI	Arsenic	3.60	3.76	104	ug/L	70 - 130
	Barium	3.60	3.65	101	ug/L	70 - 130
	Cadmium	3.60	3.68	102	ug/L	70 - 130
	Chromium	3.60	3.41	95	ug/L	70 - 130
	Lead	3.60	3.60	100	ug/L	70 - 130
	Mercury	144	148	103	ng/L	70 - 130
	Selenium	3.60	3.69	102	ug/L	70 - 130
	Silver	3.60	3.57	99	ug/L	70 - 130

* Values outside of QC limits

HOLDING TIME SUMMARY

EPA 6020A

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatior

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-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/24/20 10:03	10.02	56.00	01/24/20 17:43	10.34	56.00	
PDI-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/24/20 10:03	10.02	180.00	01/24/20 17:43	10.34	180.00	
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/24/20 10:03	9.98	56.00	01/24/20 17:48	10.30	56.00	
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/24/20 10:03	9.98	180.00	01/24/20 17:48	10.30	180.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: WET

METHOD: D7511-12

ANALYSES DATA PACKAGE COVER PAGE

D7511-12

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019

Project: Gasco PreRD_DG 2019 - 4c. Waste Characterization

Client Sample Id:	Lab Sample Id:	Matrix
PDI-WC-011420-02	A0A0539-01	Sediment
PDI-WC-011420-04	A0A0539-02	Sediment

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: 2/19/2020 12:29PM

Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

D7511-12

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Total Cyanide	0.0500	0.100	mg/kg

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

INORGANIC ANALYSIS DATA SHEET

D7511-12

PDI-WC-011420-02

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-01RE1
File ID: 0A20032-067
Sampled: 01/14/20 09:30
Prepared: 01/20/20 08:35
Analyzed: 01/20/20 13:38
Solids: 78.60
Preparation: ASTM D7511-12mod (S)
Initial/Final: 2.5145 g / 50 mL
Batch: 0010568
Sequence: 0A20032
Calibration: A0A2001
Instrument: OIA FS3000-2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
57-12-5	Total Cyanide	11.9	20	D	D7511-12

INORGANIC ANALYSIS DATA SHEET

D7511-12

PDI-WC-011420-04

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-02RE1
File ID: 0A20032-068
Sampled: 01/14/20 10:35
Prepared: 01/20/20 08:35
Analyzed: 01/20/20 13:40
Solids: 81.70
Preparation: ASTM D7511-12mod (S)
Initial/Final: 2.5488 g / 50 mL
Batch: 0010568
Sequence: 0A20032
Calibration: A0A2001
Instrument: OIA FS3000-2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
57-12-5	Total Cyanide	18.7	50	D	D7511-12

PREPARATION BATCH SUMMARY

D7511-12

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Batch: 0010568 Batch Matrix: Soil
Preparation: ASTM D7511-12mod (S)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	0010568-BLK1	0A20032-044	01/20/20 08:35	
LCS	0010568-BS1	0A20032-045	01/20/20 08:35	
PDI-WC-011420-02	A0A0539-01RE1	0A20032-067	01/20/20 08:35	
PDI-WC-011420-04	A0A0539-02RE1	0A20032-068	01/20/20 08:35	

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.

METHOD BLANK DATA SHEET
D7511-12

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Soil	Laboratory ID:	0010568-BLK1	File ID:	0A20032-044
Prepared:	01/20/20 08:35	Preparation:	ASTM D7511-12mod (S)	Initial/Final:	2.5 g / 50 mL
Analyzed:	01/20/20 12:26	Instrument:	OIA FS3000-2		
Batch:	0010568	Sequence:	0A20032	Calibration:	A0A2001

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
57-12-5	Total Cyanide	0.0500	U

LCS / LCS DUPLICATE RECOVERY

D7511-12

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Soil		
Batch:	0010568	Laboratory ID:	0010568-BS1
Preparation:	ASTM D7511-12mod (S)	Initial/Final:	2.5 g / 50 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Total Cyanide	0.400	0.433	108	84 - 116

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

D7511-12

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence:	0A20032	Instrument:	OIA FS3000-2
Matrix:	Soil	Calibration:	A0A2001

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0A20032-CAL2	0A20032-008	01/20/20 11:14
Cal Standard	0A20032-CAL3	0A20032-009	01/20/20 11:16
Cal Standard	0A20032-CAL4	0A20032-010	01/20/20 11:18
Cal Standard	0A20032-CAL5	0A20032-011	01/20/20 11:20
Cal Standard	0A20032-CAL6	0A20032-012	01/20/20 11:22
Cal Standard	0A20032-CAL7	0A20032-013	01/20/20 11:24
Initial Cal Check	0A20032-ICV1	0A20032-016	01/20/20 11:30
Initial Cal Blank	0A20032-ICB1	0A20032-017	01/20/20 11:32
Calibration Check	0A20032-CCV1	0A20032-034	01/20/20 12:06
Calibration Blank	0A20032-CCB1	0A20032-035	01/20/20 12:08
Calibration Check	0A20032-CCV2	0A20032-041	01/20/20 12:20
Calibration Blank	0A20032-CCB2	0A20032-042	01/20/20 12:22
Blank	0010568-BLK1	0A20032-044	01/20/20 12:26
LCS	0010568-BS1	0A20032-045	01/20/20 12:28
Calibration Check	0A20032-CCV3	0A20032-055	01/20/20 12:48
Calibration Blank	0A20032-CCB3	0A20032-056	01/20/20 12:50
Calibration Check	0A20032-CCV4	0A20032-062	01/20/20 13:14
Calibration Blank	0A20032-CCB4	0A20032-063	01/20/20 13:16
PDI-WC-011420-02	A0A0539-01RE1	0A20032-067	01/20/20 13:38
PDI-WC-011420-04	A0A0539-02RE1	0A20032-068	01/20/20 13:40
Calibration Check	0A20032-CCV5	0A20032-071	01/20/20 13:46
Calibration Blank	0A20032-CCB5	0A20032-072	01/20/20 13:48
Calibration Check	0A20032-CCV6	0A20032-076	01/20/20 14:09
Calibration Blank	0A20032-CCB6	0A20032-077	01/20/20 14:11
Calibration Check	0A20032-CCV7	0A20032-082	01/20/20 14:33
Calibration Blank	0A20032-CCB7	0A20032-083	01/20/20 14:35

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.

INITIAL CALIBRATION DATA (Summary)

D7511-12

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatic

Calibration: A0A2001 Date: 01/20/20 08:28 Instrument: OIA FS3000-2

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Total Cyanide	28561.45	Q **	47.20745				0.9996779		

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

D7511-12

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characte
Calibration:	A0A2001	Instrument:	OIA FS3000-2
		Calibration Date:	01/20/20 08:28

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Total Cyanide	50	40457.92	25	40783.16	10	35556.3	5	29965.8	2	16689.5	1	7916

INITIAL AND CONTINUING CALIBRATION CHECK

D7511-12

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Instrument ID: OIA FS3000-2
Calibration: A0A2001
Control Limt: +/- 10.00%
Sequence: 0A20032

Lab Sample ID	Analyte	True	Found	%R	Units	Method
0A20032-ICV1	Total Cyanide	25.0	24.9	100	ug/L	D7511-12
0A20032-CCV1	Total Cyanide	25.0	26.5	106	ug/L	D7511-12
0A20032-CCV2	Total Cyanide	25.0	24.7	99	ug/L	D7511-12
0A20032-CCV3	Total Cyanide	25.0	22.7	91	ug/L	D7511-12
0A20032-CCV4	Total Cyanide	25.0	27.4	110	ug/L	D7511-12
0A20032-CCV5	Total Cyanide	25.0	24.6	98	ug/L	D7511-12
0A20032-CCV6	Total Cyanide	25.0	24.0	96	ug/L	D7511-12
0A20032-CCV7	Total Cyanide	25.0	24.8	99	ug/L	D7511-12

* Values outside of QC limits

INSTRUMENT BLANKS
D7511-12

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Instrument ID: OIA FS3000-2
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Sequence: 0A20032
Calibration: A0A2001

Lab Sample ID	Analyte	Found	RL	Units	C	Method
0A20032-ICB1	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
0A20032-CCB1	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
0A20032-CCB2	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
0A20032-CCB3	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
0A20032-CCB4	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
0A20032-CCB5	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
0A20032-CCB6	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
0A20032-CCB7	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12

(Inst) indicates on-Instrument Result and Reporting Level. Used for non-digested Instrument Blanks.

HOLDING TIME SUMMARY

D7511-12

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatior

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-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/20/20 08:35	5.96	14.00	01/20/20 13:38	6.17	14.00	
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/20/20 08:35	5.92	14.00	01/20/20 13:40	6.13	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
Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 4c. Waste Characterization

Client Sample Id:	Lab Sample Id:	Matrix
PDI-WC-011420-02	A0A0539-01	Sediment
PDI-WC-011420-04	A0A0539-02	Sediment

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: 2/19/2020 12:29PM
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 - 4c. Waste Charac

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-WC-011420-02

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-01
Sampled: 01/14/20 09:30
Prepared: 01/17/20 15:30
Analyzed: 01/20/20 12:45
Solids: 78.60
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 0010552
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	78.6	1		SM 2540 G

INORGANIC ANALYSIS DATA SHEET

SM 2540 G

PDI-WC-011420-04

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-02
Sampled: 01/14/20 10:35
Prepared: 01/17/20 15:30
Analyzed: 01/20/20 12:45
Solids: 81.70
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 0010552
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	81.7	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 - 4c. Waste Characterization
Batch: 0010552 Batch Matrix: Sediment Preparation: Total Solids (SM2540G/PSEP)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
PDI-WC-011420-02 (Dup)	0010552-DUP1		01/17/20 15:30	
PDI-WC-011420-02	A0A0539-01		01/17/20 15:30	
PDI-WC-011420-04	A0A0539-02		01/17/20 15:30	

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.

DUPLICATES

SM 2540 G

PDI-WC-011420-02

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Sediment
Batch: 0010552
Preparation: Total Solids (SM2540G/PSEP)
Source Sample Name: PDI-WC-011420-02

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 4c. Waste Charact
Laboratory ID: 0010552-DUP1
Lab Source ID: A0A0539-01
Initial/Final: 1 N/A / 1 N/A
% Solids: 78.60

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (% by Weight)	C	DUPLICATE CONCENTRATION (% by Weight)	C	RPD %	Q	METHOD
Total Solids	10	78.6		77.1		2		SM 2540 G

* Values outside of QC limits

HOLDING TIME SUMMARY

SM 2540 G

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatior

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-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/17/20 15:30	3.25	180.00	01/20/20 12:45	2.89		
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/17/20 15:30	3.20	180.00	01/20/20 12:45	2.89		

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: WET

METHOD: EPA 1010M

ANALYSES DATA PACKAGE COVER PAGE

EPA 1010M

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019

Project: Gasco PreRD_DG 2019 - 4c. Waste Characterization

Client Sample Id:	Lab Sample Id:	Matrix
PDI-WC-011420-02	A0A0539-01	Sediment
PDI-WC-011420-04	A0A0539-02	Sediment

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: 2/19/2020 12:29PM

Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 1010M

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Oil

Analyte	MDL	MRL	Units
Flash Point (Ignitability)	70.0	70.0	°F

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

INORGANIC ANALYSIS DATA SHEET

EPA 1010M

PDI-WC-011420-02

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-01
Sampled: 01/14/20 09:30
Prepared: 01/27/20 10:08
Analyzed: 01/27/20 12:45
Solids: 78.60
Preparation: Flashpoint
Initial/Final: 70 N/A / 70 N/A
Batch: 0010801
Calibration:
Instrument: Flashpoint 1

CAS NO.	Analyte	Concentration (°F)	Dilution Factor	Q	Method
FLASHPT	Flash Point (Ignitability)	70.0	1		EPA 1010M

INORGANIC ANALYSIS DATA SHEET

EPA 1010M

PDI-WC-011420-04

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-02
Sampled: 01/14/20 10:35
Prepared: 01/27/20 10:08
Analyzed: 01/27/20 13:07
Solids: 81.70
Preparation: Flashpoint
Initial/Final: 70 N/A / 70 N/A
Batch: 0010801
Calibration:
Instrument: Flashpoint 1

CAS NO.	Analyte	Concentration (°F)	Dilution Factor	Q	Method
FLASHPT	Flash Point (Ignitability)	70.0	1		EPA 1010M

PREPARATION BATCH SUMMARY

EPA 1010M

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Batch: 0010801 Batch Matrix: Oil
Preparation: Flashpoint

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS	0010801-BS1		01/27/20 10:08	
PDI-WC-011420-02	A0A0539-01		01/27/20 10:08	
PDI-WC-011420-04	A0A0539-02		01/27/20 10:08	

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.

LCS / LCS DUPLICATE RECOVERY

EPA 1010M

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix:	Oil		
Batch:	0010801	Laboratory ID:	0010801-BS1
Preparation:	Flashpoint	Initial/Final:	70 N/A / 70 N/A

COMPOUND	SPIKE ADDED (°F)	LCS CONCENTRATION (°F)	LCS % REC. (*=Out)	QC LIMITS REC.
Flash Point (Ignitability)	145	148	102	95 - 105

* = Values outside of QC limits

HOLDING TIME SUMMARY

EPA 1010M

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatior

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-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/27/20 10:08	13.03	14.00	01/27/20 12:45	13.14	14.00	
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/27/20 10:08	12.98	14.00	01/27/20 13:07	13.11	14.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: WET

METHOD: EPA 9045D

ANALYSES DATA PACKAGE COVER PAGE

EPA 9045D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019

Project: Gasco PreRD_DG 2019 - 4c. Waste Characterization

Client Sample Id:	Lab Sample Id:	Matrix
PDI-WC-011420-02	A0A0539-01	Sediment
PDI-WC-011420-04	A0A0539-02	Sediment

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Signature:

Name: David G. Jack

Forms Created: 2/19/2020 12:29PM

Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 9045D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Soil pH (measured in H2O)	0.500	0.500	pH Units
pH Temperature (deg C)	1.00	1.00	pH Units

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

INORGANIC ANALYSIS DATA SHEET

EPA 9045D

PDI-WC-011420-02

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-01
Sampled: 01/14/20 09:30
Prepared: 01/20/20 13:39
Analyzed: 01/20/20 17:05
Solids: 78.60
Preparation: DI Leach
Initial/Final: 20.0081 g / 20 mL
Batch: 0010593
Calibration:
Instrument: pH meter 3

CAS NO.	Analyte	Concentration (pH Units)	Dilution Factor	Q	Method
pH	Soil pH (measured in H2O)	6.02	1		EPA 9045D
pH Temp	pH Temperature (deg C)	21.3	1		EPA 9045D

INORGANIC ANALYSIS DATA SHEET

EPA 9045D

PDI-WC-011420-04

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-02
Sampled: 01/14/20 10:35
Prepared: 01/20/20 13:39
Analyzed: 01/20/20 17:10
Solids: 81.70
Preparation: DI Leach
Initial/Final: 20.1158 g / 20 mL
Batch: 0010593
Calibration:
Instrument: pH meter 3

CAS NO.	Analyte	Concentration (pH Units)	Dilution Factor	Q	Method
pH	Soil pH (measured in H2O)	5.69	1		EPA 9045D
pH Temp	pH Temperature (deg C)	20.9	1		EPA 9045D

PREPARATION BATCH SUMMARY

EPA 9045D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Batch: 0010593 Batch Matrix: Sediment Preparation: DI Leach

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
PDI-WC-011420-02 (Dup)	0010593-DUP1		01/20/20 13:39	
Reference	0010593-SRM1		01/20/20 13:39	
Reference	0010593-SRM2		01/20/20 13:39	
Reference	0010593-SRM3		01/20/20 13:39	
Reference	0010593-SRM4		01/20/20 13:39	
PDI-WC-011420-02	A0A0539-01		01/20/20 13:39	
PDI-WC-011420-04	A0A0539-02		01/20/20 13:39	

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.

DUPLICATES

PDI-WC-011420-02

EPA 9045D

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Sediment
Batch: 0010593
Preparation: DI Leach
Source Sample Name: PDI-WC-011420-02

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 4c. Waste Charact
Laboratory ID: 0010593-DUP1
Lab Source ID: A0A0539-01
Initial/Final: 20.0231 g / 20 mL
% Solids: 78.60

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (pH Units)	C	DUPLICATE CONCENTRATION (pH Units)	C	RPD %	Q	METHOD
pH Temperature (deg C)	30	21.3		21.0		1		EPA 9045D

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

EPA 9045D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac
Matrix: Sediment
Batch: 0010593
Laboratory ID: 0010593-SRM1
Preparation: DI Leach
Initial/Final: 20 g / 20 mL

ANALYTE	TRUE (pH Units)	FOUND (pH Units)	SRM % REC.	QC LIMITS REC.
Soil pH (measured in H2O)	6.00	6.03	100	98.33333 - 101.6667
pH Temperature (deg C)	20.0	20.7	104	50 - 200

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

EPA 9045D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Matrix: Sediment

Batch: 0010593

Laboratory ID: 0010593-SRM2

Preparation: DI Leach

Initial/Final: 20 g / 20 mL

ANALYTE	TRUE (pH Units)	FOUND (pH Units)	SRM % REC.	QC LIMITS REC.
Soil pH (measured in H2O)	8.00	8.01	100	98.75 - 101.25
pH Temperature (deg C)	20.0	20.7	104	50 - 200

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

EPA 9045D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Matrix: Sediment

Batch: 0010593

Laboratory ID: 0010593-SRM3

Preparation: DI Leach

Initial/Final: 20 g / 20 mL

ANALYTE	TRUE (pH Units)	FOUND (pH Units)	SRM % REC.	QC LIMITS REC.
Soil pH (measured in H2O)	6.00	6.02	100	98.33333 - 101.6667
pH Temperature (deg C)	20.0	21.3	106	50 - 200

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

EPA 9045D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Matrix: Sediment

Batch: 0010593

Preparation: DI Leach

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Laboratory ID: 0010593-SRM4

Initial/Final: 20 g / 20 mL

ANALYTE	TRUE (pH Units)	FOUND (pH Units)	SRM % REC.	QC LIMITS REC.
Soil pH (measured in H2O)	8.00	8.02	100	98.75 - 101.25
pH Temperature (deg C)	20.0	21.4	107	50 - 200

* Values outside of QC limits

HOLDING TIME SUMMARY

EPA 9045D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatior

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-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/20/20 13:39	6.17	0.01	01/20/20 17:05	6.32	0.01	*
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/20/20 13:39	6.13	0.01	01/20/20 17:10	6.27	0.01	*

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: WET

METHOD: EPA 9095B

ANALYSES DATA PACKAGE COVER PAGE

EPA 9095B

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 4c. Waste Characterization

Client Sample Id:	Lab Sample Id:	Matrix
PDI-WC-011420-02	A0A0539-01	Sediment
PDI-WC-011420-04	A0A0539-02	Sediment

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Signature:
Name: David G. Jack

Forms Created: 2/19/2020 12:29PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 9095B

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Charac

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Free Liquid	0.00	0.00	mL

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

INORGANIC ANALYSIS DATA SHEET

EPA 9095B

PDI-WC-011420-02

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-01
Sampled: 01/14/20 09:30
Prepared: 01/24/20 13:41
Analyzed: 01/24/20 13:46
Solids: 78.60
Preparation: Paint Filter
Initial/Final: 100.04 g / 1 N/A
Batch: 0010775
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (mL)	Dilution Factor	Q	Method
FREE_LIQ	Free Liquid	ND	1	U	EPA 9095B

INORGANIC ANALYSIS DATA SHEET

EPA 9095B

PDI-WC-011420-04

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Matrix: Sediment
Laboratory ID: A0A0539-02
Sampled: 01/14/20 10:35
Prepared: 01/24/20 13:46
Analyzed: 01/24/20 13:51
Solids: 81.70
Preparation: Paint Filter
Initial/Final: 100.03 g / 1 N/A
Batch: 0010775
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (mL)	Dilution Factor	Q	Method
FREE_LIQ	Free Liquid	ND	1	U	EPA 9095B

PREPARATION BATCH SUMMARY

EPA 9095B

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterization
Batch: 0010775 Batch Matrix: Sediment Preparation: Paint Filter

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
PDI-WC-011420-02	A0A0539-01		01/24/20 13:41	
PDI-WC-011420-04	A0A0539-02		01/24/20 13:46	

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

EPA 9095B

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4c. Waste Characterizatior

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-WC-011420-02	01/14/20 09:30	01/14/20 14:27	01/24/20 13:41	10.17	28.00	01/24/20 13:46	10.18	28.00	
PDI-WC-011420-04	01/14/20 10:35	01/14/20 14:27	01/24/20 13:46	10.13	28.00	01/24/20 13:51	10.14	28.00	

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

Diesel and/or Oil Hydrocarbons by NWTPH-Dx
Benchsheet & Analysis Sequence Data

Batch 0010543
Sequence 0A17024 (A0A0539-01,02)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 0010543 (Sediment)

Prep Method: EPA 3546 (Fuels)

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	0010543-BLK1		QC	01/17/20 12:52	11	5				100					
	0010543-BS1		QC	01/17/20 12:52	10	5	A20A166		100	100					
	A0A0538-01	A	NWTPH-Dx (Diesel/Oil)	01/17/20 12:52	10.68	5				100	PDI-WC-011420-01				
	0010543-DUP1		QC	01/17/20 12:52	10.69	5		A0A0538-01		100					
	A0A0538-02	A	NWTPH-Dx (Diesel/Oil)	01/17/20 12:52	10.4	5				100	PDI-WC-011420-03				
	A0A0539-01	A	NWTPH-Dx (Diesel/Oil)	01/17/20 12:52	10.63	5				100	PDI-WC-011420-02				
	A0A0539-02	A	NWTPH-Dx (Diesel/Oil)	01/17/20 12:52	10.49	5				100	PDI-WC-011420-04				

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19I263	03/18/20	DCM CHEM PROD. 194934
A19L136	06/06/20	Sodium Sulfate Lot # 194950

Analyte Spike(s)

Std ID	Exp. Date	Description
A20A166	07/11/20	NWTPH-DX Spike in Methanol

Surrogate(s)

Std ID	Exp. Date	Description
A19L269	04/27/20	NWTPH-DX Soil Surrogate in DCM

Method 3546 digestion time and temperature achieved.
Initial:

Witness: _____

Prepared By: _____ Date

Reviewed By: Ben [signature] 1-20-20 Date

Printed: 1/20/2020 9:48:19AM

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 0010543 (Sediment)

Prep Method: EPA 3546 (Fuels)

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
5	0010543-BLK1		QC	01/17/20 12:52	~~10~~ 11	5 ✓				100					
6	0010543-BS1		QC	01/17/20 12:52	10	5 ✓	A20A166		100	100					
7	A0A0538-01	A	NWTPH-Dx (Diesel/Oil)	01/17/20 12:52	~~10~~ 10.68	5 ✓				100	PDI-WC-011420-01	Soil, rocks			
8	0010543-DUP1		QC	01/17/20 12:52	~~10~~ 10.69	5 ✓		A0A0538-01		100		Soil, rocks			
9	A0A0538-02	A	NWTPH-Dx (Diesel/Oil)	01/17/20 12:52	~~10~~ 10.40	5 ✓				100	PDI-WC-011420-03	Soil, rocks, odor			
10	A0A0539-01	A	NWTPH-Dx (Diesel/Oil)	01/17/20 12:52	~~10~~ 10.63	5 ✓				100	PDI-WC-011420-02	Soil, rocks			
11	A0A0539-02	A	NWTPH-Dx (Diesel/Oil)	01/17/20 12:52	~~10~~ 10.49	5 ✓				100	PDI-WC-011420-04	Soil, rocks			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19I263	03/18/20	DCM CHEM PROD. 194934
A19L136	06/06/20	Sodium Sulfate Lot # 194950

Analyte Spike(s)

Std ID	Exp. Date	Description
A20A166	07/11/20	NWTPH-DX Spike in Methanol

SCG

Surrogate(s)

Std ID	Exp. Date	Description
~~A20A129~~ A19L269	04/27/20	NWTPH-DX Soil Surrogate in DCM

SCG

Method 3546 digestion time and temperature achieved.
Initial: SCG

Witness: CAS 01/17/2020

SCG 01/17/2020
Prepared By: Date

CAS 01/17/2020
Reviewed By: Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **0A17024** Instrument: **DUALFID4R**

Date: **01/17/20 12:27** Calibration: **A0A1404**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A17024-RES1	Soil	QC	QC				A19L267
2	0A17024-CCV1	Soil	QC	QC				A20A165
3	0A17024-CCV2	Soil	QC	QC				A20A164
4	0A17024-CCB1	Soil	QC	QC				
5	0010541-BLK1	Soil	QC	QC		0010541		
6	0010541-BS1	Soil	QC	QC		0010541		
7	A0A0436-03	Soil	NWTPH-Dx (Diesel/Oil)		01/20/20	0010541		
8	0010541-DUP1	Soil	QC	QC		0010541		
9	A0A0546-07	Soil	NWTPH-Dx (Diesel/Oil)		01/20/20	0010541		
10	A0A0546-08	Soil	NWTPH-Dx (Diesel/Oil)		01/20/20	0010541		
11	A0A0546-09	Soil	NWTPH-Dx (Diesel/Oil)		01/20/20	0010541		
12	A0A0546-10	Soil	NWTPH-Dx (Diesel/Oil)		01/20/20	0010541		
13	A0A0579-01	Soil	NWTPH-Dx (Diesel/Oil)		01/20/20	0010541		
14	A0A0579-02	Soil	NWTPH-Dx (Diesel/Oil)		01/20/20	0010541		
15	A0A0580-01	Soil	NWTPH-Dx (Diesel/Oil)		01/20/20	0010541		
16	A0A0580-02	Soil	NWTPH-Dx (Diesel/Oil)		01/20/20	0010541		
17	0010543-BLK1	Sediment	QC	QC		0010543		
18	0010543-BS1	Sediment	QC	QC		0010543		
19	A0A0538-01	Sediment	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	01/21/20	0010543		
20	0010543-DUP1	Sediment	QC	QC		0010543		
21	A0A0538-02	Sediment	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	01/21/20	0010543		
22	A0A0539-01	Sediment	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	01/21/20	0010543		
23	A0A0539-02	Sediment	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	01/21/20	0010543		
24	0A17024-CCV3	Soil	QC	QC				A20A164
25	0A17024-CCV4	Soil	QC	QC				A20A165

Data Entered By: RR 1.20.20

Comments:

Data Reviewed By: [signature] 1/20/20

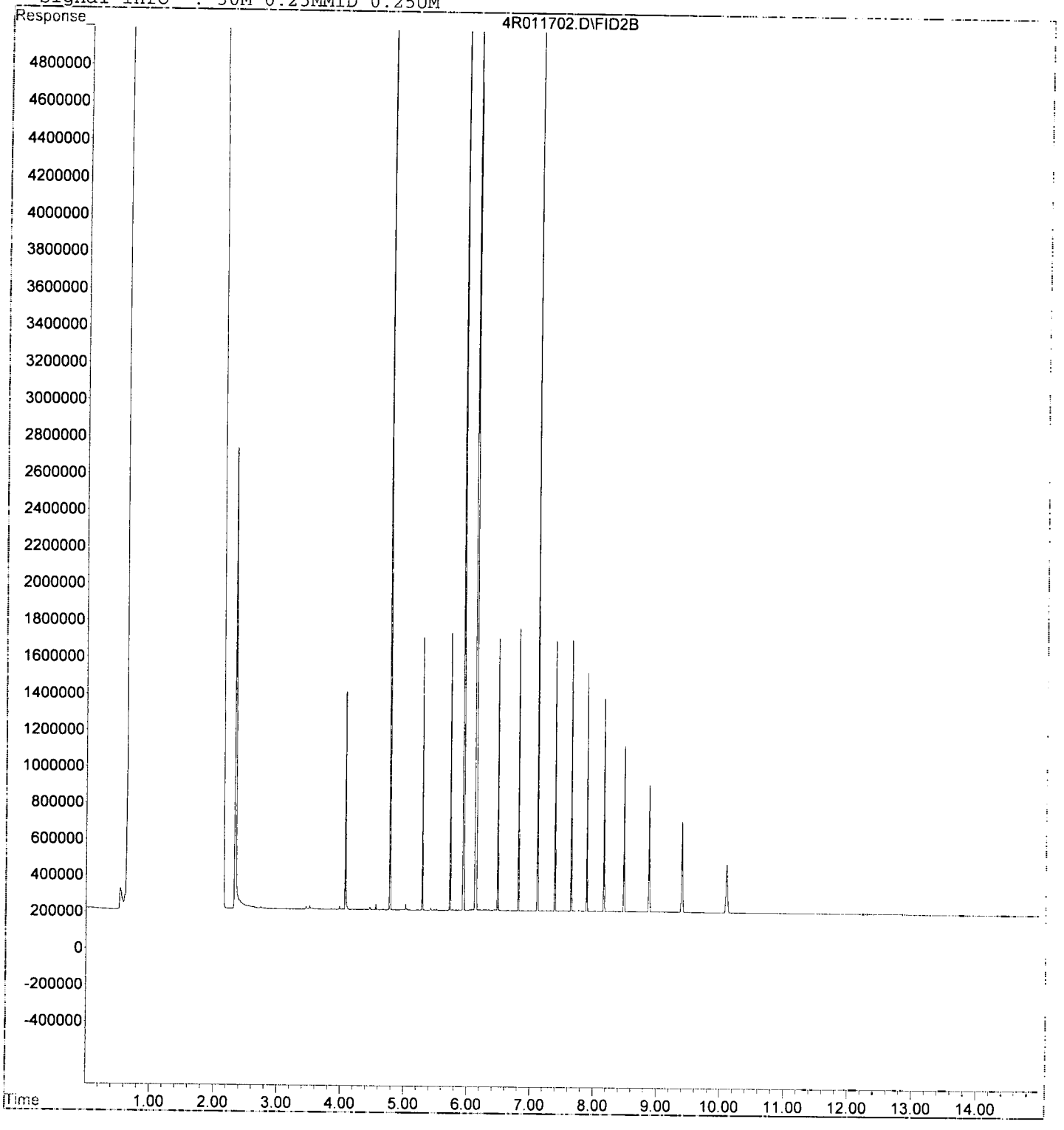
Quantitation Report (Not Reviewed)

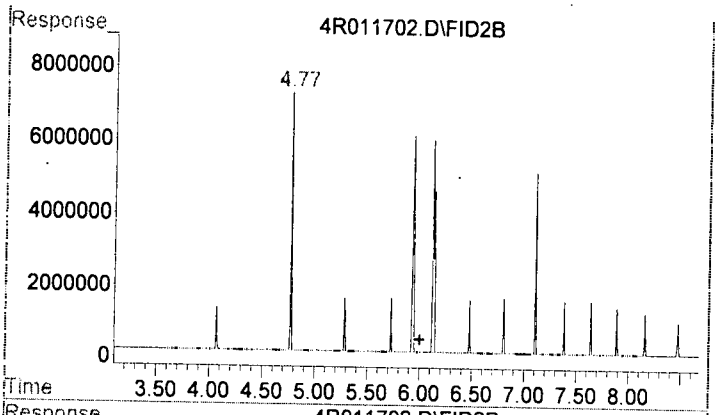
Data File : G:\4\DATA\2020-01\0A17024\4R011702.D
Acq On : 17 Jan 2020 16:19
Sample : 0A17024-RES1
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Vial: 95
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

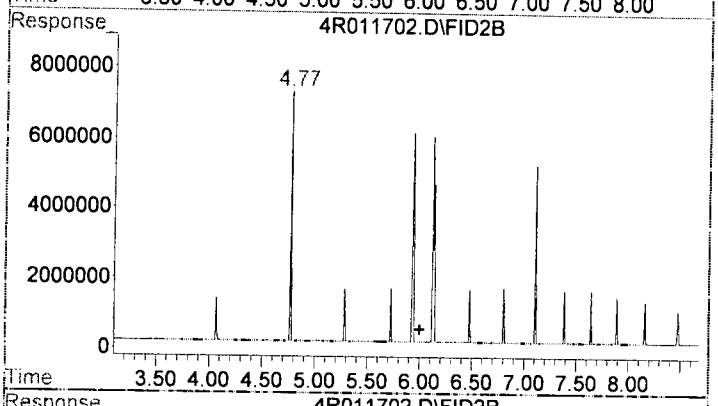
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





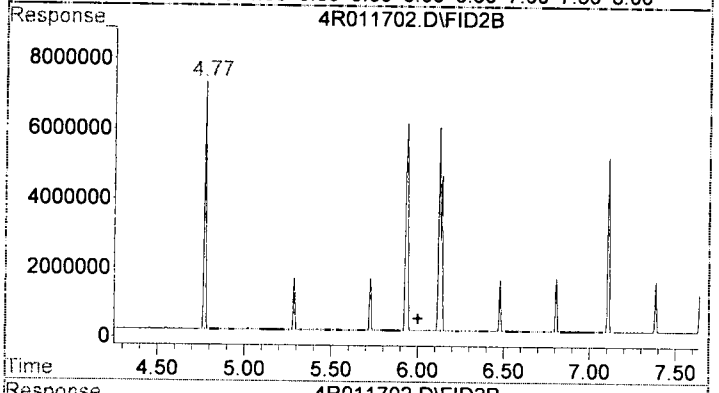
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 304364327
Conc: 275.67 ug/ml m



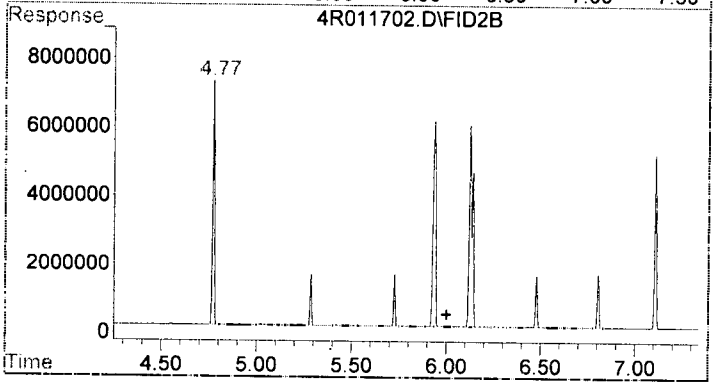
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 304364327
Conc: 275.67 ug/ml m



#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 254845149
Conc: 230.82 ug/ml m

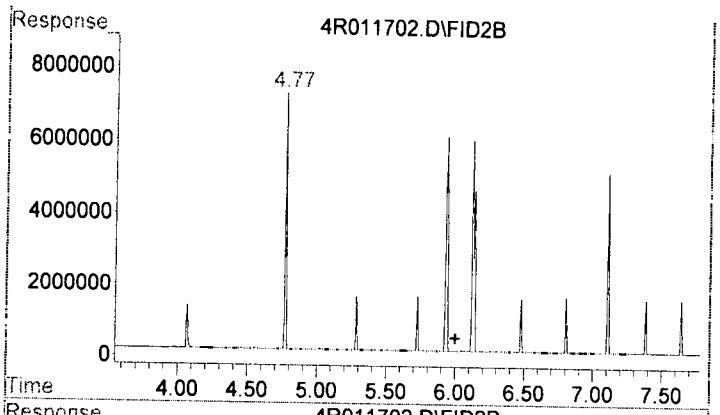


#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 220755619
Conc: 271.57 ug/ml m

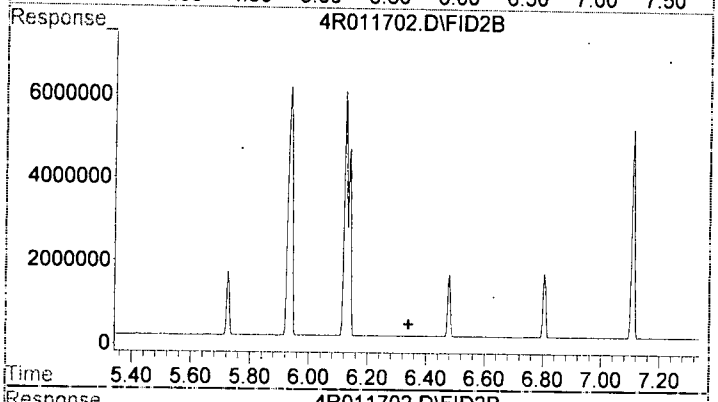
J

✓ AR 1.30.20



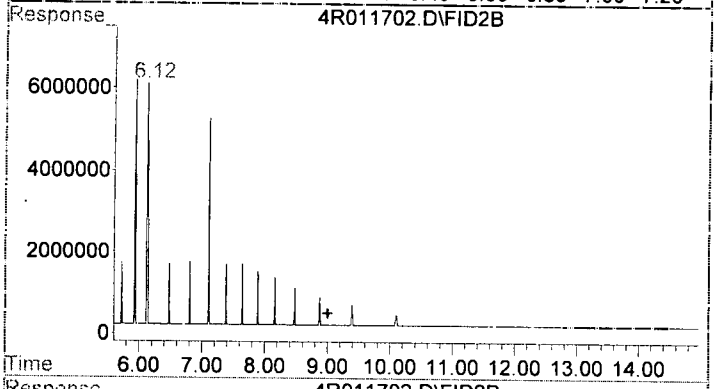
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 265089859
Conc: 259.01 ug/ml m



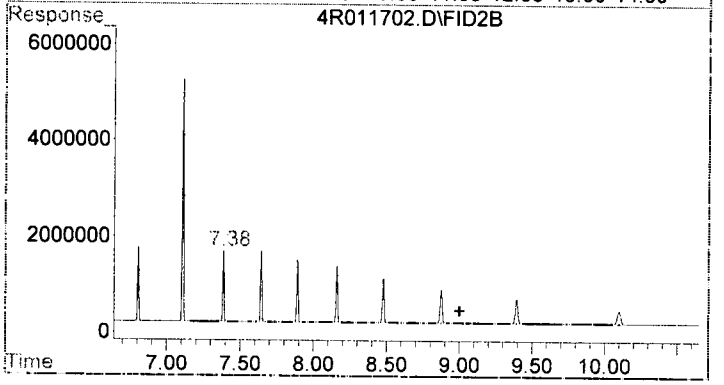
#6 o-Terphenyl

R.T.: 0.000 min
Exp R.T. : 6.340 min
Response: 0
Conc: N.D.



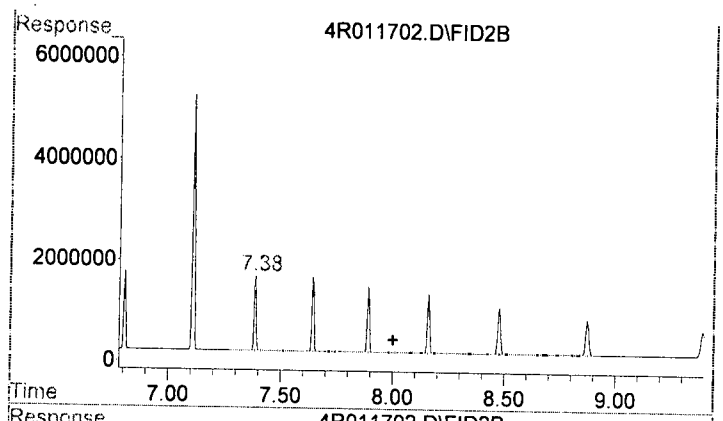
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 195339221
Conc: 170.78 ug/ml m



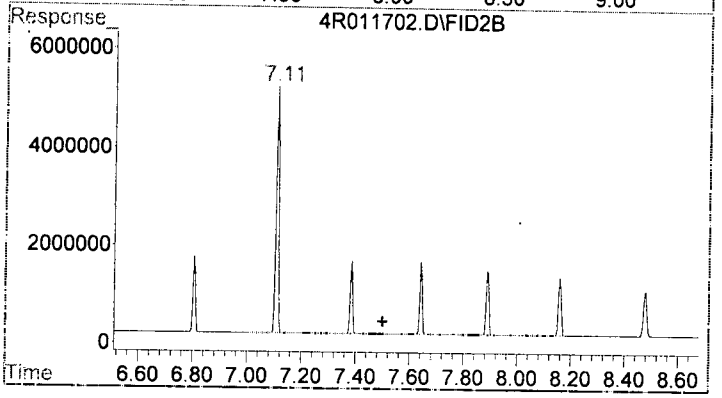
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 66232477
Conc: 57.91 ug/ml m



#9 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 54327161
Conc: 76.34 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.: 7.500 min
Delta R.T.: 0.000 min
Response: 72436079
Conc: 101.07 ug/ml m

Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2020-01\0A17024\4R011703.D
Acq On : 17 Jan 2020 16:40
Sample : 0A17024-CCV1
Misc :
IntFile : SUR.E

Vial: 2
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	H	Mineral Oil	-1.000	355.540	0.0	93	0.00
2	H	Diesel	-1.000	355.540	0.0	93	0.00
3	H	DRO(C12-C24)	-1.000	84.365	0.0	93	0.00
4	H	CA LUFT DRO (C12-C22)	-1.000	39.054	0.0	0	0.00
5	H	TPHd (C10-C25)	-1.000	131.851	0.0	93	0.00
6	S	o-Terphenyl	-1.000	53.199	0.0	0	0.00
7	H	Oil	500.000	466.178	6.8	98	0.00
8	H	RRO (C24-C40)	500.000	360.796	27.8#	76	0.00
9	H	TPHmo (C25-C36)	500.000	462.837	7.4	95	0.00
10	H	CA LUFT ORO (C23-C32)	500.000	455.511	8.9	93	0.00

AR 1.30.20

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

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011703.D
Acq On : 17 Jan 2020 16:40
Sample : 0A17024-CCV1
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Vial: 2
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	6.35	65283349	53.199	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	392547174	355.540	ug/ml
2)	H	Diesel	6.00	392547174	355.540	ug/ml
3)	H	DRO(C12-C24)	6.00	93146611	84.365	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	31746161	39.054	ug/ml
5)	H	TPHd (C10-C25)	6.00	134946995	131.851	ug/ml
7)	H	Oil	9.00	533219860	466.178	ug/ml
8)	H	RRO (C24-C40)	9.00	412682357	360.796	ug/ml
9)	H	TPHmo (C25-C36)	8.00	329373013	462.837	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	326458630	455.511	ug/ml

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1.20.20

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(f)=RT Delta > 1/2 window (m)=manual int.

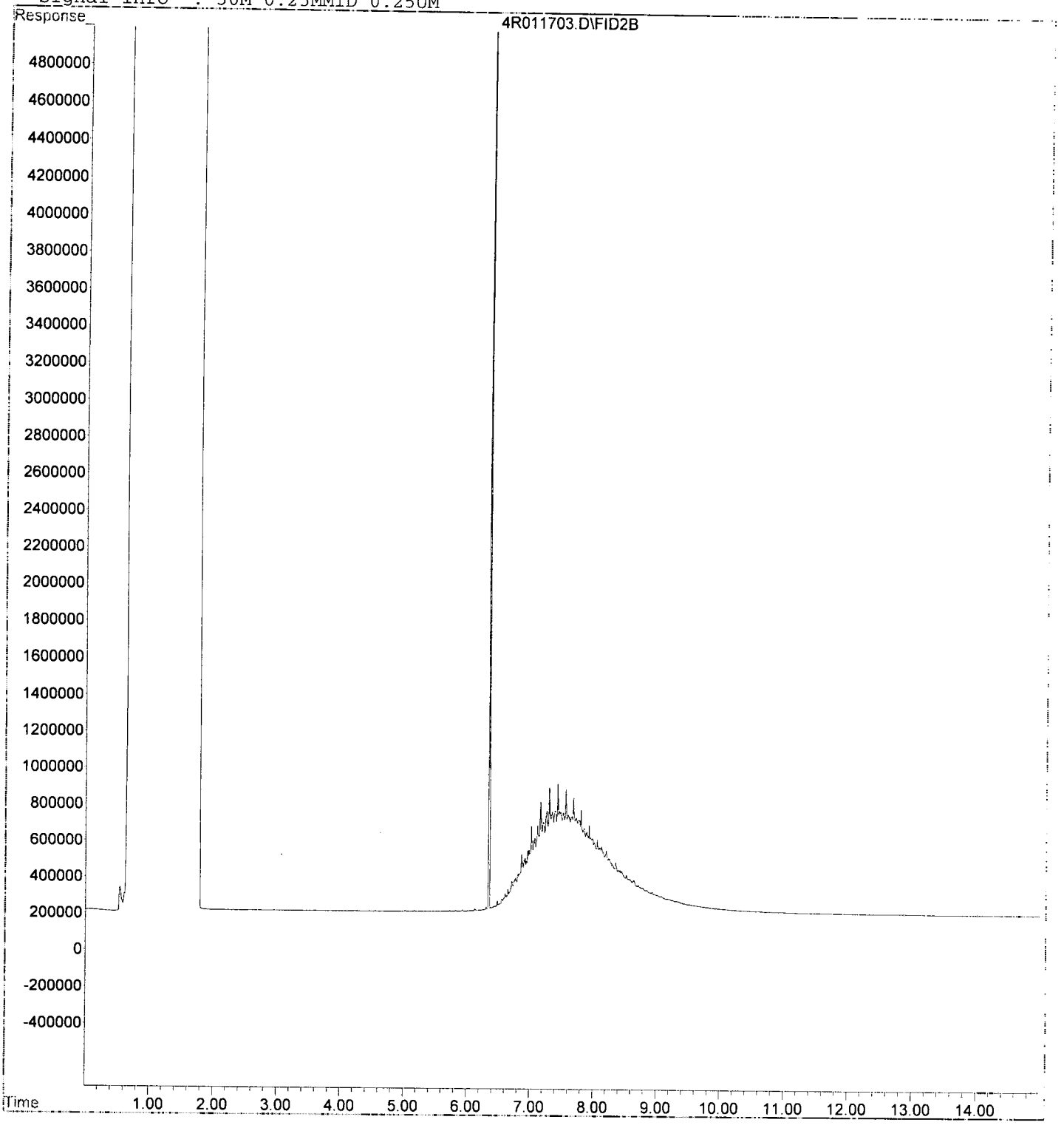
Quantitation Report (Not Reviewed)

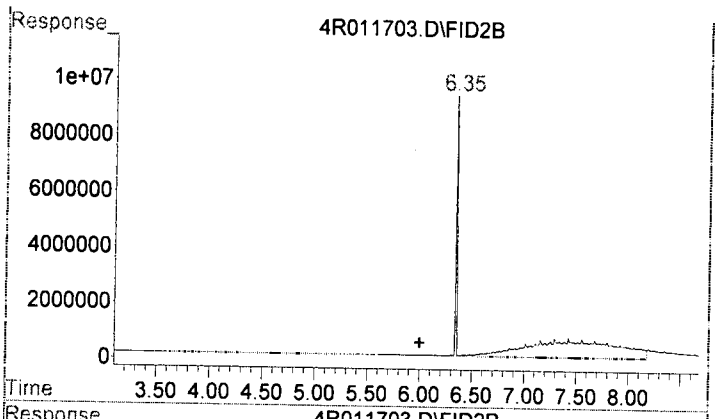
Data File : G:\4\DATA\2020-01\0A17024\4R011703.D
Acq On : 17 Jan 2020 16:40
Sample : 0A17024-CCV1
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Vial: 2
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

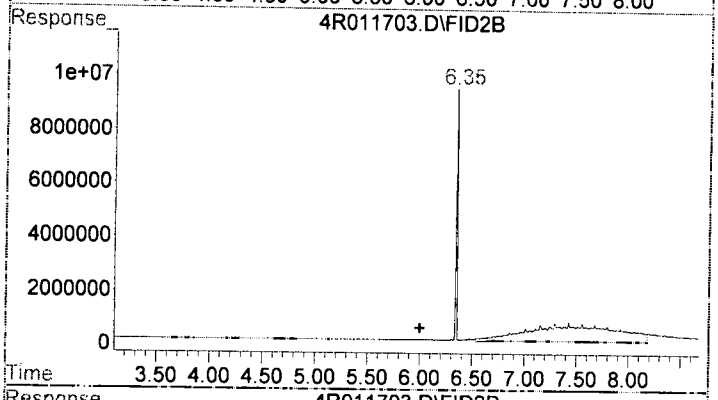
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





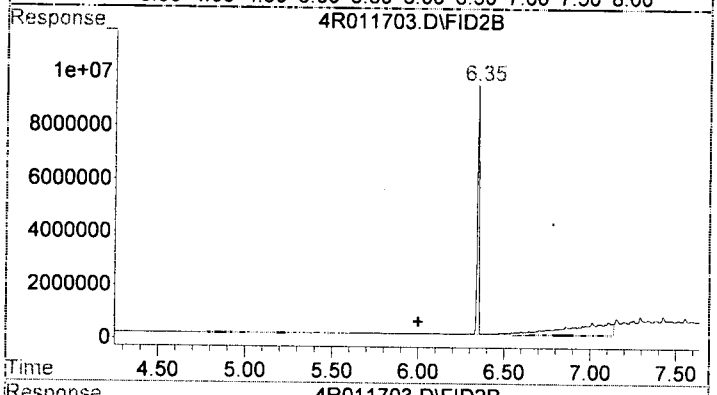
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 392547174
Conc: 355.54 ug/ml m



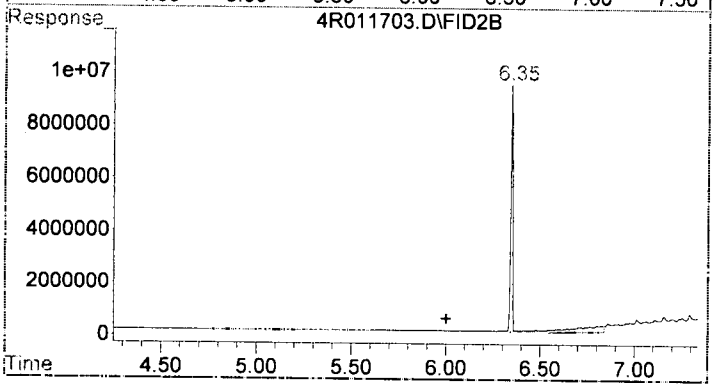
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 392547174
Conc: 355.54 ug/ml m



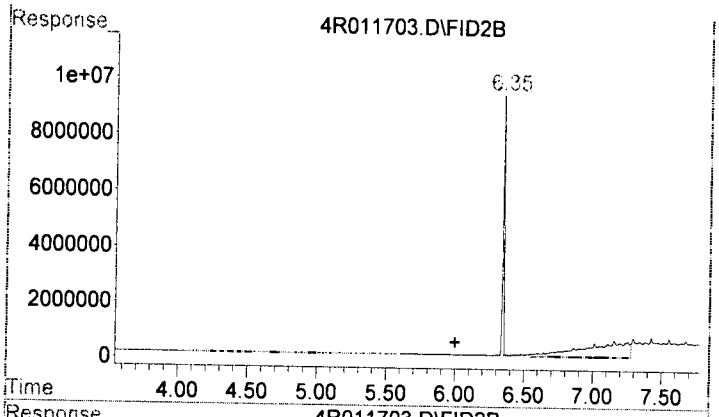
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 93146611
Conc: 84.37 ug/ml m



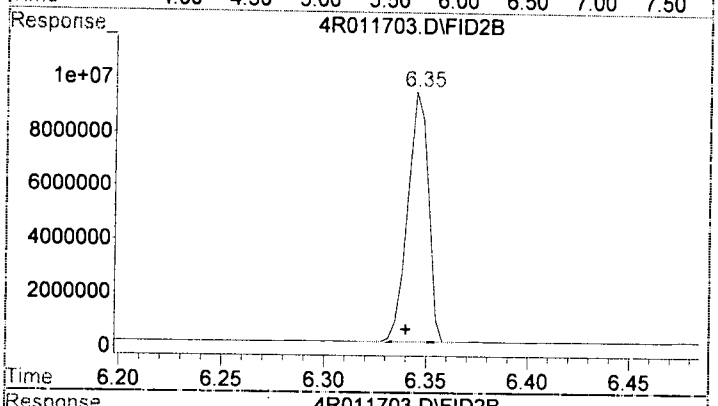
#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 31746161
Conc: 39.05 ug/ml m



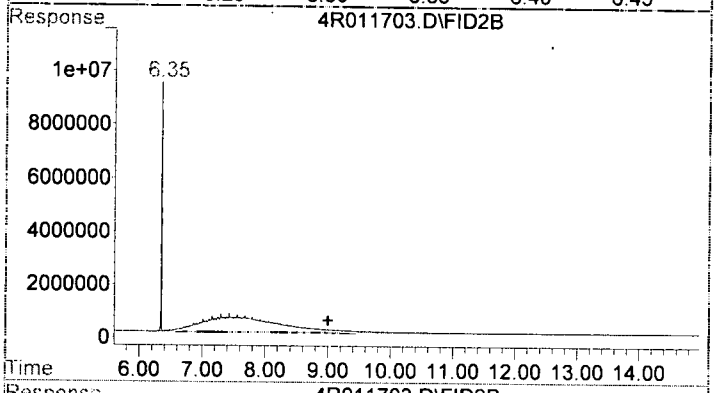
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 134946995
Conc: 131.85 ug/ml m



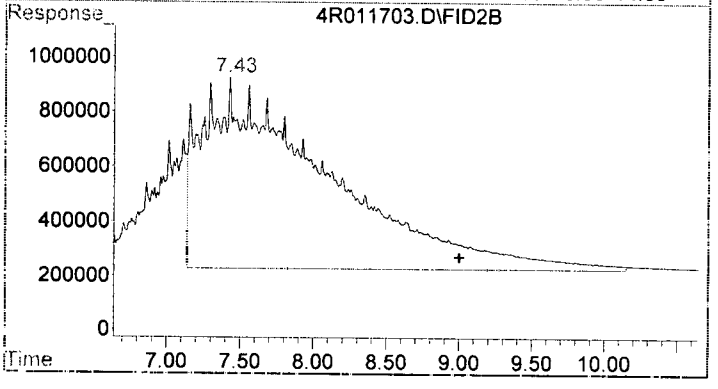
#6 o-Terphenyl

R.T.: 6.347 min
Delta R.T.: 0.007 min
Response: 65283349
Conc: 53.20 ug/ml



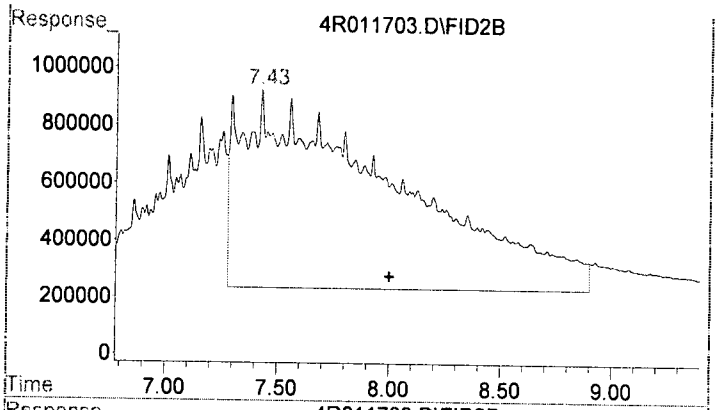
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 533219860
Conc: 466.18 ug/ml m



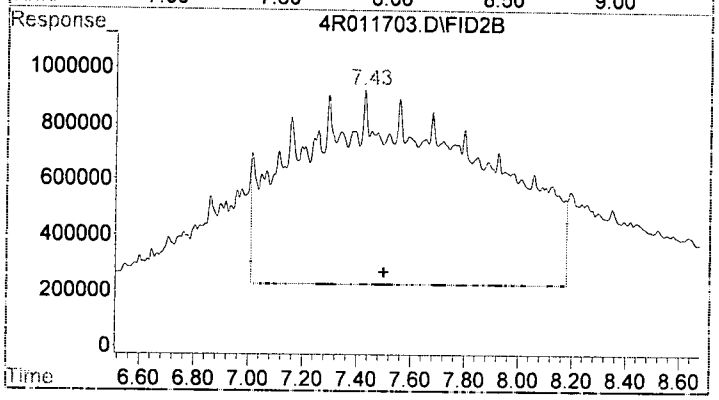
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 412682357
Conc: 360.80 ug/ml m



#9 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 329373013
Conc: 462.84 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.: 7.500 min
Delta R.T.: 0.000 min
Response: 326458630
Conc: 455.51 ug/ml m

Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2020-01\0A17024\4R011704.D
Acq On : 17 Jan 2020 17:02
Sample : 0A17024-CCV2
Misc :
IntFile : SUR.E

Vial: 1
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	H	Mineral Oil	1000.000	1001.521	-0.2	99	0.00
2	H	Diesel	1000.000	1001.521	-0.2	99	0.00
3	H	DRO(C12-C24)	1000.000	796.031	20.4#	79	0.00
4	H	CA LUFT DRO (C12-C22)	1000.000	1037.036	-3.7	100	0.00
5	H	TPHd (C10-C25)	1000.000	1021.924	-2.2	100	0.00
6	S	o-Terphenyl	-1.000	55.118	0.0	0	0.00
7	H	Oil	-1.000	252.667	0.0	0	0.00
8	H	RRO (C24-C40)	-1.000	16.354	0.0	0	0.00
9	H	TPHmo (C25-C36)	-1.000	15.789	0.0	0	0.00
10	H	CA LUFT ORO (C23-C32)	-1.000	37.351	0.0	0	0.00

RA 1.30.20

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

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011704.D
Acq On : 17 Jan 2020 17:02
Sample : 0A17024-CCV2
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Vial: 1
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	6.35	67637930	55.118	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	1105766388	1001.521	ug/ml
2)	H	Diesel	6.00	1105766388	1001.521	ug/ml
3)	H	DRO(C12-C24)	6.00	878888045	796.031	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	842993179	1037.036	ug/ml
5)	H	TPHd (C10-C25)	6.00	1045917895	1021.924	ug/ml
7)	H	Oil	9.00	289002856	252.667	ug/ml
8)	H	RRO (C24-C40)	9.00	18706129	16.354	ug/ml
9)	H	TPHmo (C25-C36)	8.00	11236059	15.789	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	26768654	37.351	ug/ml

RA
1.20.20

(f)=RT Delta > 1/2 Window (m)=manual int.

4R011704.D 4R00113D.M Mon Jan 20 05:25:27 2020 SV-GCMS3

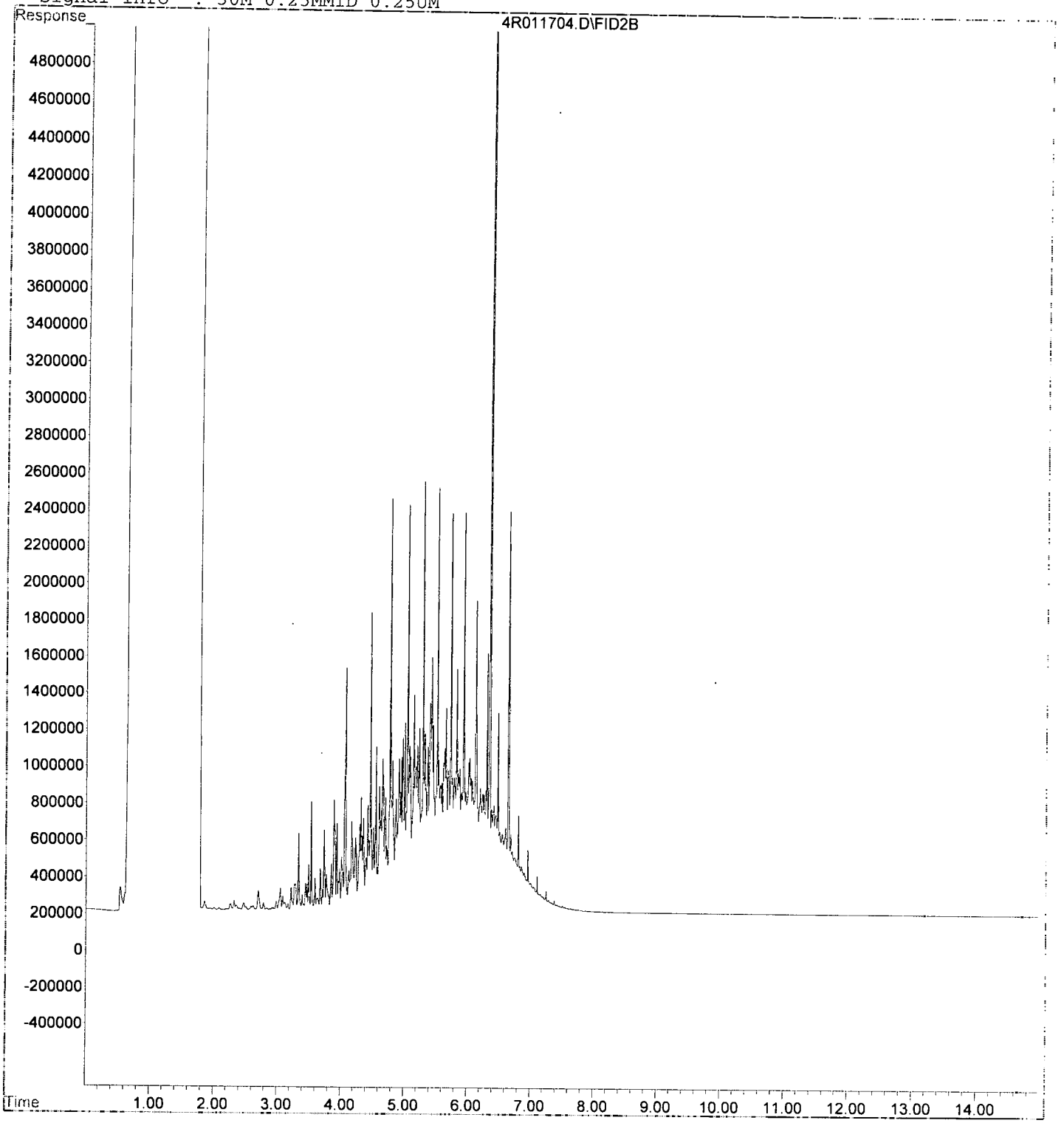
Quantitation Report (Not Reviewed)

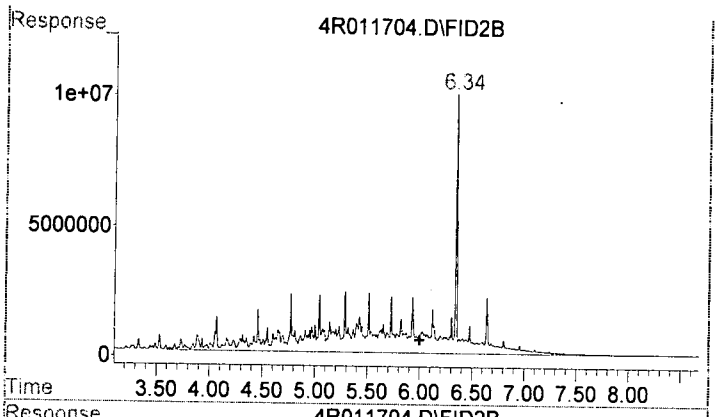
Data File : G:\4\DATA\2020-01\0A17024\4R011704.D
Acq On : 17 Jan 2020 17:02
Sample : 0A17024-CCV2
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Vial: 1
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

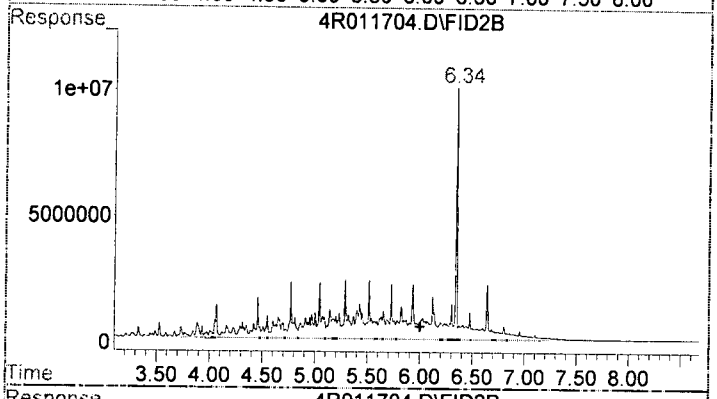
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





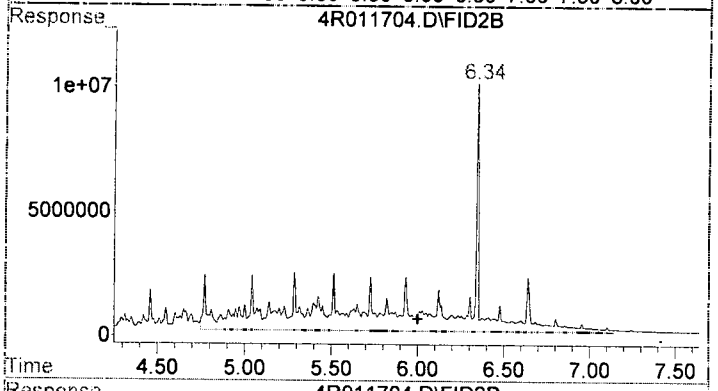
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1105766388
Conc: 1001.52 ug/ml m



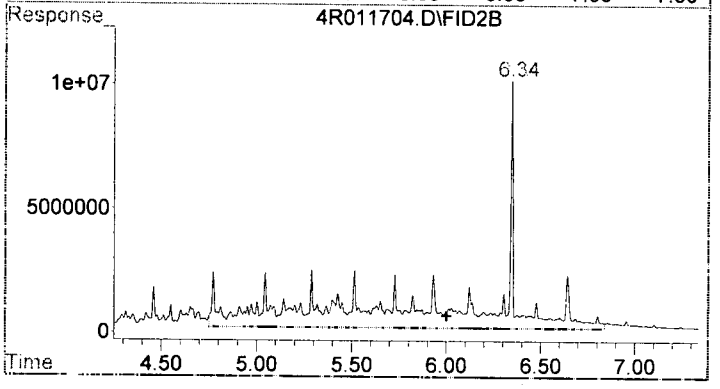
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1105766388
Conc: 1001.52 ug/ml m



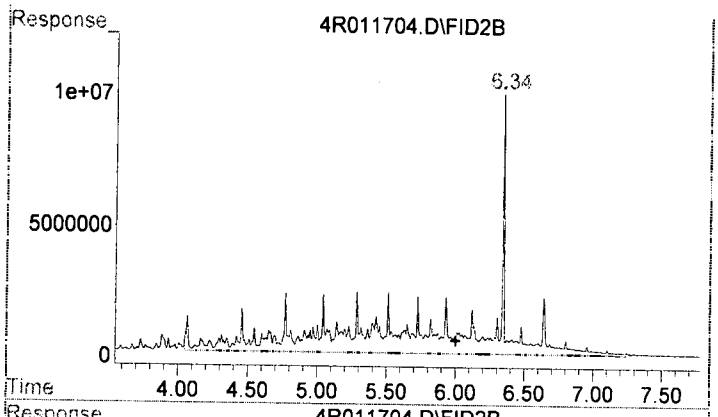
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 878888045
Conc: 796.03 ug/ml m



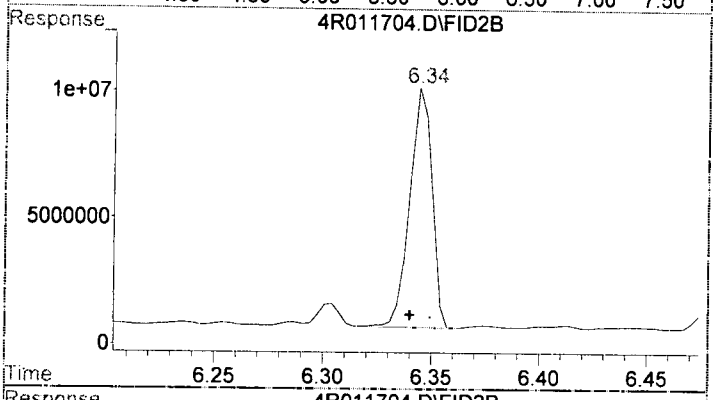
#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 842993179
Conc: 1037.04 ug/ml m



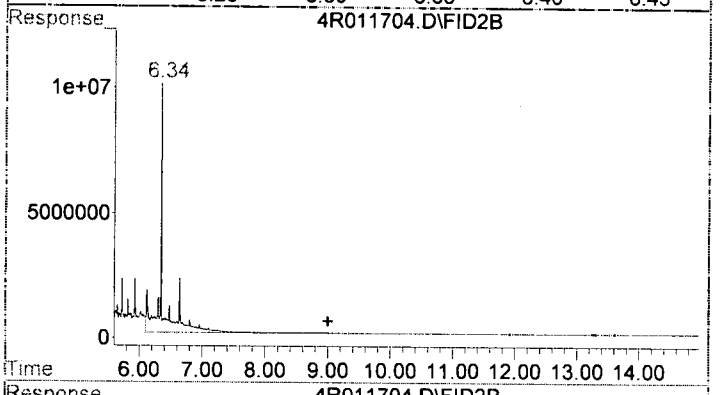
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1045917895
Conc: 1021.92 ug/ml m



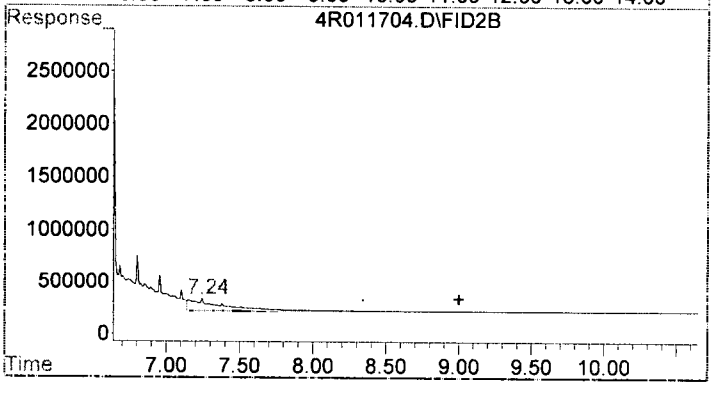
#6 o-Terphenyl

R.T.: 6.346 min
Delta R.T.: 0.006 min
Response: 67637930
Conc: 55.12 ug/ml



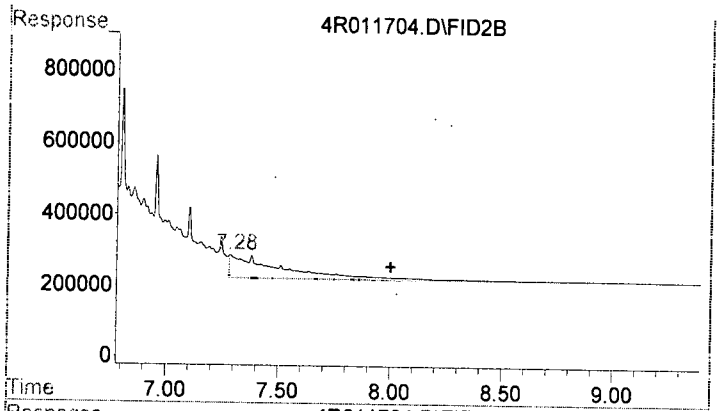
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 289002856
Conc: 252.67 ug/ml m



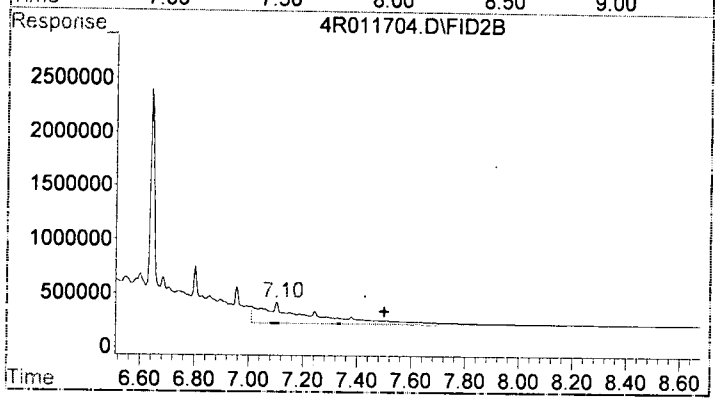
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 18706129
Conc: 16.35 ug/ml m



#9 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 11236059
Conc: 15.79 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.: 7.500 min
Delta R.T.: 0.000 min
Response: 26768654
Conc: 37.35 ug/ml m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011705.D
Acq On : 17 Jan 2020 17:24
Sample : 0A17024-CCB1
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Vial: 100
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	4444817	4.026	ug/ml
2)	H	Diesel	6.00	4444817	4.026	ug/ml
3)	H	DRO(C12-C24)	6.00	2491599	2.257	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	2265014	2.786	ug/ml
5)	H	TPHd (C10-C25)	6.00	3133393	3.062	ug/ml
7)	H	Oil	9.00	6084884	5.320	ug/ml
8)	H	RRO (C24-C40)	9.00	2290099	2.002	ug/ml
9)	H	TPHmo (C25-C36)	8.00	1183114	1.663	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	979846	1.367	ug/ml

CV/2 L

M
1.20.20

(f)=RT Delta > 1/2 Window (m)=manual int.

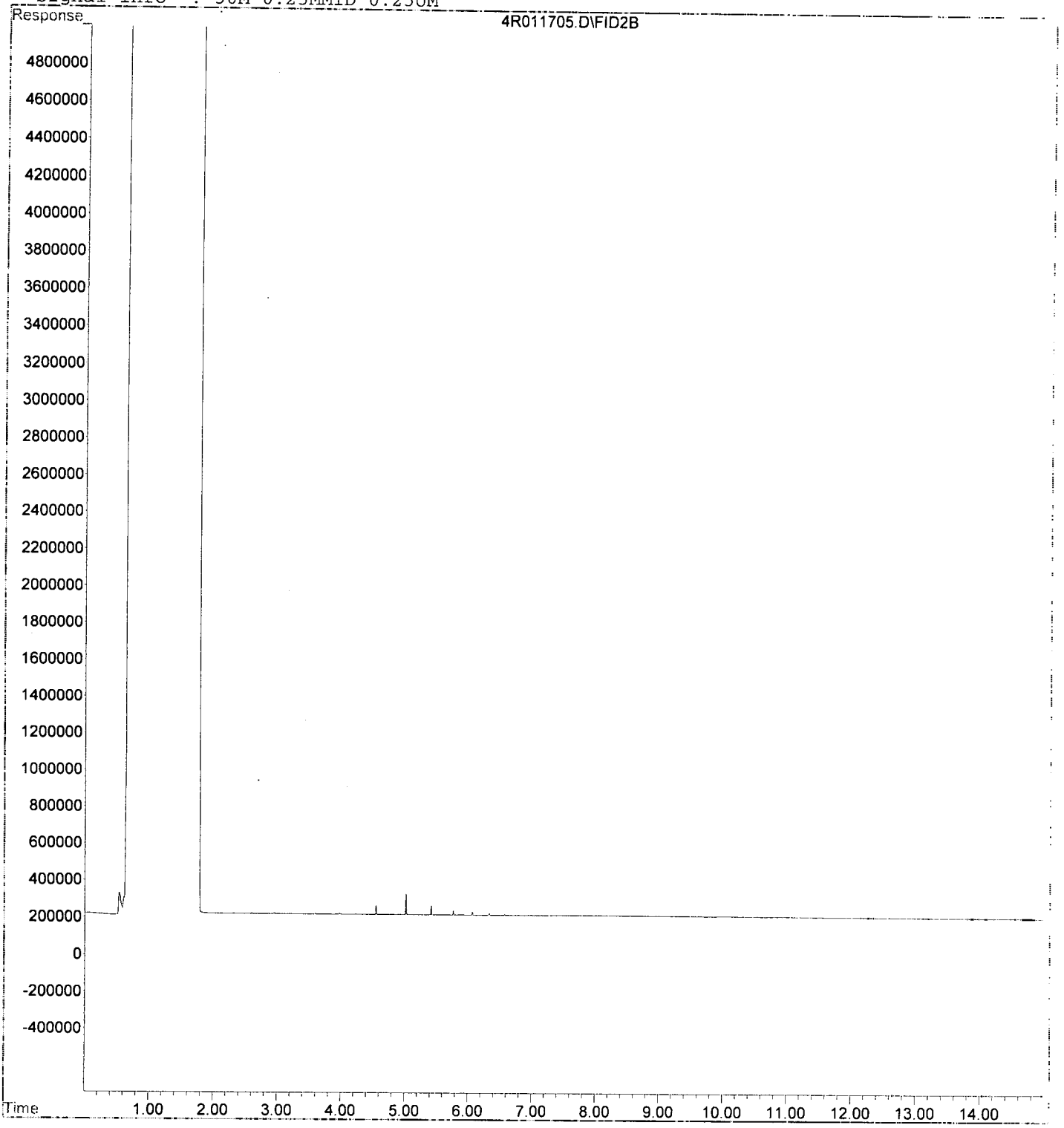
Quantitation Report (Not Reviewed)

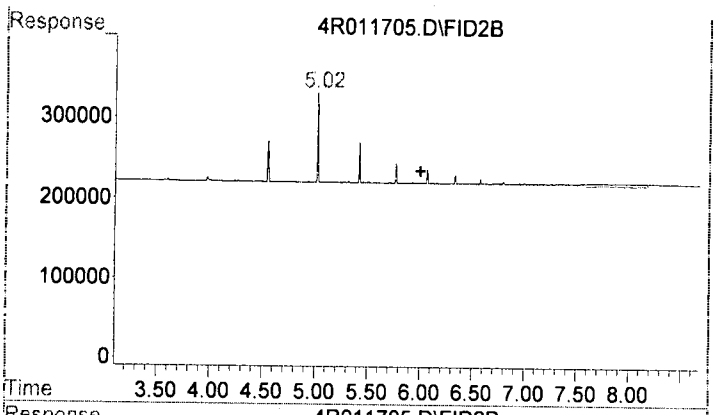
Data File : G:\4\DATA\2020-01\0A17024\4R011705.D
Acq On : 17 Jan 2020 17:24
Sample : 0A17024-CCB1
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Vial: 100
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

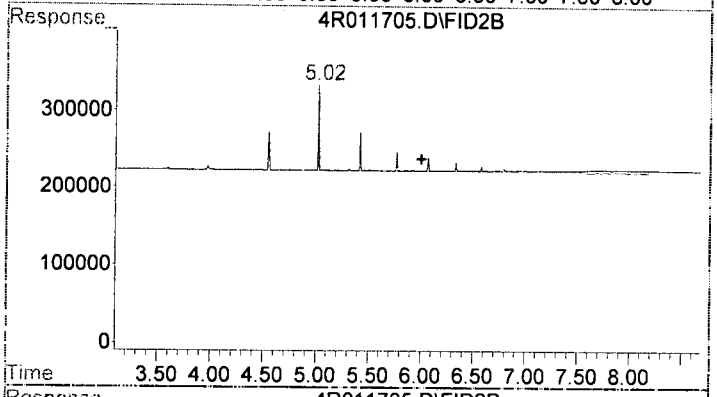
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





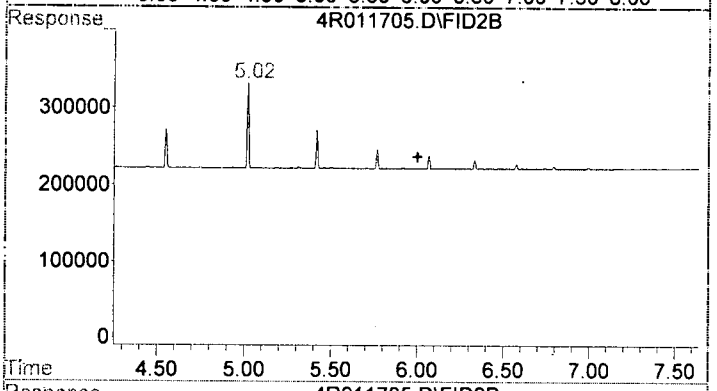
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 4444817
Conc: 4.03 ug/ml m



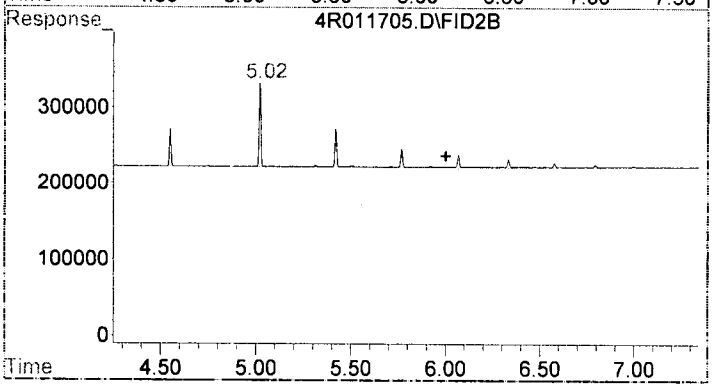
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 4444817
Conc: 4.03 ug/ml m



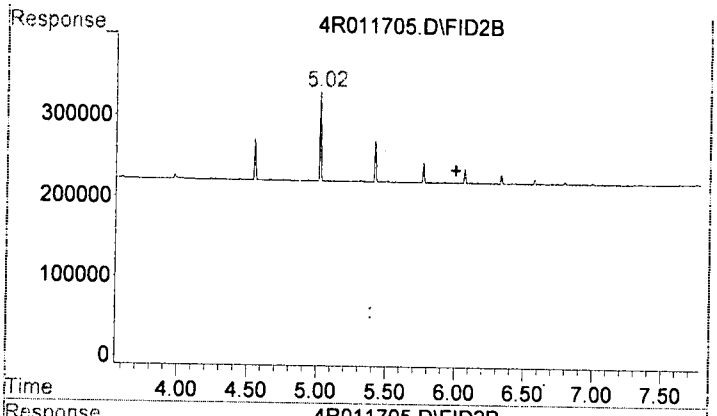
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 2491599
Conc: 2.26 ug/ml m



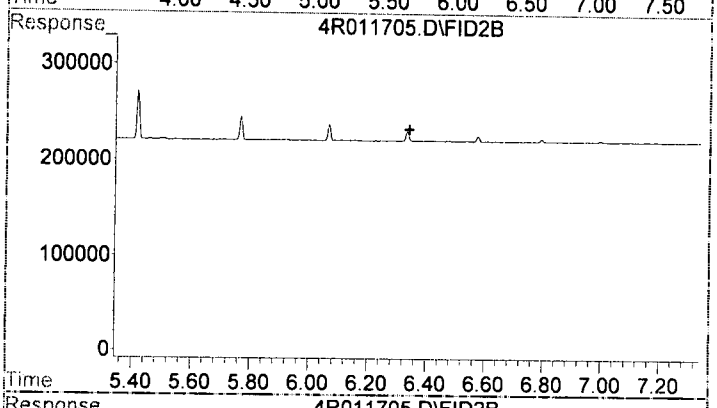
#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 2265014
Conc: 2.79 ug/ml m



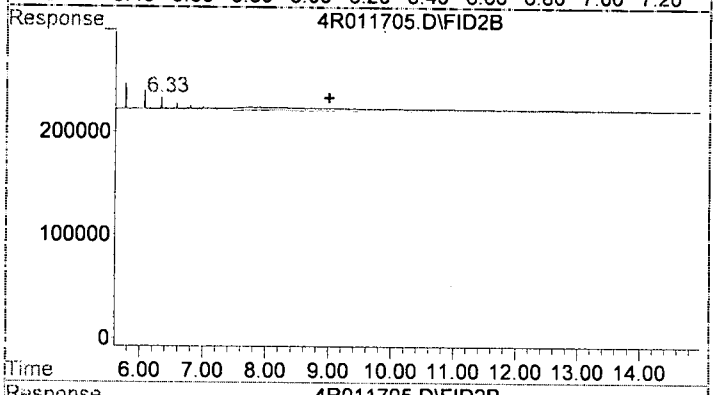
#5 TPHd (C10-C25)

R.T.:	6.000 min
Delta R.T.:	0.000 min
Response:	3133393
Conc:	3.06 ug/ml m



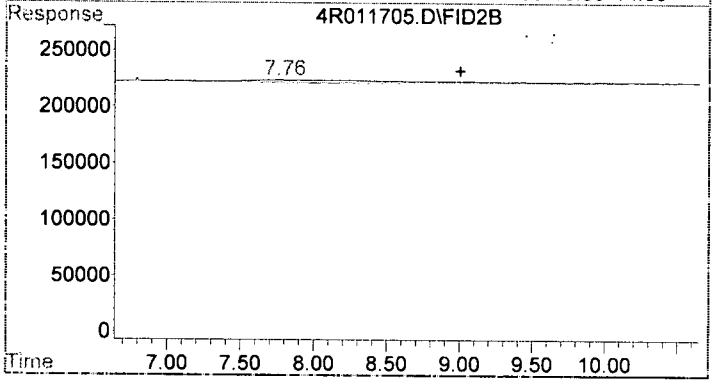
#6 o-Terphenyl

R.T.:	0.000 min
Exp R.T. :	6.340 min
Response:	0
Conc:	N.D.



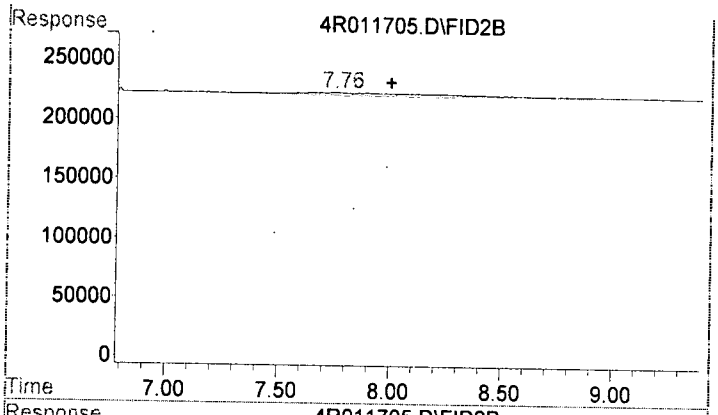
#7 Oil

R.T.:	9.000 min
Delta R.T.:	0.000 min
Response:	6084884
Conc:	5.32 ug/ml m



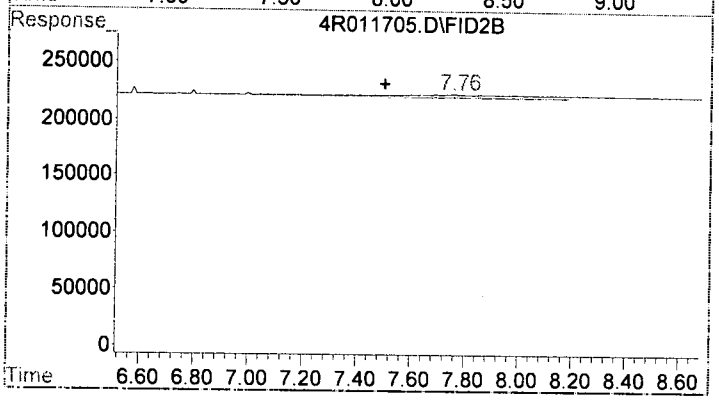
#8 RRO (C24-C40)

R.T.:	9.000 min
Delta R.T.:	0.000 min
Response:	2290099
Conc:	2.00 ug/ml m



#9 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	1183114
Conc:	1.66 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.:	7.500 min
Delta R.T.:	0.000 min
Response:	979846
Conc:	1.37 ug/ml m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011706.D Vial: 51
Acq On : 17 Jan 2020 19:28 Operator: BLL
Sample : 0010541-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
6)	S	o-Terphenyl	6.35	65775508	53.600 ug/ml
		Target Compounds			
1)	H	Mineral Oil	6.00	4081203	3.696 ug/ml
2)	H	Diesel	6.00	4081203	3.696 ug/ml
3)	H	DRO(C12-C24)	6.00	1632934	1.479 ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	1304203	1.604 ug/ml
5)	H	TPHd (C10-C25)	6.00	2080417	2.033 ug/ml
7)	H	Oil	9.00	9255287	8.092 ug/ml
8)	H	RRO (C24-C40)	9.00	3573475	3.124 ug/ml
9)	H	TPHmo (C25-C36)	8.00	2073747	2.914 ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	1615401	2.254 ug/ml

< 1/2 RL

AA
1.20.20

J

(f)=RT Delta > 1/2 Window (m)=manual int.

4R011706.D 4R00113D.M Mon Jan 20 05:25:34 2020 SV-GCMS3

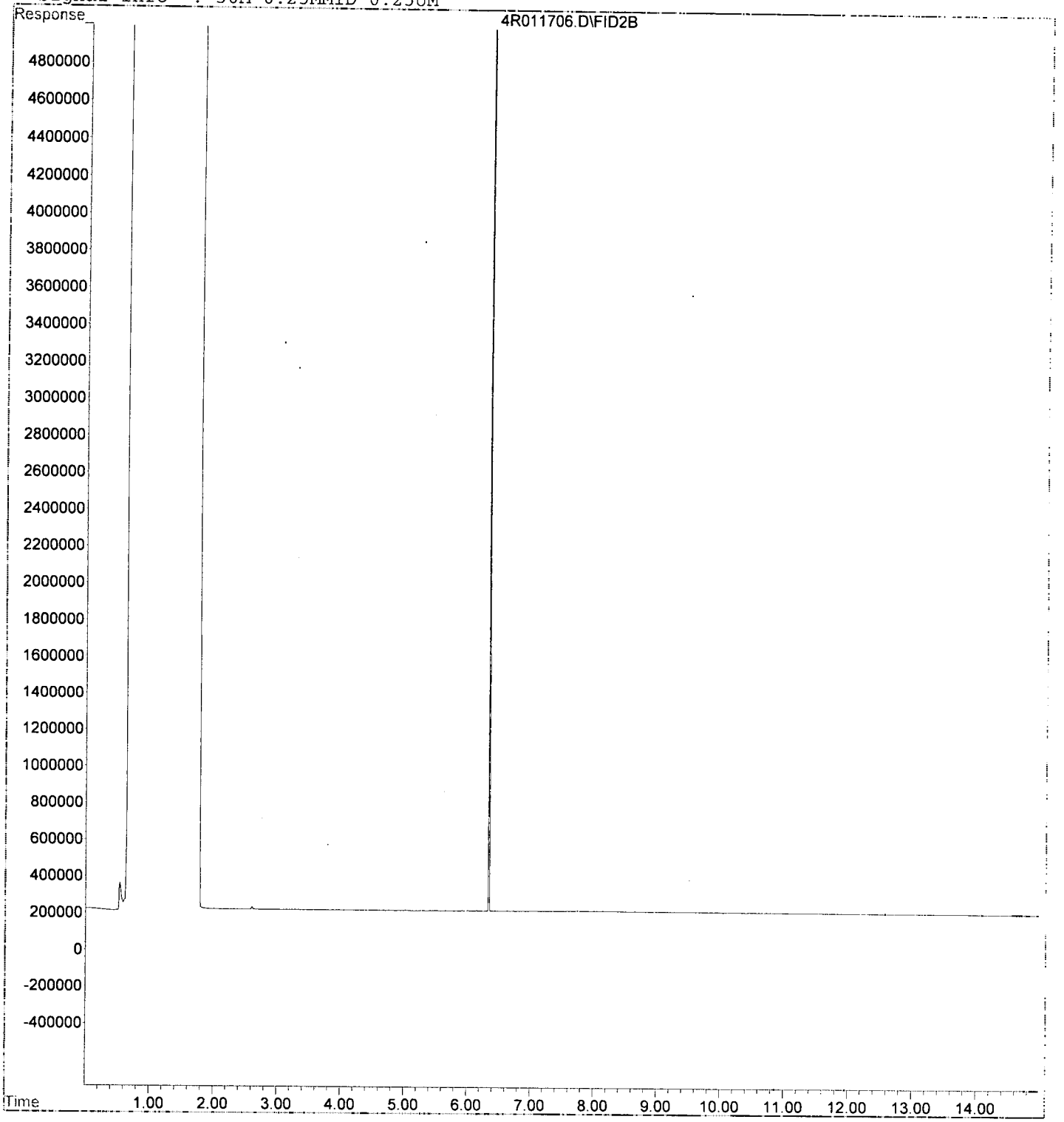
Quantitation Report (Not Reviewed)

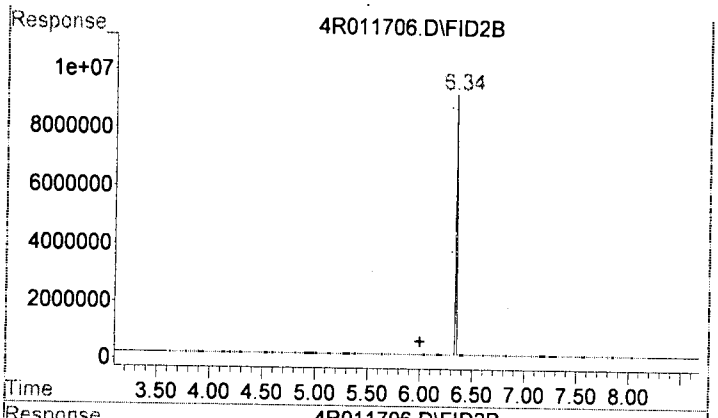
Data File : G:\4\DATA\2020-01\0A17024\4R011706.D
Acq On : 17 Jan 2020 19:28
Sample : 0010541-BLK1
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Vial: 51
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

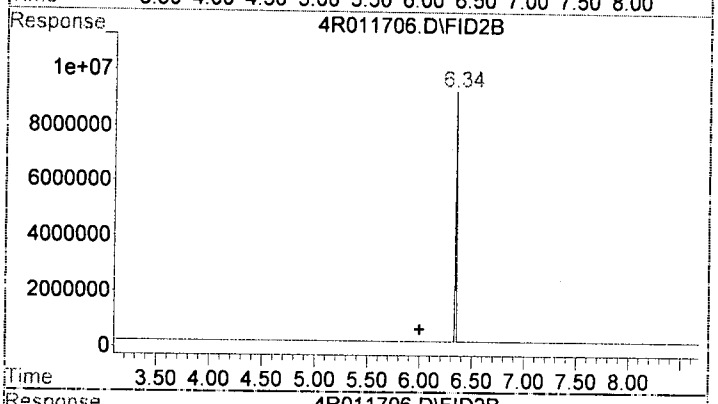
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





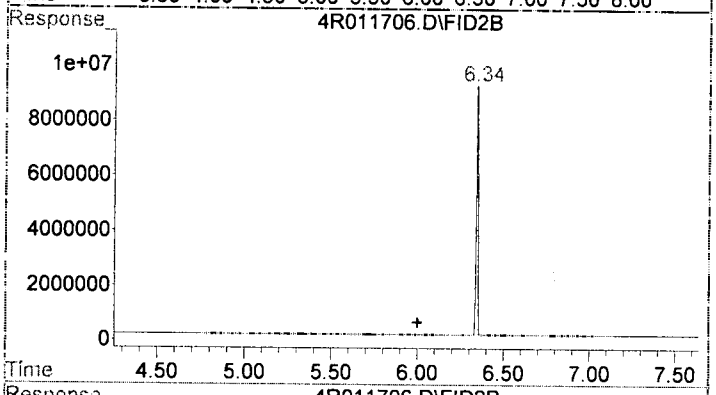
#1 Mineral Oil

R.T.:	6.000 min
Delta R.T.:	0.000 min
Response:	4081203
Conc:	3.70 ug/ml m



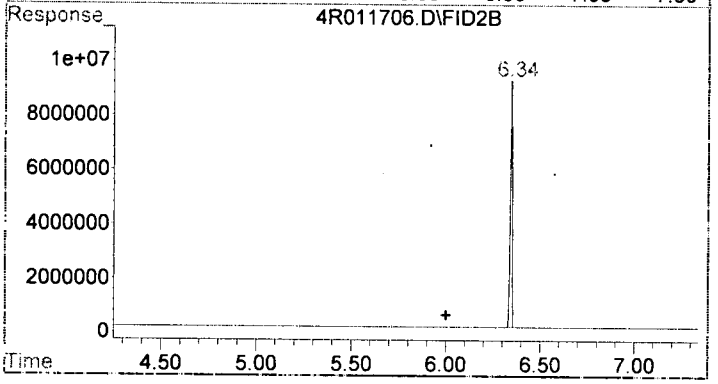
#2 Diesel

R.T.:	6.000 min
Delta R.T.:	0.000 min
Response:	4081203
Conc:	3.70 ug/ml m



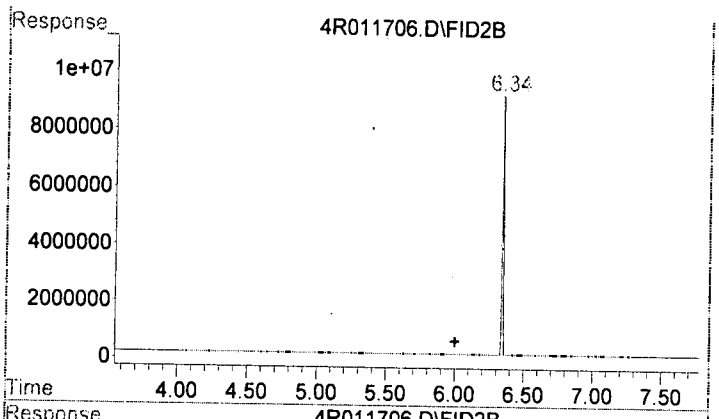
#3 DRO(C12-C24)

R.T.:	6.000 min
Delta R.T.:	0.000 min
Response:	1632934
Conc:	1.48 ug/ml m



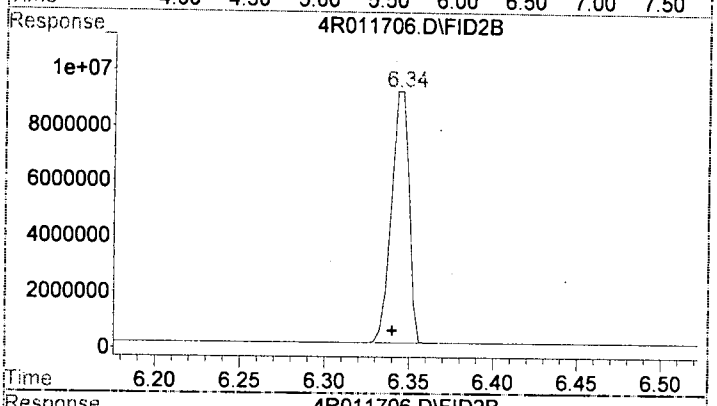
#4 CA LUFT DRO (C12-C22)

R.T.:	6.000 min
Delta R.T.:	0.000 min
Response:	1304203
Conc:	1.60 ug/ml m



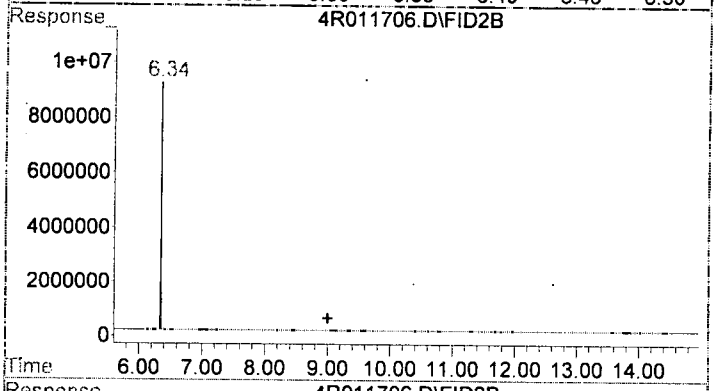
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 2080417
Conc: 2.03 ug/ml m



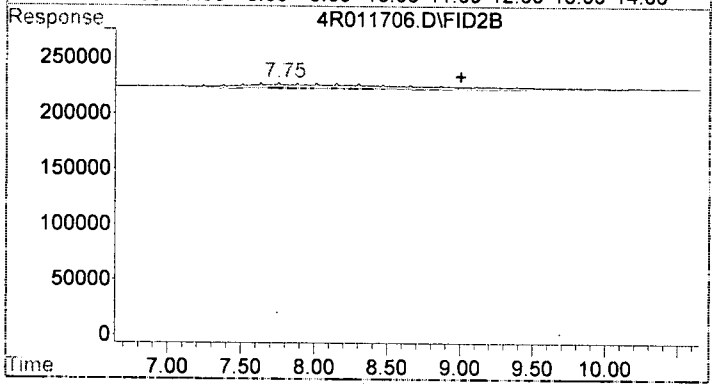
#6 o-Terphenyl

R.T.: 6.346 min
Delta R.T.: 0.006 min
Response: 65775508
Conc: 53.60 ug/ml



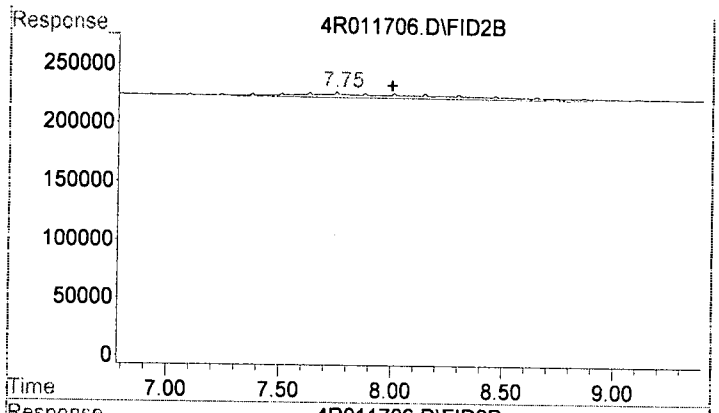
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 9255287
Conc: 8.09 ug/ml m



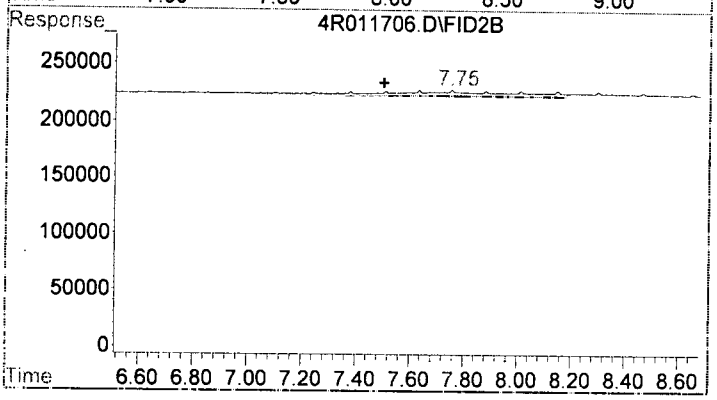
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 3573475
Conc: 3.12 ug/ml m



#9 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	2073747
Conc:	2.91 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.:	7.500 min
Delta R.T.:	0.000 min
Response:	1615401
Conc:	2.25 ug/ml m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011707.D
Acq On : 17 Jan 2020 19:49
Sample : 0010541-BS1
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Vial: 52
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	6.34	65884623	53.689	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	260424214	235.873	ug/ml
2)	H	Diesel	6.00	260424214	235.873	ug/ml
3)	H	DRO(C12-C24)	6.00	206441139	186.979	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	198011915	243.591	ug/ml
5)	H	TPHd (C10-C25)	6.00	245775674	240.137	ug/ml
7)	H	Oil	9.00	73930566	64.635	ug/ml
8)	H	RRO (C24-C40)	9.00	6638116	5.804	ug/ml
9)	H	TPHmo (C25-C36)	8.00	4157773	5.843	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	7041820	9.826	ug/ml

RA 1.20.20

(f)=RT Delta > 1/2 Window (m)=manual int.

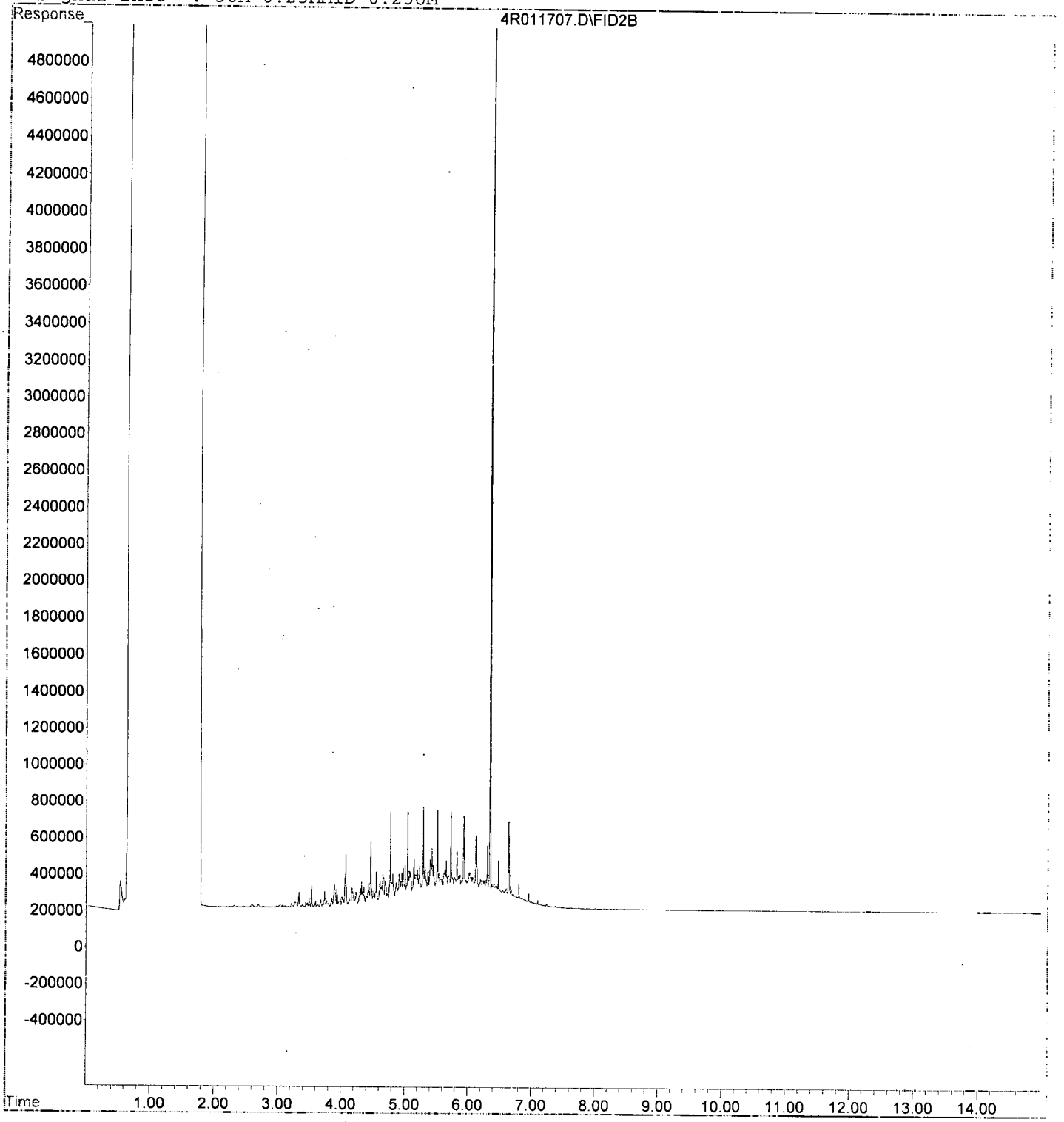
4R011707.D 4R00113D.M Mon Jan 20 05:25:37 2020 SV-GCMS3

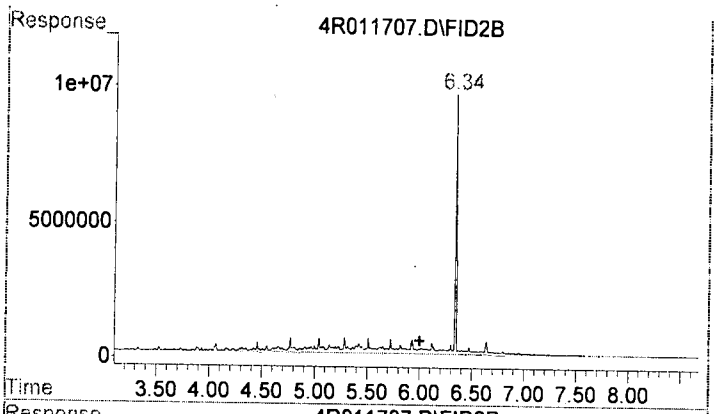
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011707.D Vial: 52
Acq On : 17 Jan 2020 19:49 Operator: BLL
Sample : 0010541-BS1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 20 5:25 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

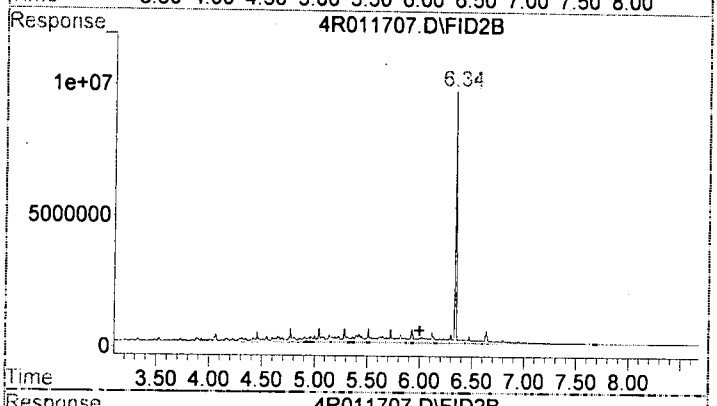
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





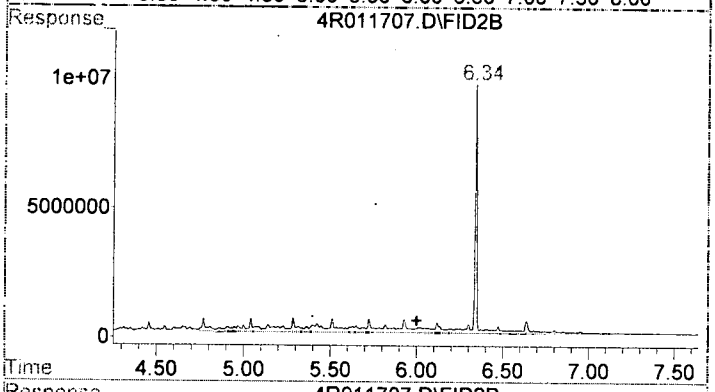
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 260424214
Conc: 235.87 ug/ml m



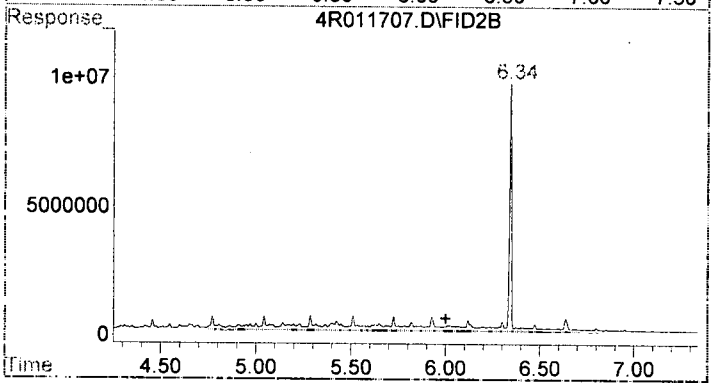
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 260424214
Conc: 235.87 ug/ml m



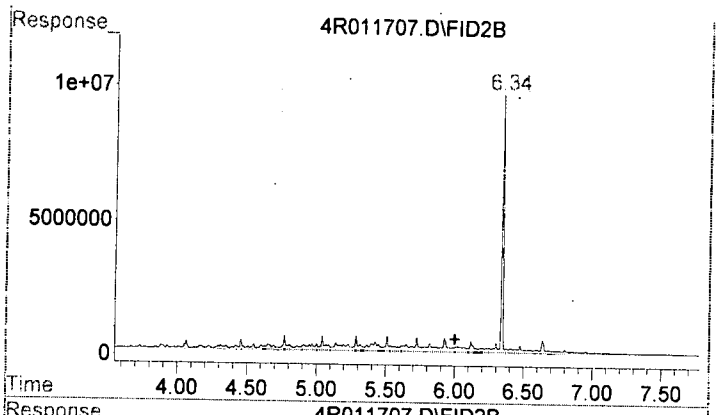
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 206441139
Conc: 186.98 ug/ml m



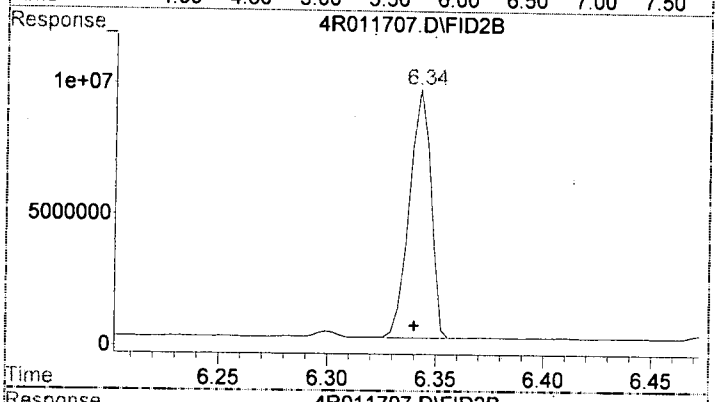
#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 198011915
Conc: 243.59 ug/ml m



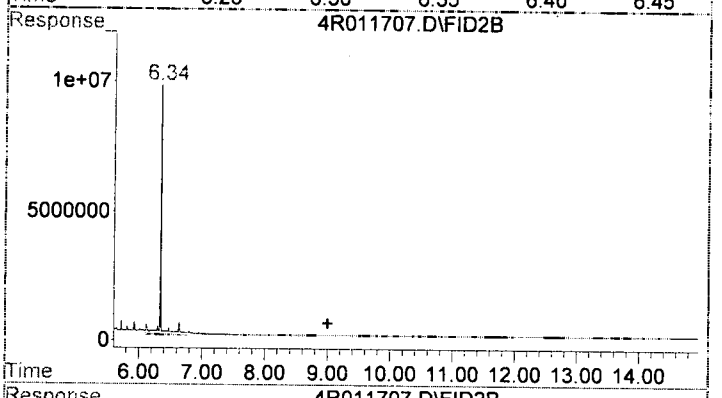
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 245775674
Conc: 240.14 ug/ml m



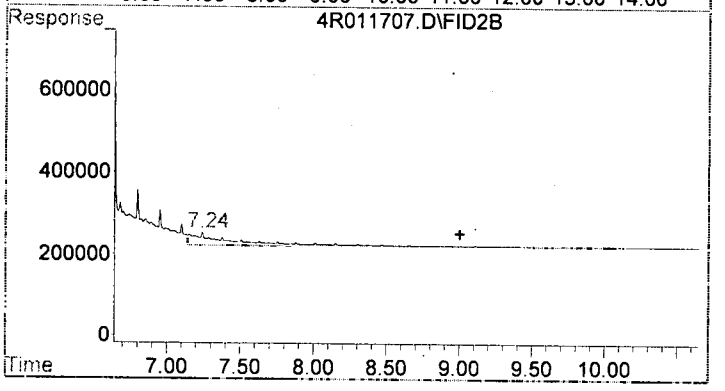
#6 o-Terphenyl

R.T.: 6.344 min
Delta R.T.: 0.004 min
Response: 65884623
Conc: 53.69 ug/ml



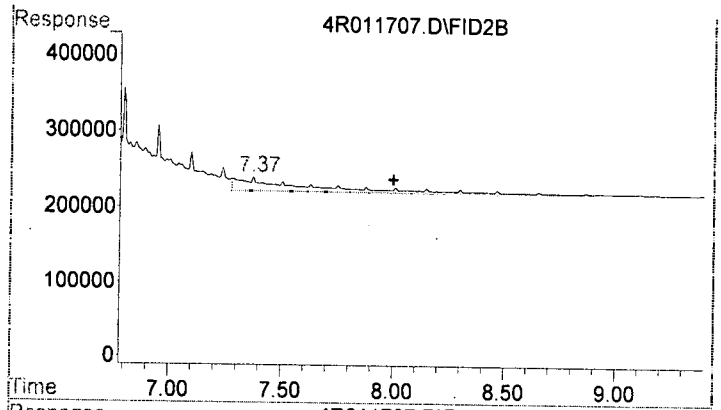
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 73930566
Conc: 64.64 ug/ml m



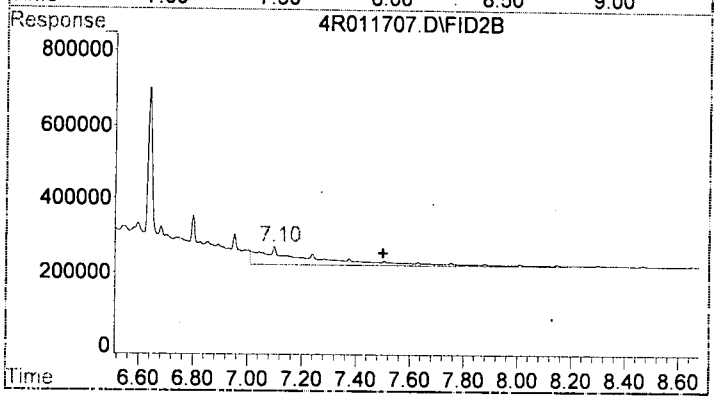
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 6638116
Conc: 5.80 ug/ml m



#9 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	4157773
Conc:	5.84 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.:	7.500 min
Delta R.T.:	0.000 min
Response:	7041820
Conc:	9.83 ug/ml m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011719.D Vial: 63
Acq On : 18 Jan 2020 00:09 Operator: BLL
Sample : 0010543-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
6)	S	o-Terphenyl	6.34	66305359	54.032 ug/ml
		Target Compounds			
1)	H	Mineral Oil	6.00	11265391	10.203 ug/ml
2)	H	Diesel	6.00	11265391	10.203 ug/ml
3)	H	DRO(C12-C24)	6.00	6484373	5.873 ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	5052971	6.216 ug/ml
5)	H	TPHd (C10-C25)	6.00	7272435	7.106 ug/ml
7)	H	Oil	9.00	29573214	25.855 ug/ml
8)	H	RRO (C24-C40)	9.00	5012120	4.382 ug/ml
9)	H	TPHmo (C25-C36)	8.00	1732838	2.435 ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	2417721	3.373 ug/ml

<1/2 RL

RL 1.00.20

✓

(f)=RT Delta > 1/2 Window (m)=manual int.

4R011719.D 4R00113D.M Mon Jan 20 05:26:16 2020 SV-GCMS3 Page 1

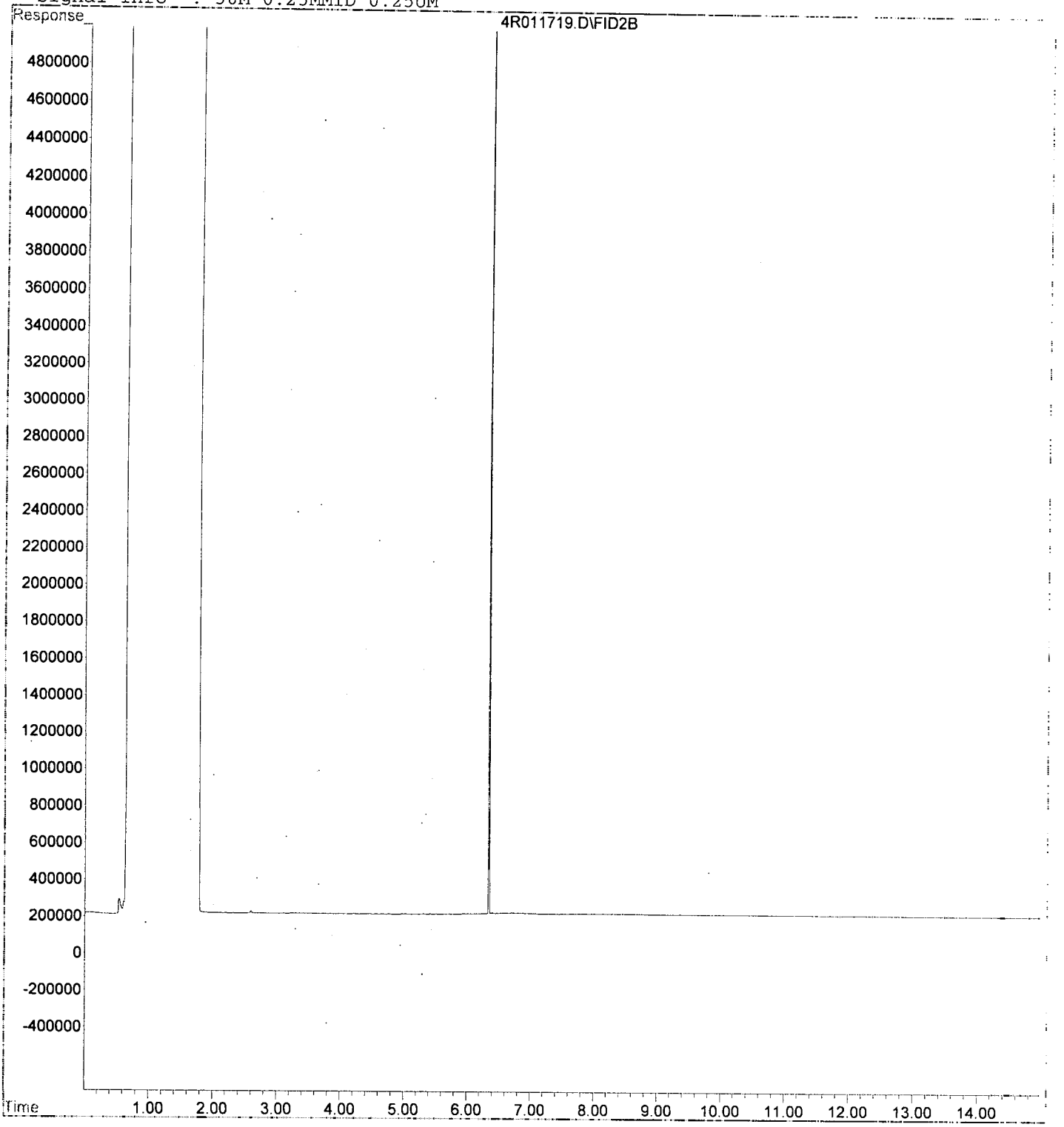
Quantitation Report (Not Reviewed)

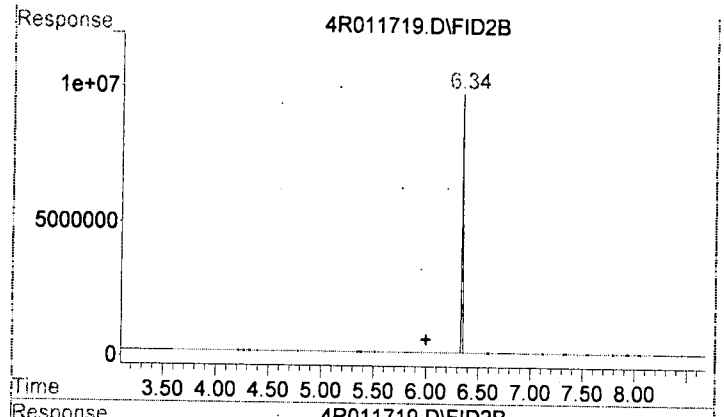
Data File : G:\4\DATA\2020-01\0A17024\4R011719.D
Acq On : 18 Jan 2020 00:09
Sample : 0010543-BLK1
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Vial: 63
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

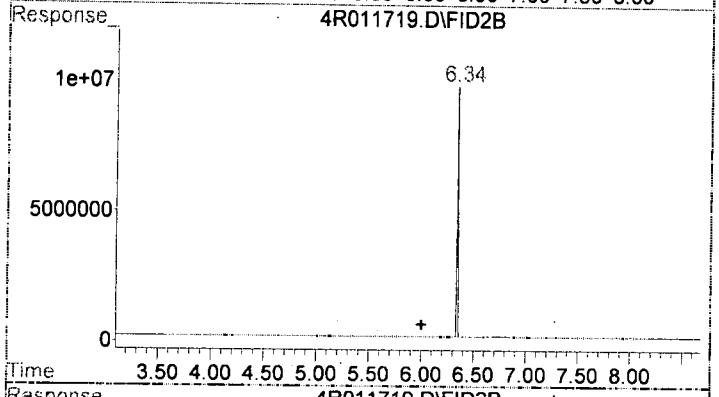
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





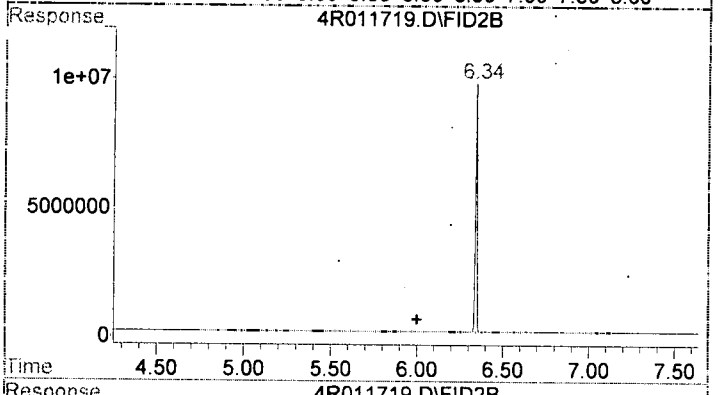
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 11265391
Conc: 10.20 ug/ml m



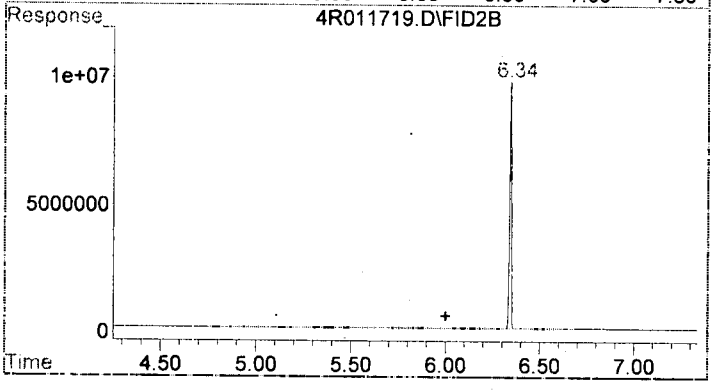
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 11265391
Conc: 10.20 ug/ml m



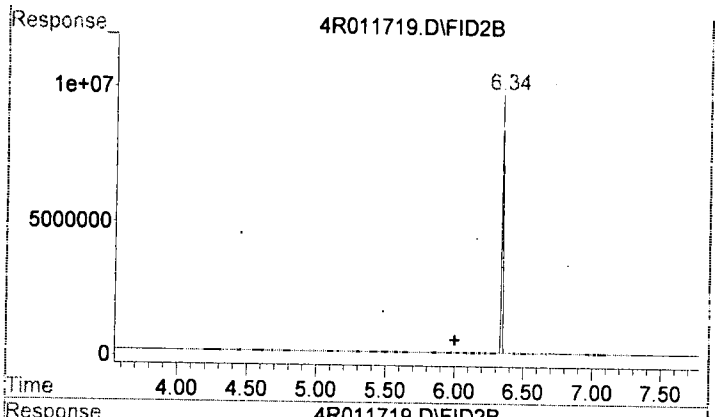
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 6484373
Conc: 5.87 ug/ml m



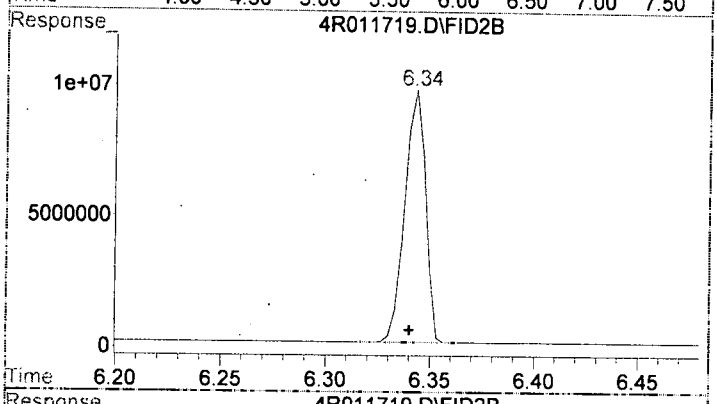
#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 5052971
Conc: 6.22 ug/ml m



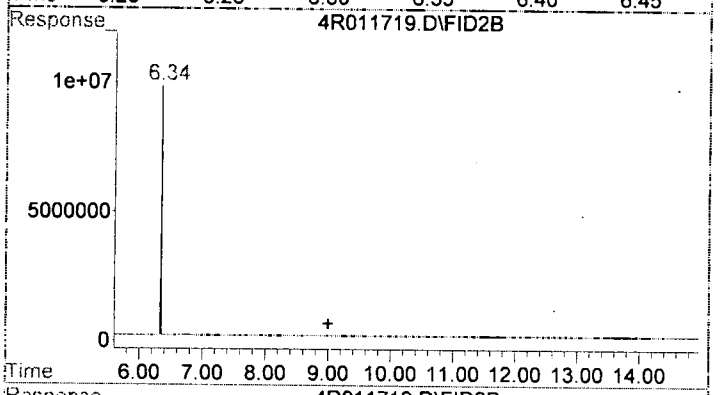
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 7272435
Conc: 7.11 ug/ml m



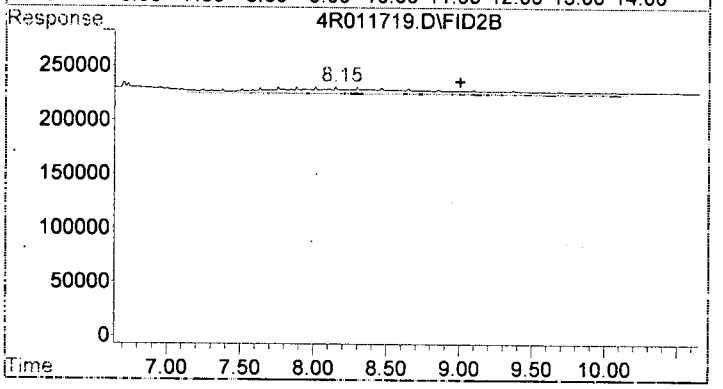
#6 o-Terphenyl

R.T.: 6.344 min
Delta R.T.: 0.004 min
Response: 66305359
Conc: 54.03 ug/ml



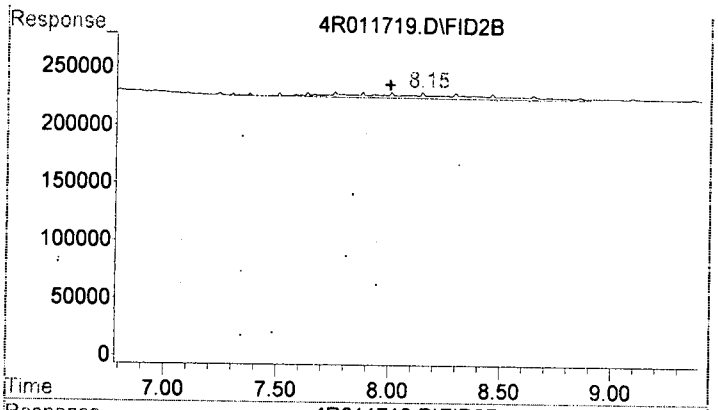
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 29573214
Conc: 25.85 ug/ml m



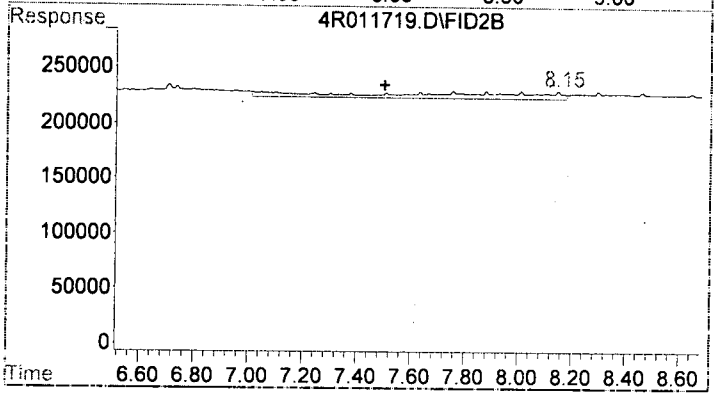
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 5012120
Conc: 4.38 ug/ml m



#9 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	1732838
Conc:	2.43 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.:	7.500 min
Delta R.T.:	0.000 min
Response:	2417721
Conc:	3.37 ug/ml m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011720.D
Acq On : 18 Jan 2020 00:30
Sample : 0010543-BS1
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Vial: 64
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
6)	S	o-Terphenyl	6.35	67305913	54.847 ug/ml
		Target Compounds			
1)	H	Mineral Oil	6.00	272170327	246.512 ug/ml
2)	H	Diesel	6.00	272170327	246.512 ug/ml
3)	H	DRO(C12-C24)	6.00	210749260	190.881 ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	203150876	249.913 ug/ml
5)	H	TPHd (C10-C25)	6.00	254978769	249.129 ug/ml
7)	H	Oil	9.00	79618576	69.608 ug/ml
8)	H	RRO (C24-C40)	9.00	7321928	6.401 ug/ml
9)	H	TPHmo (C25-C36)	8.00	4105658	5.769 ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	7207533	10.057 ug/ml

AA 1.20.20

(f)=RT Delta > 1/2 Window (m)=manual int.

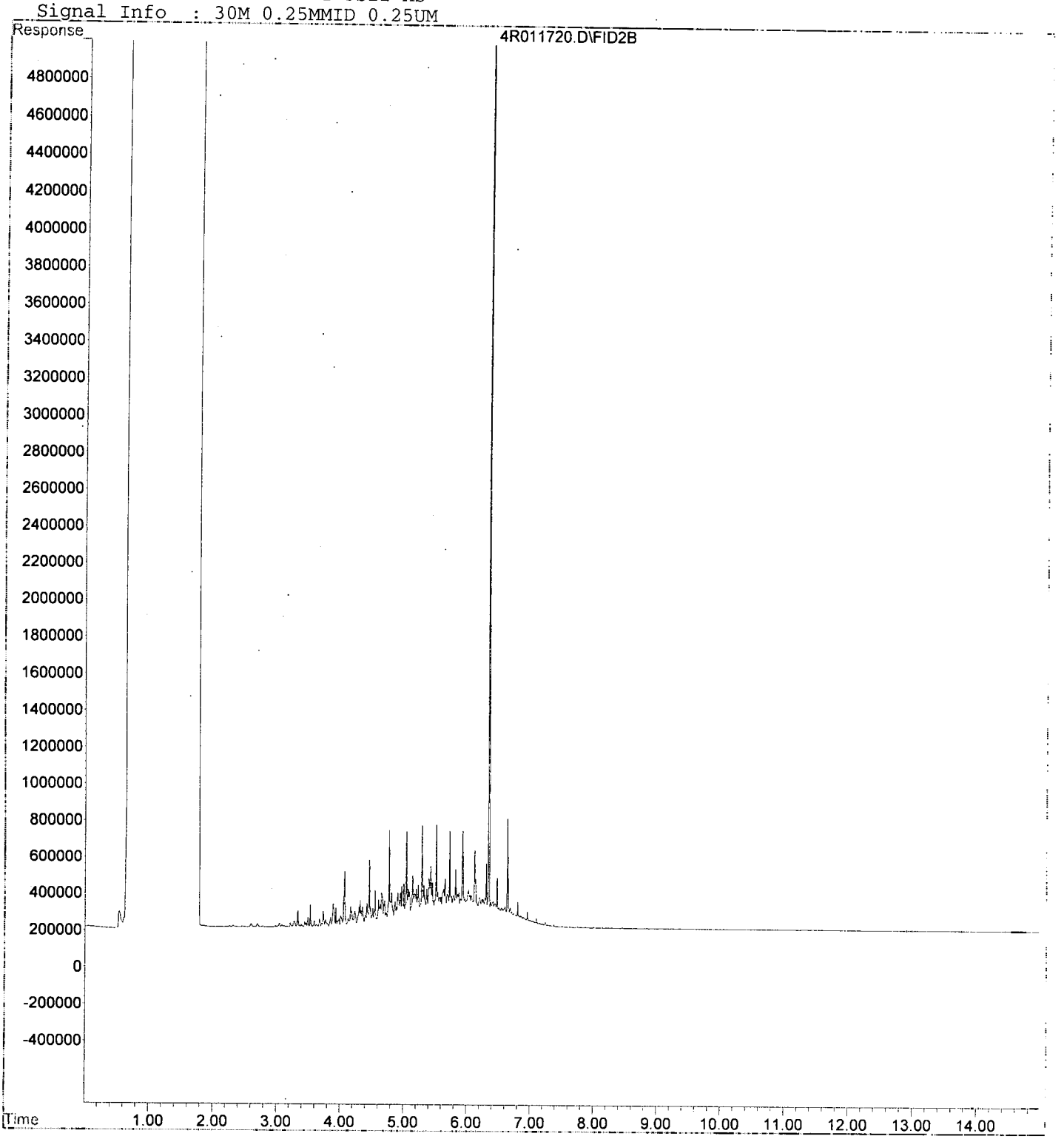
Quantitation Report (Not Reviewed)

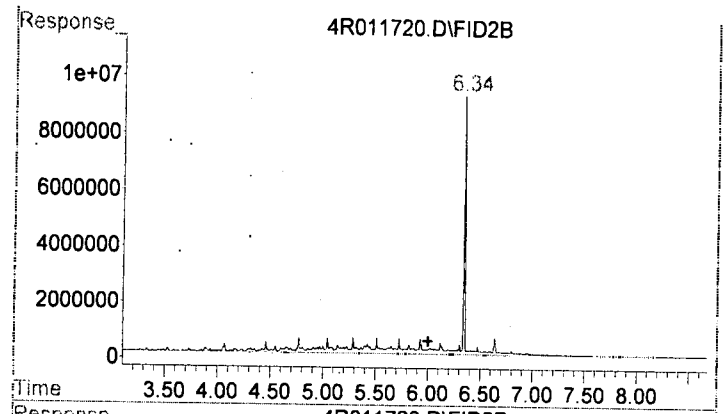
Data File : G:\4\DATA\2020-01\0A17024\4R011720.D
Acq On : 18 Jan 2020 00:30
Sample : 0010543-BS1
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Vial: 64
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

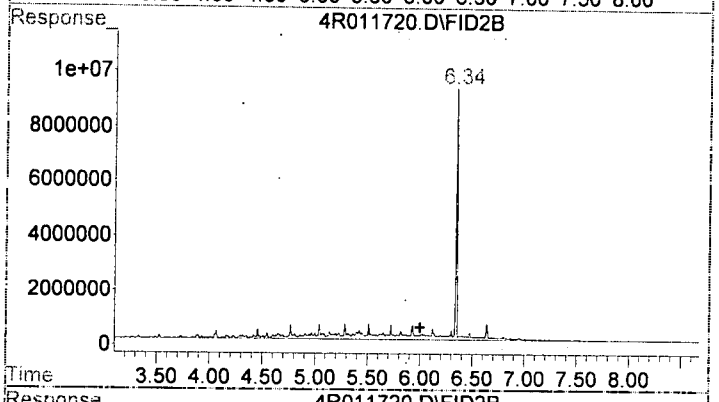
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





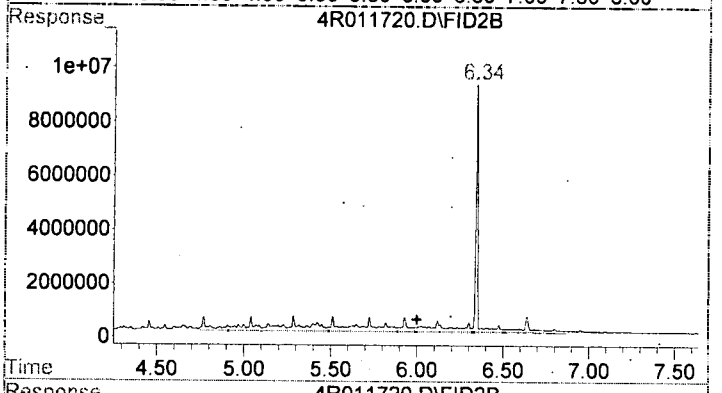
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 272170327
Conc: 246.51 ug/ml m



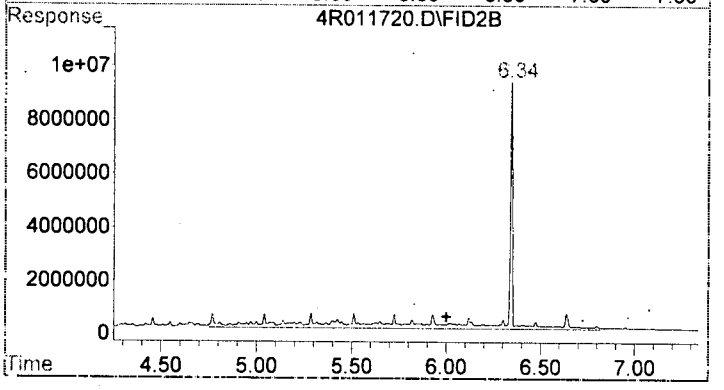
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 272170327
Conc: 246.51 ug/ml m



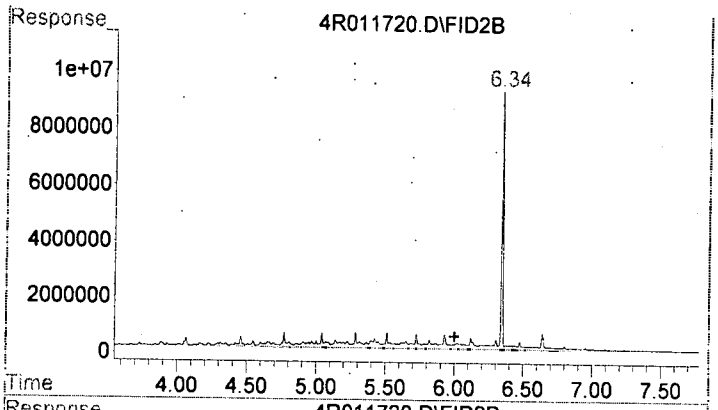
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 210749260
Conc: 190.88 ug/ml m



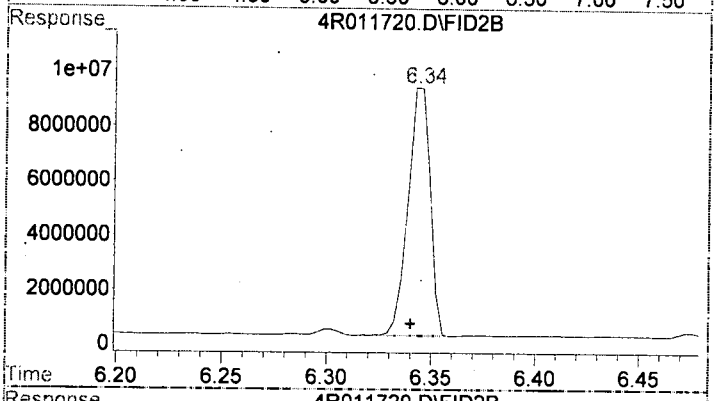
#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 203150876
Conc: 249.91 ug/ml m



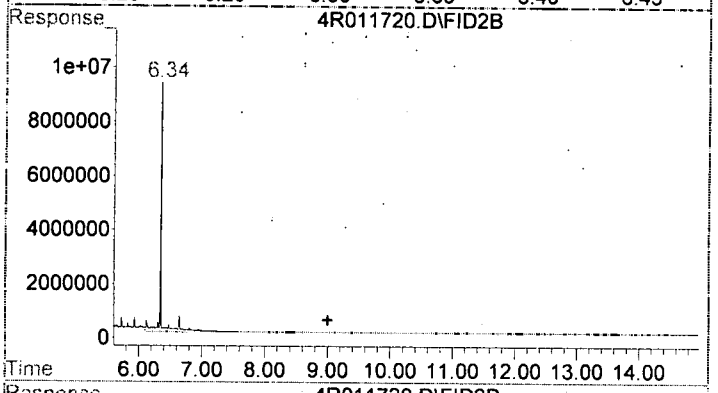
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 254978769
Conc: 249.13 ug/ml m



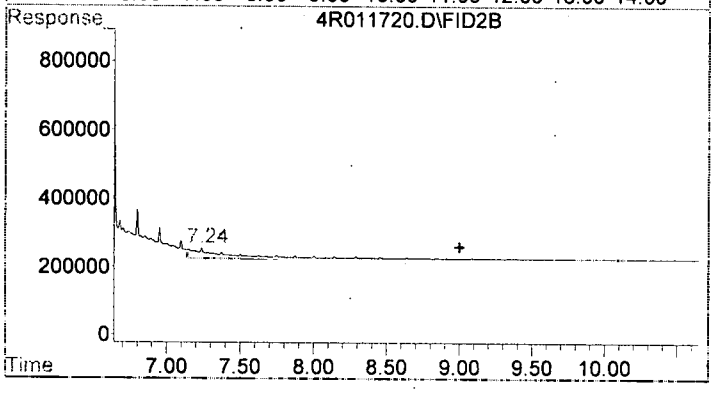
#6 o-Terphenyl

R.T.: 6.345 min
Delta R.T.: 0.005 min
Response: 67305913
Conc: 54.85 ug/ml



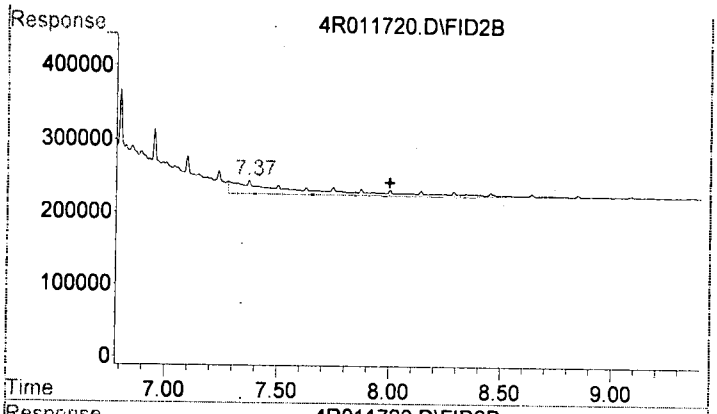
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 79618576
Conc: 69.61 ug/ml m



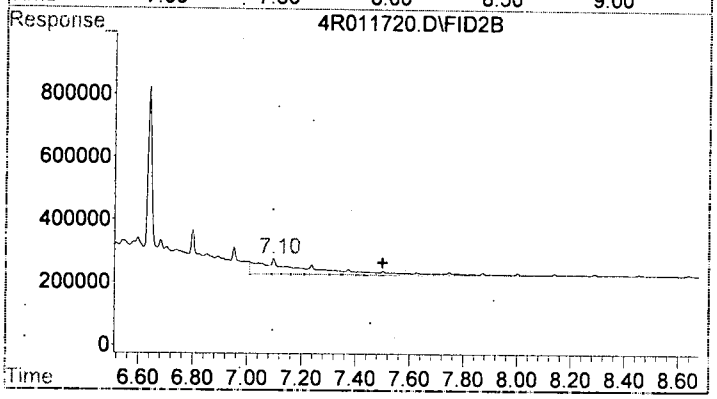
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 7321928
Conc: 6.40 ug/ml m



#9 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	4105658
Conc:	5.77 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.:	7.500 min
Delta R.T.:	0.000 min
Response:	7207533
Conc:	10.06 ug/ml m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011724.D
Acq On : 18 Jan 2020 1:57
Sample : A0A0539-01
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Vial: 68
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	6.34	64440779	52.512	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	1209297820	1095.292	ug/ml
2)	H	Diesel	6.00	1209297820	1095.292	ug/ml
3)	H	DRO(C12-C24)	6.00	788449448	714.119	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	698308435	859.047	ug/ml
5)	H	TPHd (C10-C25)	6.00	852787268	833.224	ug/ml
7)	H	Oil	9.00	1234164600	1078.993	ug/ml
8)	H	RRO (C24-C40)	9.00	582002451	508.827	ug/ml
9)	H	TPHmo (C25-C36)	8.00	442046314	621.167	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	351310232	490.187	ug/ml

f.24

Report DRO/RRO

RR 1.20.20

(f)=RT Delta > 1/2 Window (m)=manual int.

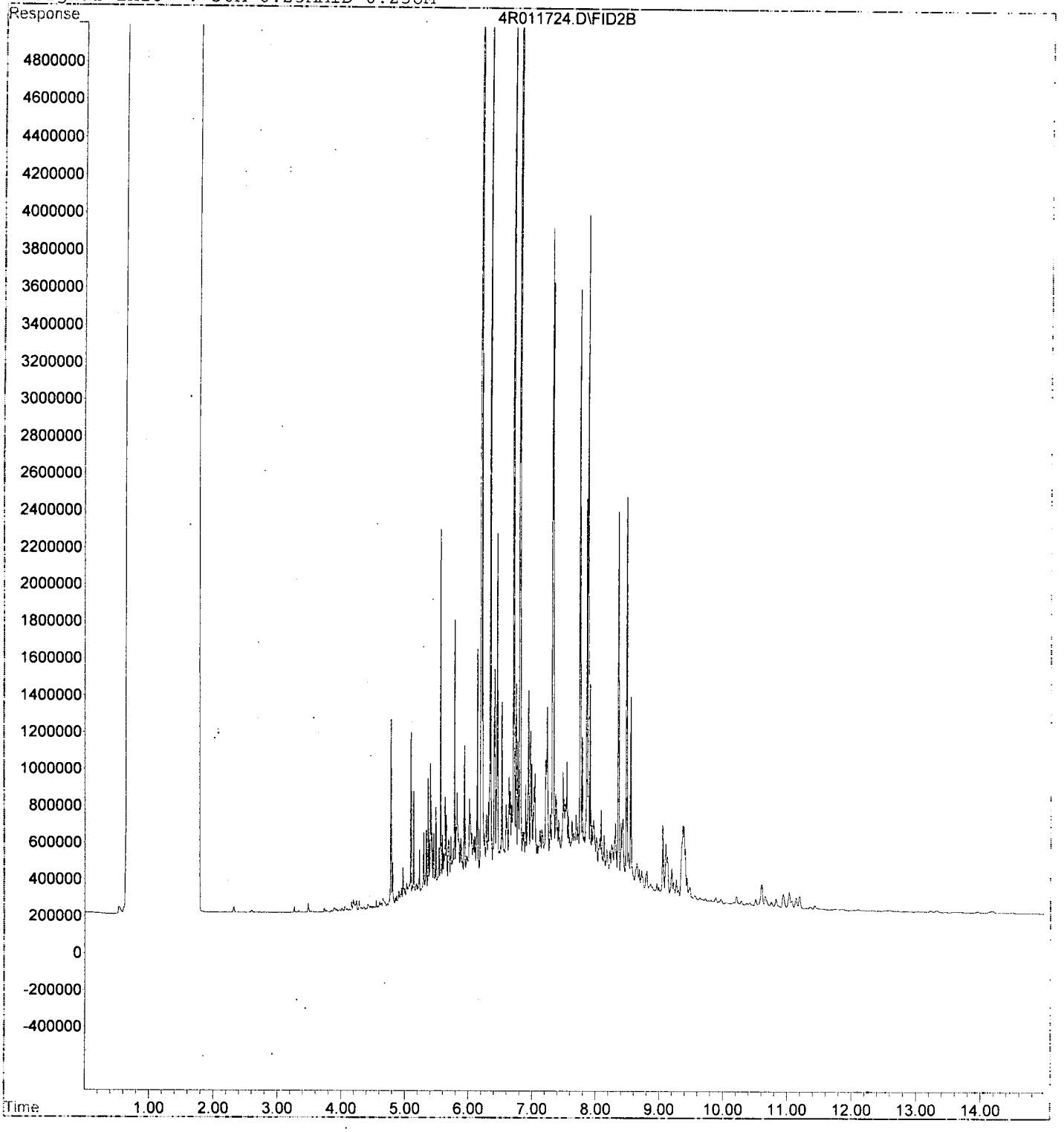
4R011724.D 4R00113D.M Mon Jan 20 05:26:34 2020 SV-GCMS3 Page 1

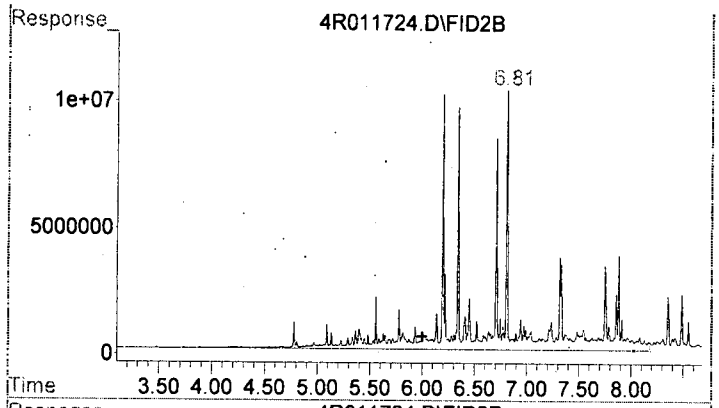
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011724.D Vial: 68
Acq On : 18 Jan 2020 1:57 Operator: BLL
Sample : A0A0539-01 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

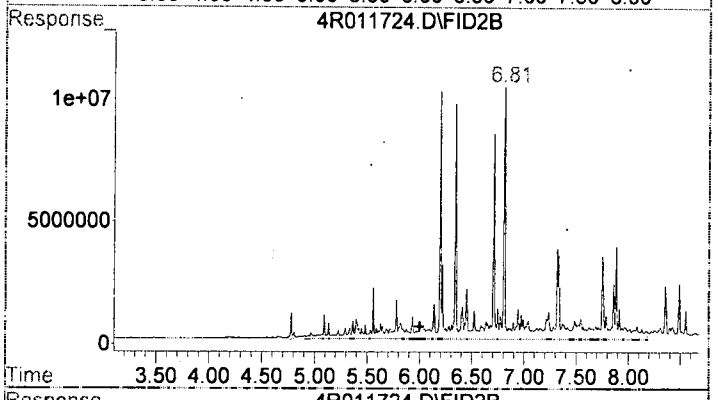
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





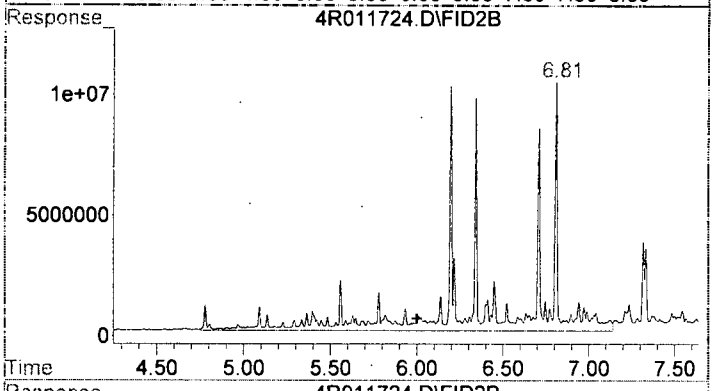
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1209297820
Conc: 1095.29 ug/ml m



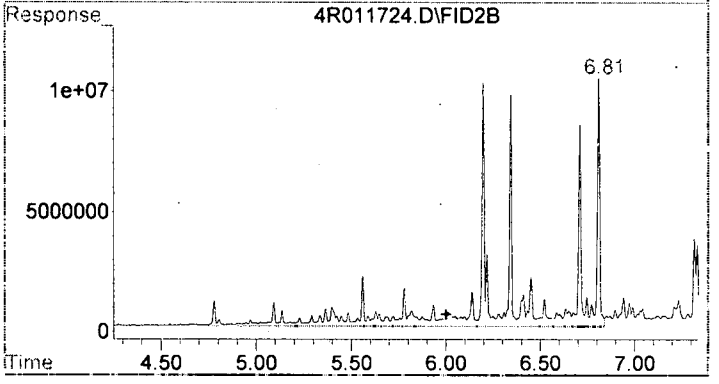
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1209297820
Conc: 1095.29 ug/ml m



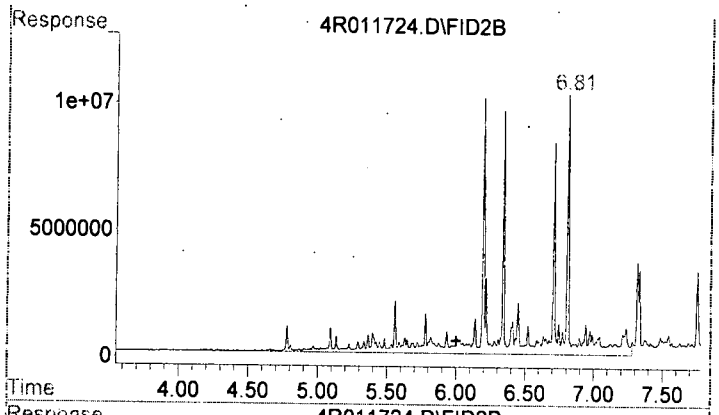
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 788449448
Conc: 714.12 ug/ml m



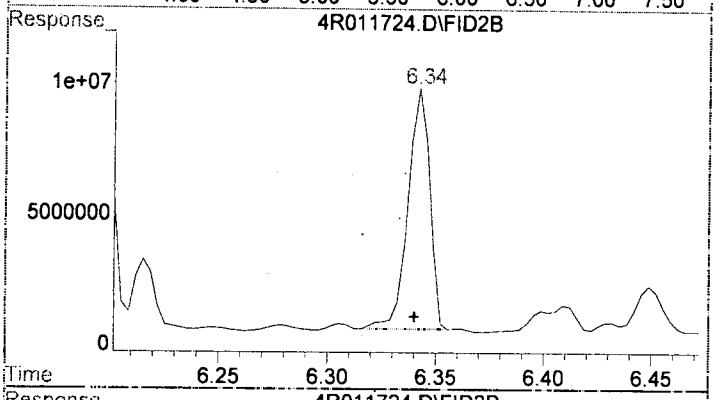
#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 698308435
Conc: 859.05 ug/ml m



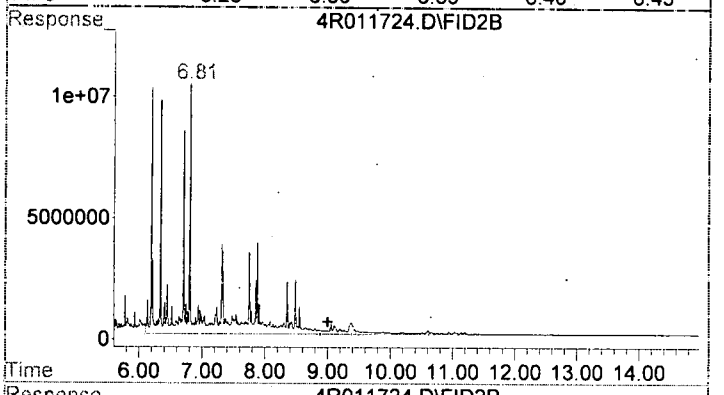
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 852787268
Conc: 833.22 ug/ml m



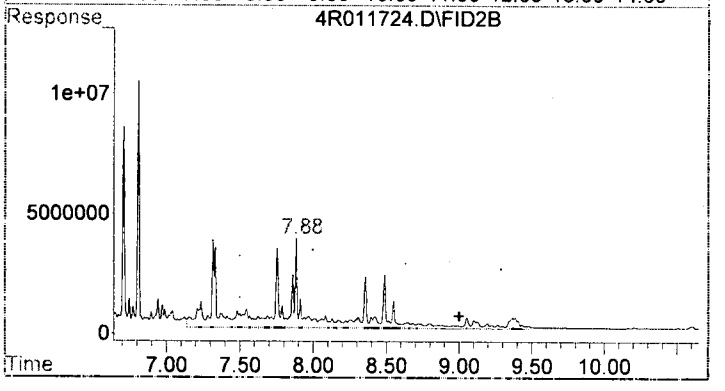
#6 o-Terphenyl

R.T.: 6.343 min
Delta R.T.: 0.003 min
Response: 64440779
Conc: 52.51 ug/ml



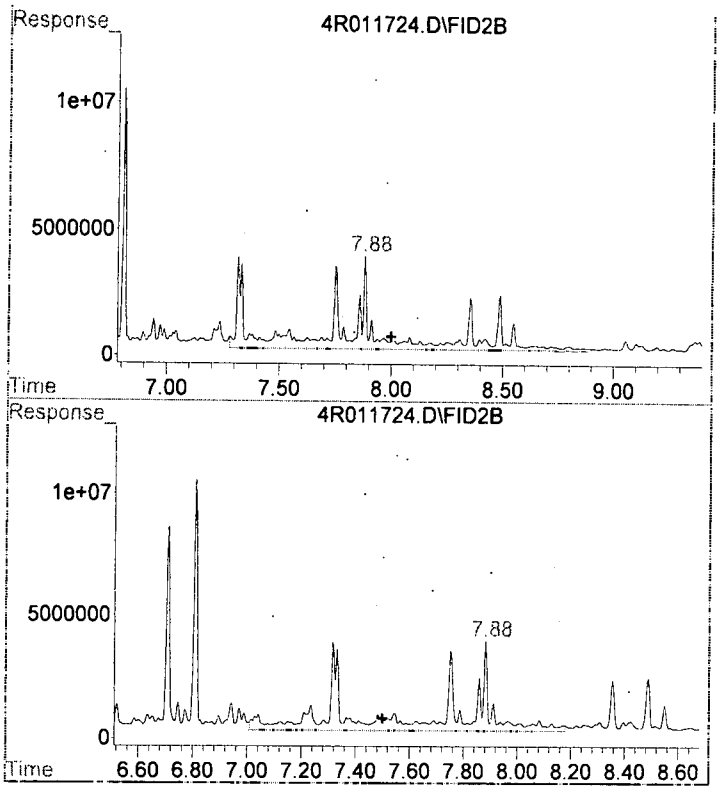
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 1234164600
Conc: 1078.99 ug/ml m



#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 582002451
Conc: 508.83 ug/ml m



#9 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 442046314
Conc: 621.17 ug/ml m

#10 CA LUFT ORO (C23-C32)

R.T.: 7.500 min
Delta R.T.: 0.000 min
Response: 351310232
Conc: 490.19 ug/ml m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011725.D
Acq On : 18 Jan 2020 2:19
Sample : A0A0539-02
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Vial: 69
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
6)	S	o-Terphenyl	6.34	61855877	50.406 ug/ml
		Target Compounds			
1)	H	Mineral Oil	6.00	729200493	660.455 ug/ml
2)	H	Diesel	6.00	729200493	660.455 ug/ml
3)	H	DRO(C12-C24)	6.00	419786466	380.211 ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	346946912	426.808 ug/ml
5)	H	TPHd (C10-C25)	6.00	463529974	452.896 ug/ml
7)	H	Oil	9.00	816051116	713.449 ug/ml
8)	H	RRO (C24-C40)	9.00	428337497	374.483 ug/ml
9)	H	TPHmo (C25-C36)	8.00	322863286	453.690 ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	259654280	362.298 ug/ml

F.24

Report DRO/RRO

AM 1.20.20

J

(f)=RT Delta > 1/2 window (m)=manual int.

4R011725.D 4R00113D.M Mon Jan 20 05:26:38 2020 SV-GCMS3

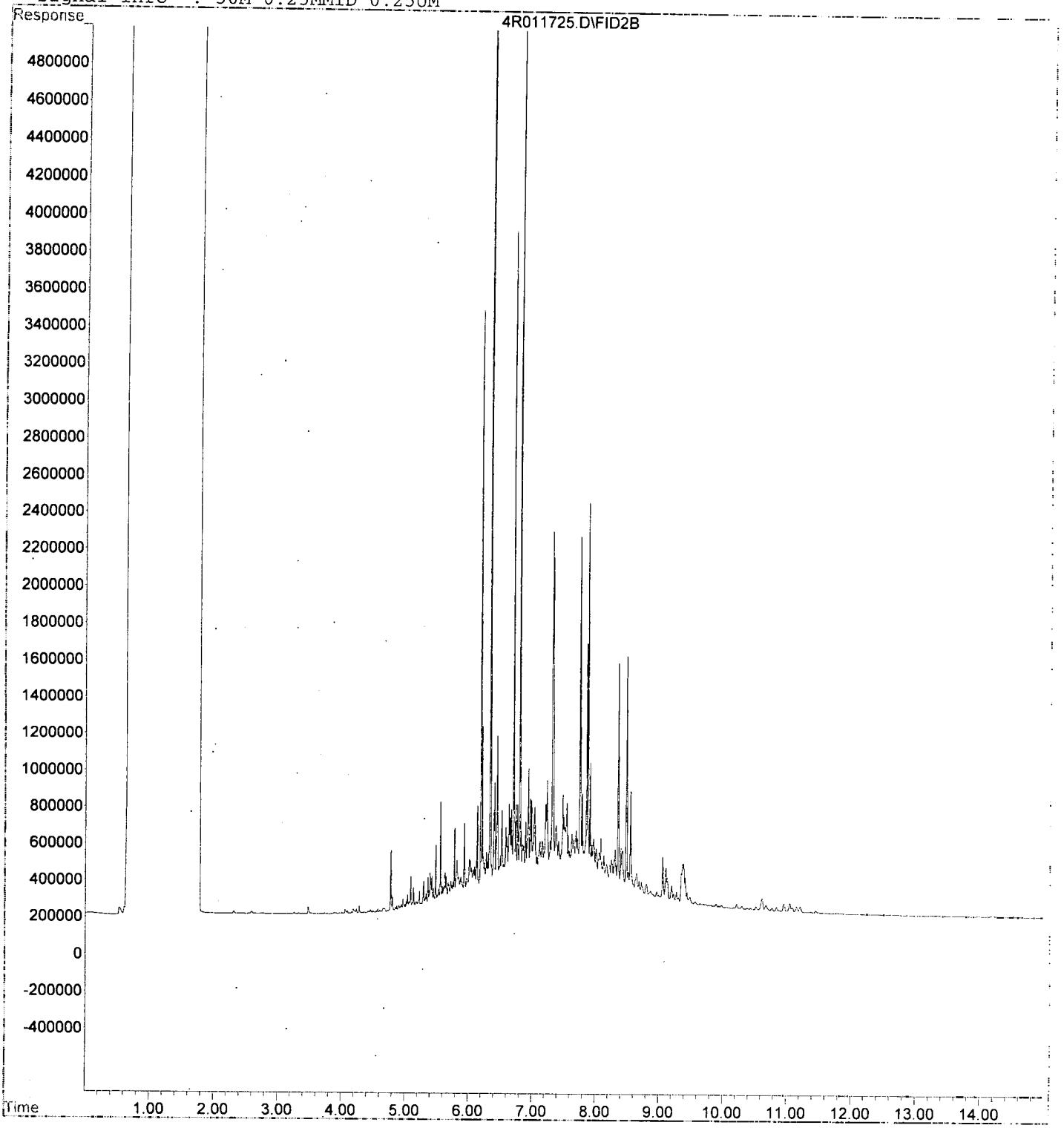
Quantitation Report (Not Reviewed)

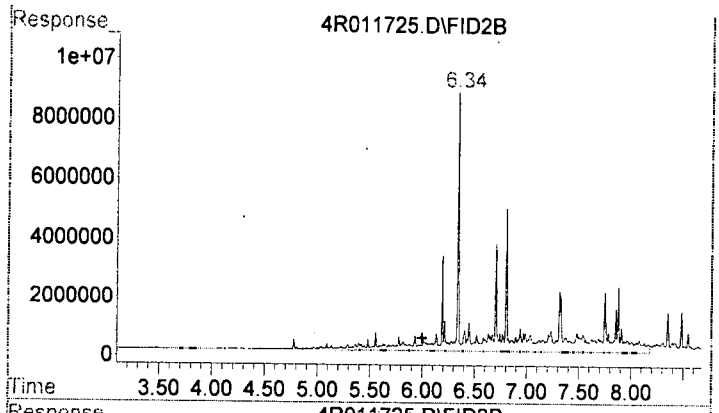
Data File : G:\4\DATA\2020-01\0A17024\4R011725.D
Acq On : 18 Jan 2020 2:19
Sample : A0A0539-02
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Vial: 69
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

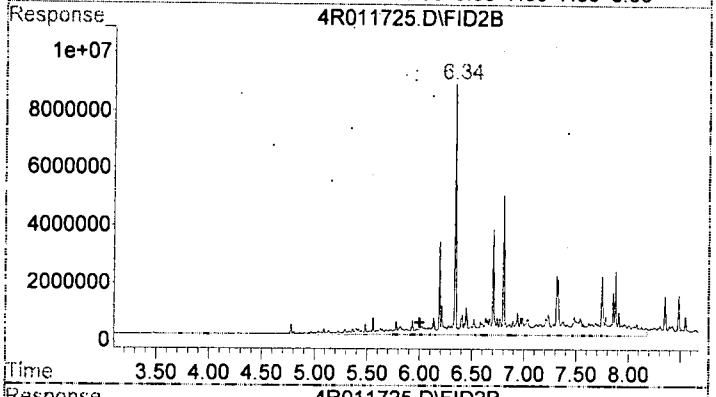
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





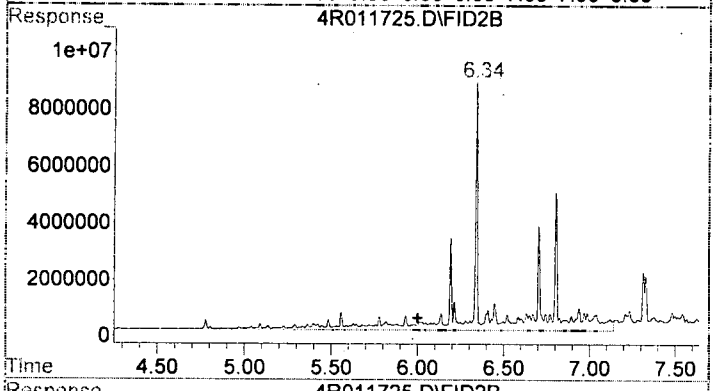
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 729200493
Conc: 660.46 ug/ml m



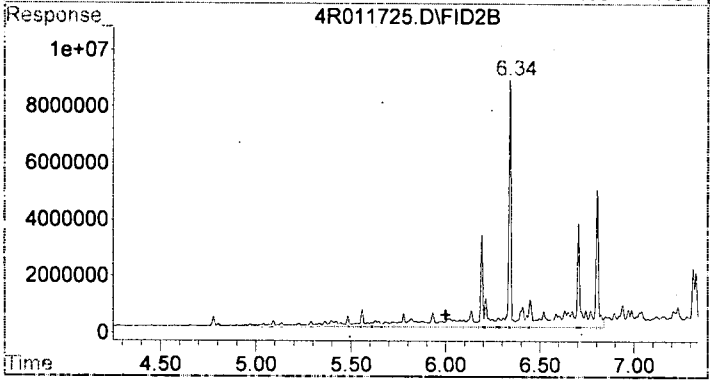
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 729200493
Conc: 660.46 ug/ml m



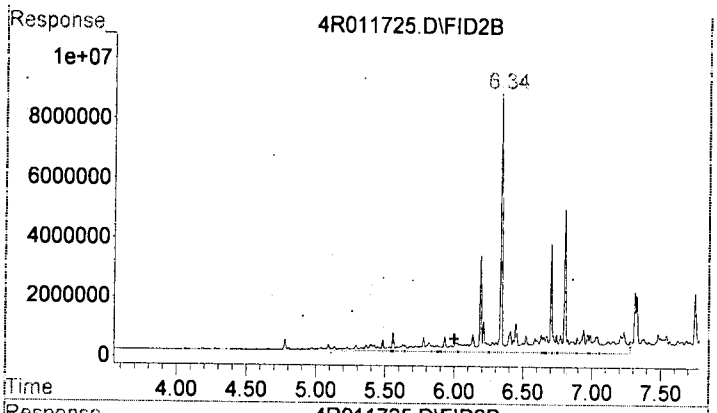
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 419786466
Conc: 380.21 ug/ml m



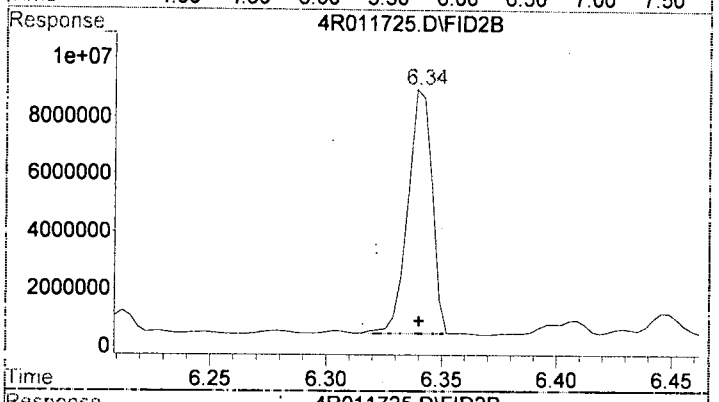
#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 346946912
Conc: 426.81 ug/ml m



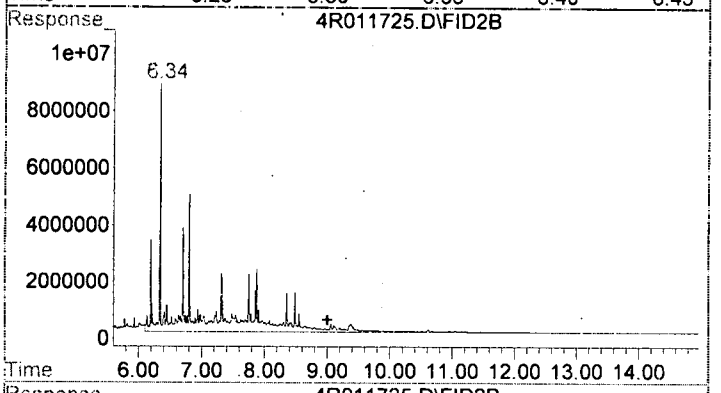
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 463529974
Conc: 452.90 ug/ml m



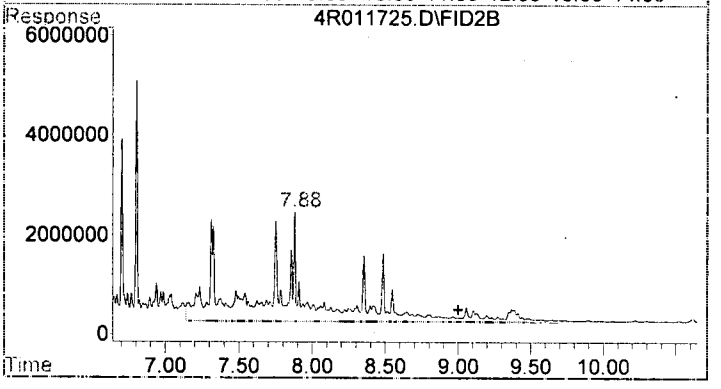
#6 o-Terphenyl

R.T.: 6.342 min
Delta R.T.: 0.002 min
Response: 61855877
Conc: 50.41 ug/ml



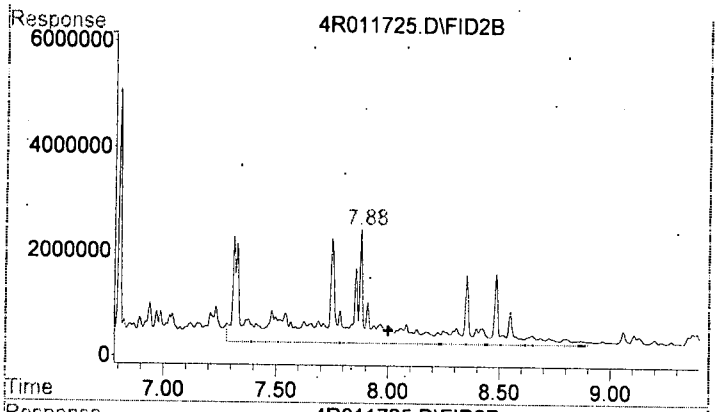
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 816051116
Conc: 713.45 ug/ml m



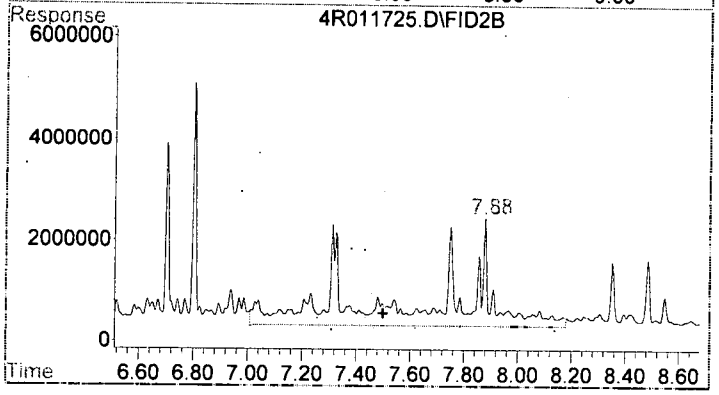
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 428337497
Conc: 374.48 ug/ml m



#9 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 322863286
Conc: 453.69 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.: 7.500 min
Delta R.T.: 0.000 min
Response: 259654280
Conc: 362.30 ug/ml m

Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2020-01\0A17024\4R011727.D
Acq On : 18 Jan 2020 3:02
Sample : 0A17024-CCV3
Misc :
IntFile : SUR.E

Vial: 70
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	H	Mineral Oil	1000.000	1008.550	-0.9	100	0.00
2	H	Diesel	1000.000	1008.550	-0.9	100	0.00
3	H	DRO(C12-C24)	1000.000	797.687	20.2#	79	0.00
4	H	CA LUFT DRO (C12-C22)	1000.000	1041.341	-4.1	101	0.00
5	H	TPHd (C10-C25)	1000.000	1026.404	-2.6	100	0.00
6	S	o-Terphenyl	-1.000	55.466	0.0	0	0.00
7	H	Oil	-1.000	258.223	0.0	0	0.00
8	H	RRO (C24-C40)	-1.000	16.860	0.0	0	0.00
9	H	TPHmo (C25-C36)	-1.000	15.855	0.0	0	0.00
10	H	CA LUFT ORO (C23-C32)	-1.000	35.546	0.0	0	0.00

1.20.20

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

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011727.D
Acq On : 18 Jan 2020 3:02
Sample : 0A17024-CCV3
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Vial: 70
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	6.34	68065472	55.466	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	1113527217	1008.550	ug/ml
2)	H	Diesel	6.00	1113527217	1008.550	ug/ml
3)	H	DRO(C12-C24)	6.00	880716400	797.687	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	846492758	1041.341	ug/ml
5)	H	TPHd (C10-C25)	6.00	1050503196	1026.404	ug/ml
7)	H	Oil	9.00	295357860	258.223	ug/ml
8)	H	RRO (C24-C40)	9.00	19284916	16.860	ug/ml
9)	H	TPHmo (C25-C36)	8.00	11283089	15.855	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	25475177	35.546	ug/ml

RA 1.20.20

(f)=RT Delta > 1/2 window (m)=manual int.

4R011727.D 4R00113D.M Mon Jan 20 05:26:44 2020 SV-GCMS3 Page 1

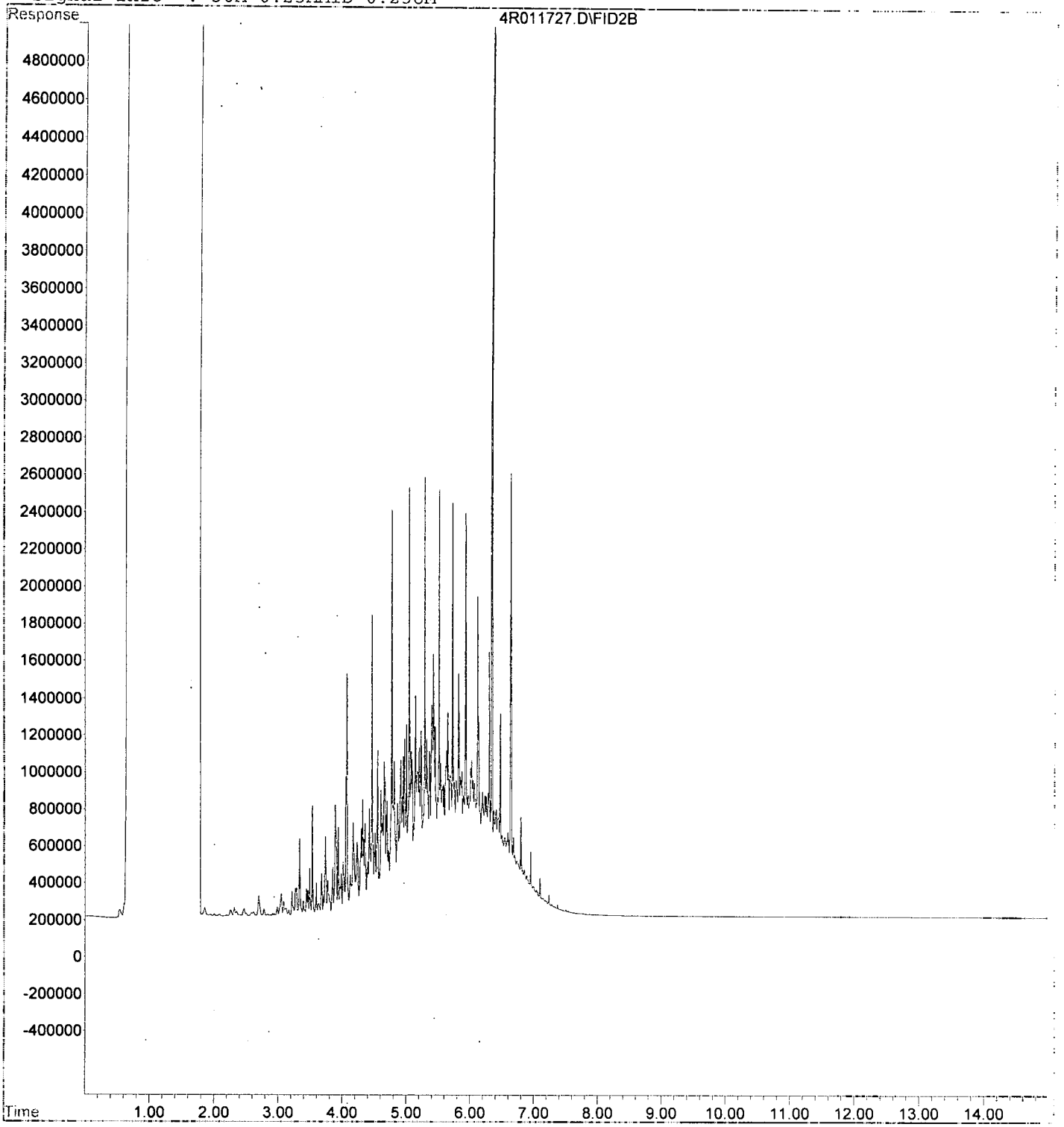
Quantitation Report (Not Reviewed)

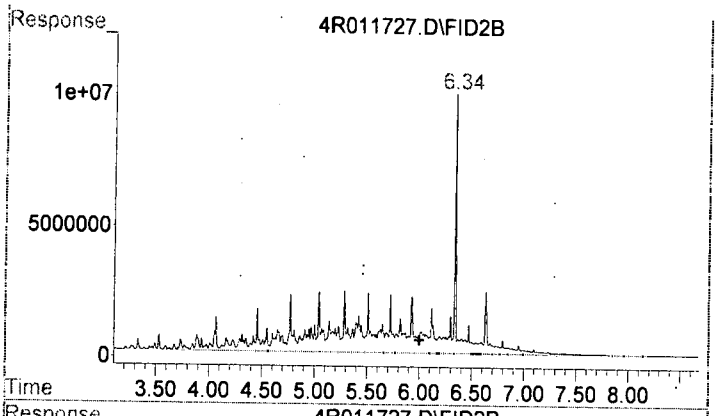
Data File : G:\4\DATA\2020-01\0A17024\4R011727.D
Acq On : 18 Jan 2020 3:02
Sample : 0A17024-CCV3
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Vial: 70
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

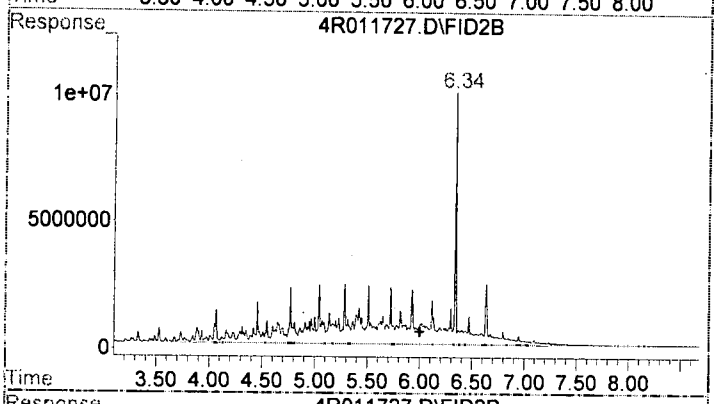
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





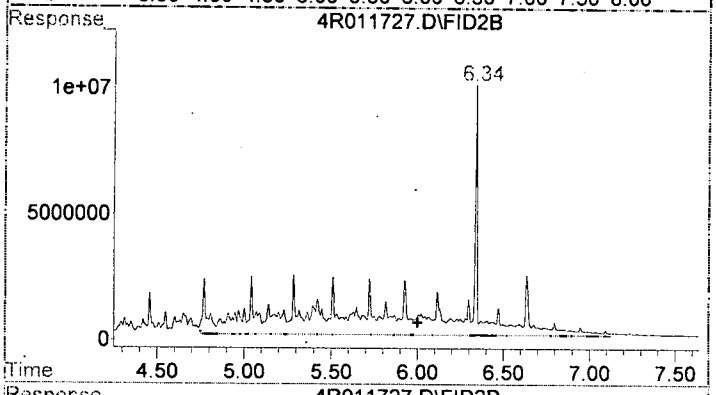
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1113527217
Conc: 1008.55 ug/ml m



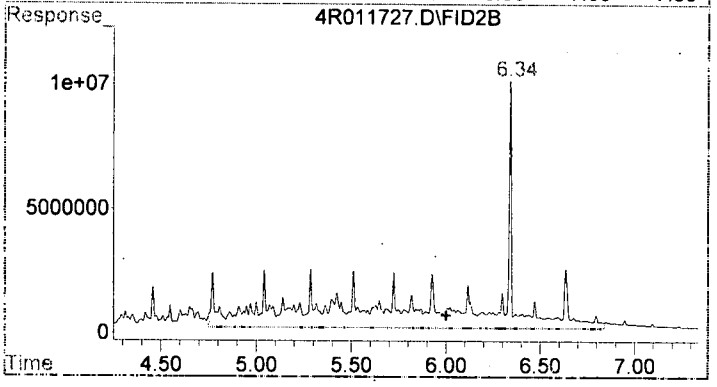
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1113527217
Conc: 1008.55 ug/ml m



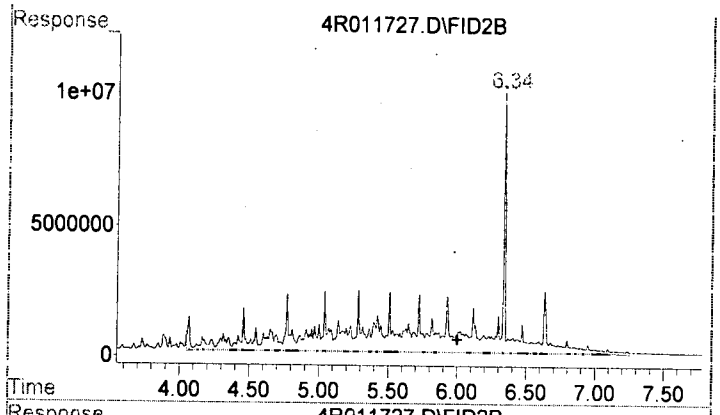
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 880716400
Conc: 797.69 ug/ml m



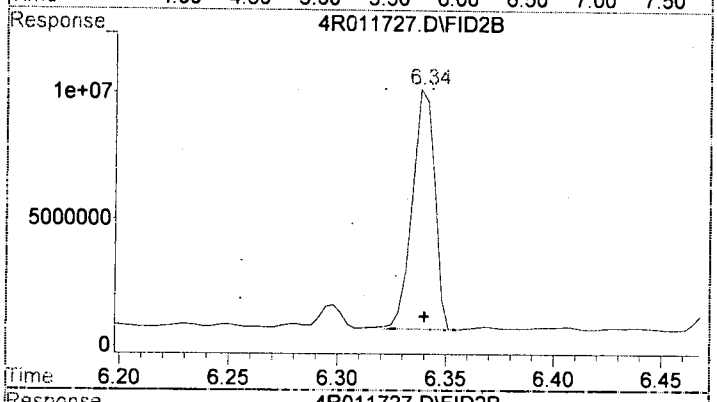
#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 846492758
Conc: 1041.34 ug/ml m



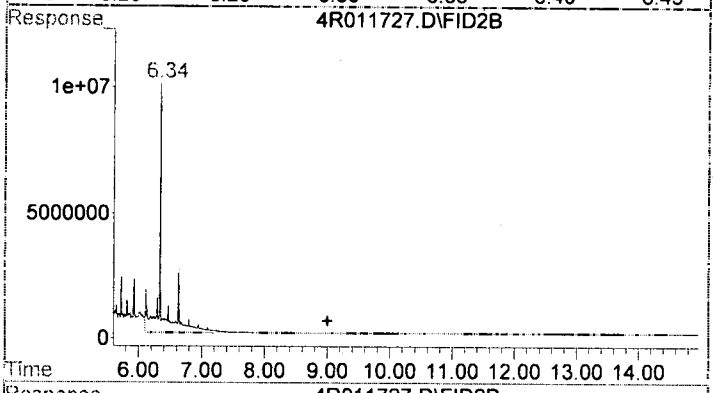
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1050503196
Conc: 1026.40 ug/ml m



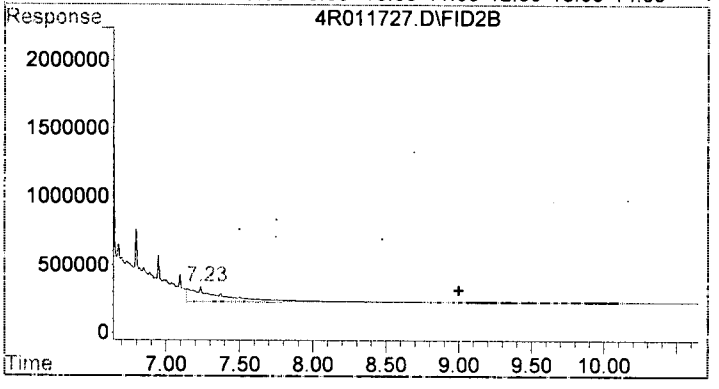
#6 o-Terphenyl

R.T.: 6.341 min
Delta R.T.: 0.000 min
Response: 68065472
Conc: 55.47 ug/ml



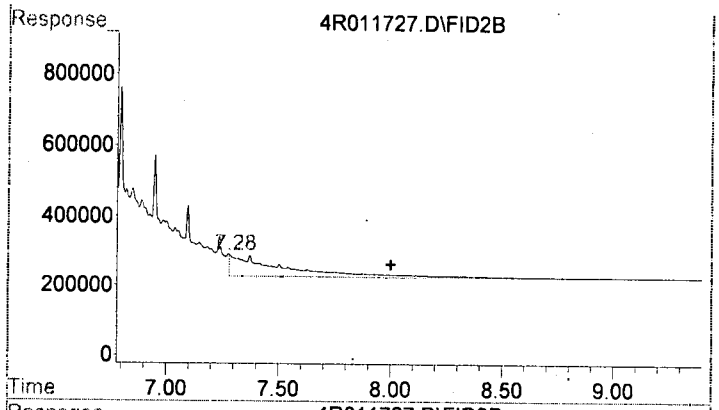
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 295357860
Conc: 258.22 ug/ml m



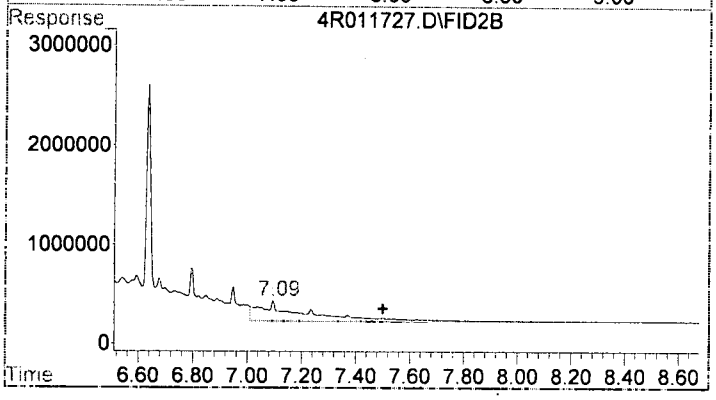
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 19284916
Conc: 16.86 ug/ml m



#9 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 11283089
Conc: 15.86 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.: 7.500 min
Delta R.T.: 0.000 min
Response: 25475177
Conc: 35.55 ug/ml m

Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2020-01\0A17024\4R011728.D
Acq On : 18 Jan 2020 3:24
Sample : 0A17024-CCV4
Misc :
IntFile : SUR.E

Vial: 71
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	H	Mineral Oil	-1.000	365.068	0.0	96	0.00
2	H	Diesel	-1.000	365.068	0.0	96	0.00
3	H	DRO(C12-C24)	-1.000	89.035	0.0	98	0.00
4	H	CA LUFT DRO (C12-C22)	-1.000	41.997	0.0	0	0.00
5	H	TPHd (C10-C25)	-1.000	138.347	0.0	98	0.00
6	S	o-Terphenyl	-1.000	53.793	0.0	0	0.00
7	H	Oil	500.000	489.489	2.1	102	0.00
8	H	RRO (C24-C40)	500.000	370.465	25.9#	78	0.00
9	H	TPHmo (C25-C36)	500.000	470.515	5.9	96	0.00
10	H	CA LUFT ORO (C23-C32)	500.000	464.351	7.1	95	0.00

1.20.20

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

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A17024\4R011728.D Vial: 71
Acq On : 18 Jan 2020 3:24 Operator: BLL
Sample : 0A17024-CCV4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
System Monitoring Compounds						
6)	S	o-Terphenyl	6.34	66012331	53.793	ug/ml
Target Compounds						
1)	H	Mineral Oil	6.00	403066879	365.068	ug/ml
2)	H	Diesel	6.00	403066879	365.068	ug/ml
3)	H	DRO(C12-C24)	6.00	98302897	89.035	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	34138755	41.997	ug/ml
5)	H	TPHd (C10-C25)	6.00	141595309	138.347	ug/ml
7)	H	Oil	9.00	559883168	489.489	ug/ml
8)	H	RRO (C24-C40)	9.00	423741740	370.465	ug/ml
9)	H	TPHmo (C25-C36)	8.00	334836623	470.515	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	332794449	464.351	ug/ml

MR 1-20-20

(f)=RT Delta > 1/2 Window (m)=manual int.

4R011728.D 4R00113D.M Mon Jan 20 05:26:48 2020 SV-GCMS3

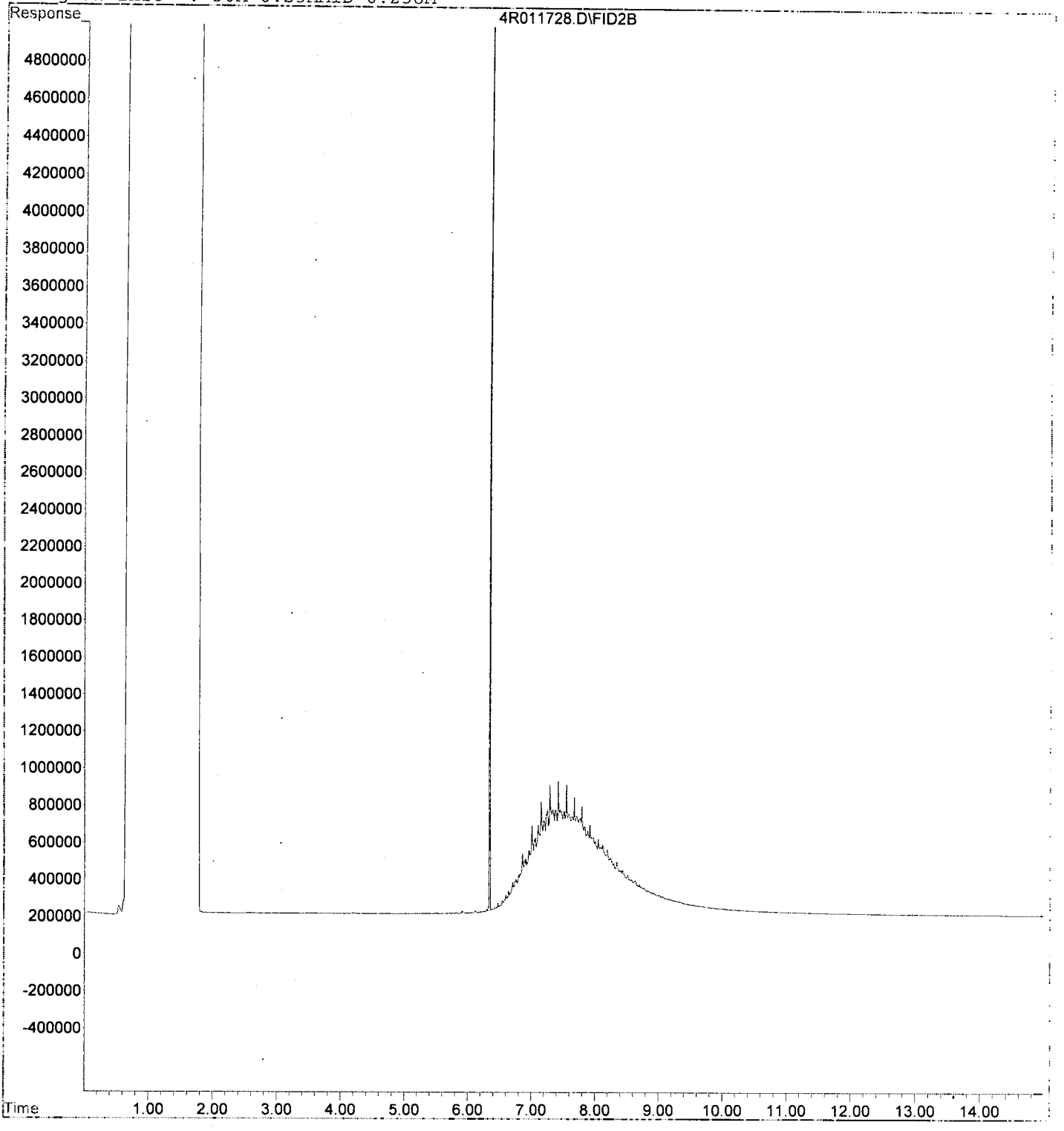
Quantitation Report (Not Reviewed)

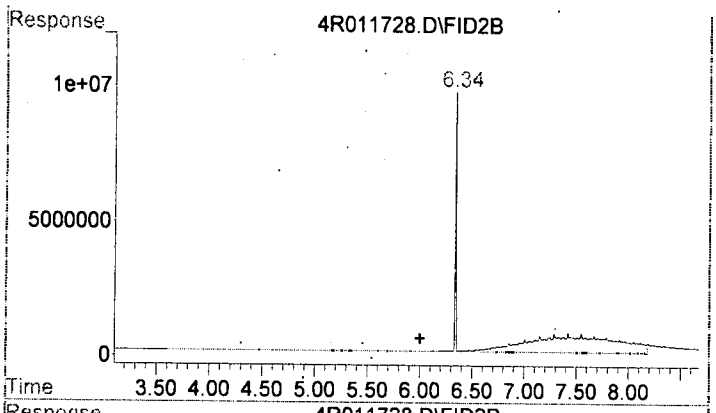
Data File : G:\4\DATA\2020-01\0A17024\4R011728.D
Acq On : 18 Jan 2020 3:24
Sample : 0A17024-CCV4
Misc :
IntFile : SUR.E
Quant Time: Jan 20 5:26 2020 Quant Results File: 4R00113D.RES

Vial: 71
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Jan 16 07:04:00 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

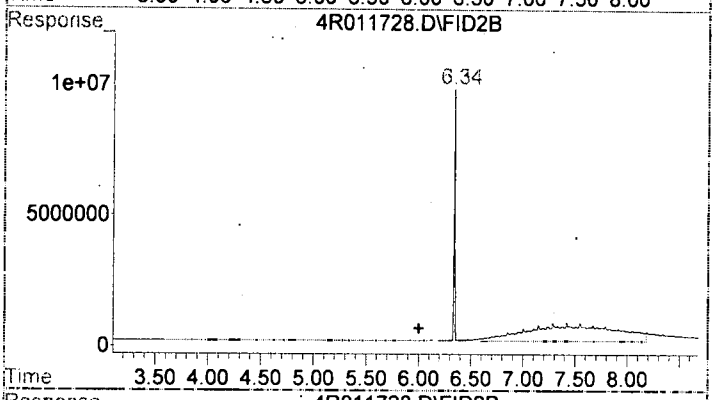
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





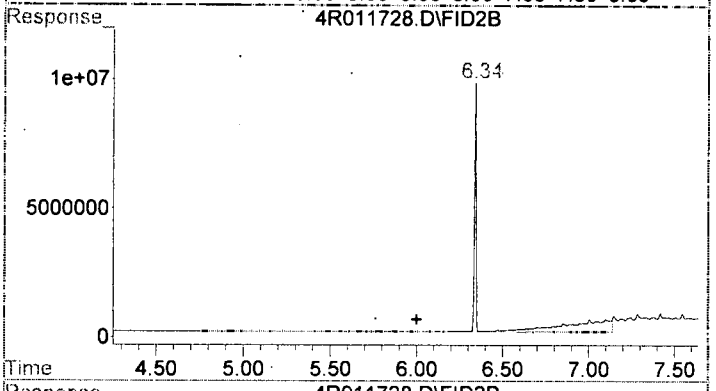
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 403066879
Conc: 365.07 ug/ml m



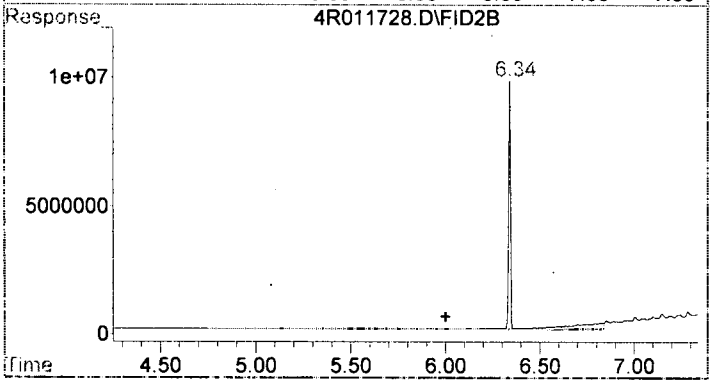
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 403066879
Conc: 365.07 ug/ml m



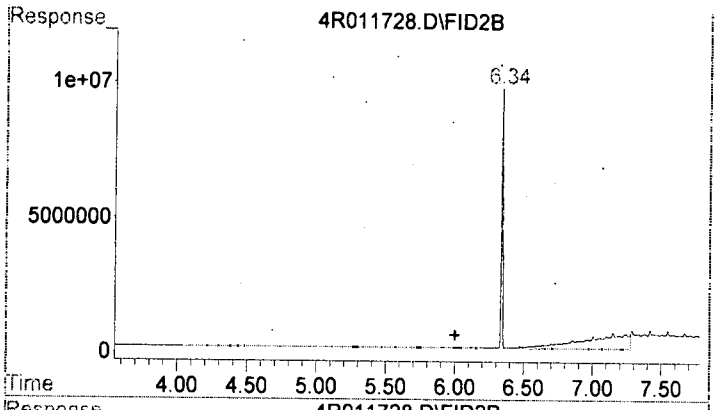
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 98302897
Conc: 89.04 ug/ml m



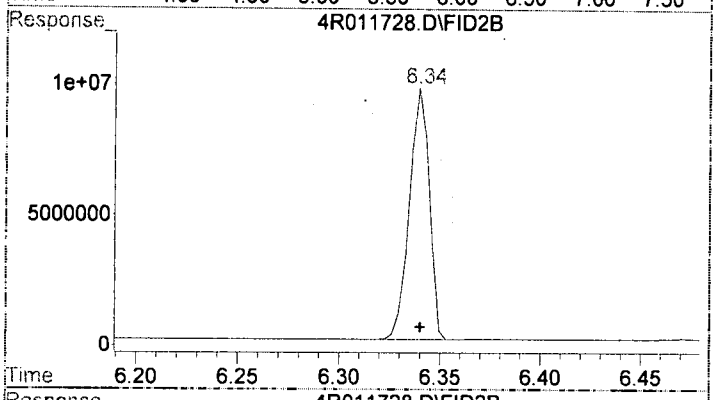
#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 34138755
Conc: 42.00 ug/ml m



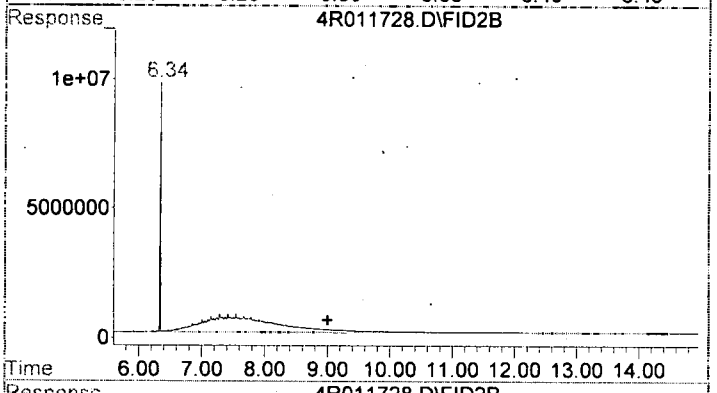
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 141595309
Conc: 138.35 ug/ml m



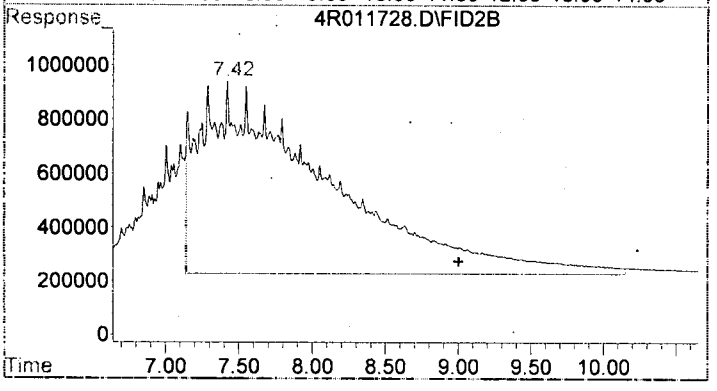
#6 o-Terphenyl

R.T.: 6.341 min
Delta R.T.: 0.000 min
Response: 66012331
Conc: 53.79 ug/ml



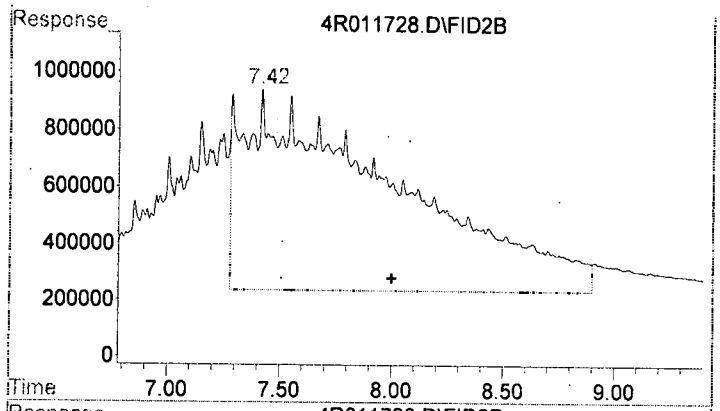
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 559883168
Conc: 489.49 ug/ml m



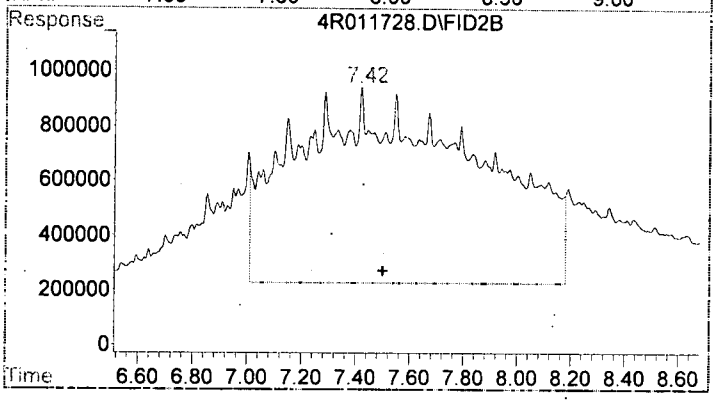
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 423741740
Conc: 370.46 ug/ml m



#9 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 334836623
Conc: 470.51 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.: 7.500 min
Delta R.T.: 0.000 min
Response: 332794449
Conc: 464.35 ug/ml m

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

Diesel and/or Oil Hydrocarbons by NWTPH-Dx
Calibration Data

Sequence 0A13043 (Cal ID A0A1404) DUALFID4R

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**0A13043**	Instrument:	**DUALFID4R**
Date:	**01/13/20 12:33**	Calibration:	**A0A1404**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A13043-RES1	Soil	QC	QC				A19L267
2	0A13043-ICB1	Soil	QC	QC				
3	0A13043-CAL1	Soil	QC	QC				A19K021
4	0A13043-CAL2	Soil	QC	QC				A19K022
5	0A13043-CAL3	Soil	QC	QC				A19K023
6	0A13043-CAL4	Soil	QC	QC				A19K024
7	0A13043-CAL5	Soil	QC	QC				A19K025
8	0A13043-CAL6	Soil	QC	QC				A19K027
9	0A13043-CAL7	Soil	QC	QC				A19I110
10	0A13043-ICV1	Soil	QC	QC				A20A172

Data Entered By: AL 1-14-20

Data Reviewed By: [illegible] 1/14/20

Comments:

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0A13043 **Seq. Date: 1/13/2020**

SEQUENCE LOG

SampleID	Analysis	Matrix	STDID	Analyzed
0A13043-ICB1	8015B TPH-D (C10-25) /TPH-MO	Soil		1/13/2020 5:46:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"		"
"	+8015D LL TPH-D (C10-25) /TPI	"		"
"	+8015D TPH-D (C10-25) /TPH-M	"		"
"	+8015M TPH-D (C10-25)/TPH-M	"		"
"	+CA LUFT DRO/RRO	"		"
"	+CA LUFT DRO/RRO - LL	"		"
"	+CA LUFT DRO/RRO W/SG	"		"
"	+NWTPH-Dx (Diesel/Oil)	"		"
"	+NWTPH-Dx (Diesel/Oil) Low Le	"		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"		"
"	+NWTPH-Dx - Extract and Hold	"		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"		"
"	+NWTPH-Dx w/SG - Extract and	"		"
0A13043-CAL1	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K021	1/13/2020 6:08:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K021	"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K021	"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K021	"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K021	"
"	+CA LUFT DRO/RRO	"	A19K021	"
"	+CA LUFT DRO/RRO - LL	"	A19K021	"
"	+CA LUFT DRO/RRO W/SG	"	A19K021	"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K021	"
"	+NWTPH-Dx (Diesel/Oil) Low Le	"	A19K021	"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K021	"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K021	"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K021	"
0A13043-CAL2	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K022	1/13/2020 6:29:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K022	"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K022	"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K022	"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K022	"
"	+CA LUFT DRO/RRO	"	A19K022	"
"	+CA LUFT DRO/RRO - LL	"	A19K022	"
"	+CA LUFT DRO/RRO W/SG	"	A19K022	"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K022	"
"	+NWTPH-Dx (Diesel/Oil) Low Le	"	A19K022	"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K022	"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K022	"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K022	"
0A13043-CAL3	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K023	1/13/2020 9:14:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K023	"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K023	"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K023	"

"	+8015M TPH-D (C10-25)/TPH-M	"	A19K023		"
"	+CA LUFT DRO/RRO	"	A19K023		"
"	+CA LUFT DRO/RRO - LL	"	A19K023		"
"	+CA LUFT DRO/RRO W/SG	"	A19K023		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K023		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K023		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K023		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K023		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K023		"
0A13043-CAL4	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K024	1/13/2020	9:34:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K024		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K024		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K024		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K024		"
"	+CA LUFT DRO/RRO	"	A19K024		"
"	+CA LUFT DRO/RRO - LL	"	A19K024		"
"	+CA LUFT DRO/RRO W/SG	"	A19K024		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K024		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K024		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K024		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K024		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K024		"
0A13043-CAL5	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K025	1/13/2020	9:55:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K025		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K025		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K025		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K025		"
"	+CA LUFT DRO/RRO	"	A19K025		"
"	+CA LUFT DRO/RRO - LL	"	A19K025		"
"	+CA LUFT DRO/RRO W/SG	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K025		"
0A13043-CAL6	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K027	1/13/2020	10:16:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K027		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K027		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K027		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K027		"
"	+CA LUFT DRO/RRO	"	A19K027		"
"	+CA LUFT DRO/RRO - LL	"	A19K027		"
"	+CA LUFT DRO/RRO W/SG	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K027		"
0A13043-CAL7	8015B TPH-D (C10-25) /TPH-MO	Soil	A19I110	1/13/2020	10:57:00PM

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0A13043 **Seq. Date: 1/13/2020**

"	+8015B TPH-D(C10-25)/MO(C2	"	A19I110		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19I110		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19I110		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19I110		"
"	+CA LUFT DRO/RRO	"	A19I110		"
"	+CA LUFT DRO/RRO - LL	"	A19I110		"
"	+CA LUFT DRO/RRO W/SG	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19I110		"
0A13043-ICV1	8015B TPH-D (C10-25) /TPH-MO	Soil	A20A172	1/13/2020 11:39:00PM	
"	+8015B TPH-D(C10-25)/MO(C2	"	A20A172		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A20A172		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A20A172		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A20A172		"
"	+CA LUFT DRO/RRO	"	A20A172		"
"	+CA LUFT DRO/RRO - LL	"	A20A172		"
"	+CA LUFT DRO/RRO W/SG	"	A20A172		"
"	+NWTPH-Dx (Diesel/Oil)	"	A20A172		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A20A172		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A20A172		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A20A172		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A20A172		"

CALIBRATION STANDARD RECOVERIES

Calibration: **A0A1404** Instrument: **DUALFID4R**

8015B TPH-D (C10-25) /TPH- Sequence: **0A13043** Matrix: **Soil**

0A13043-CAL1	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A13043-CAL2	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A13043-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A13043-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A13043-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A13043-CAL6	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A13043-CAL7	**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.

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0A13043 **Seq. Date: 1/13/2020**

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: **A0A1404** Instrument: **DUALFID4R**

CA LUFT DRO/RRO - LL Sequence: **0A13043** Matrix: **Soil**

0A13043-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.

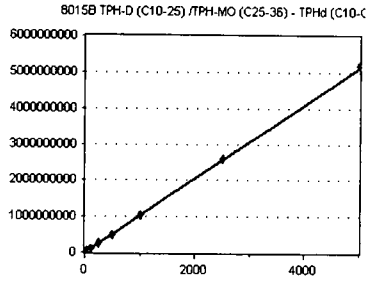
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **8015B TPH-D (C10-25) /TPH·** Instrument Cal ID: **A0A1404**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

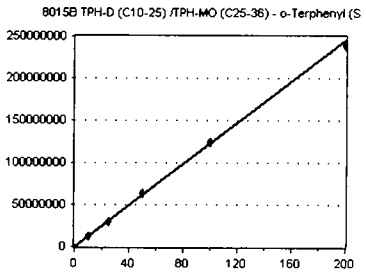


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.529767E+07	1011907.000	6.00
9K13038-CAL2	40	4.159173E+07	1039793.000	6.00
9K13038-CAL3	100	9.974917E+07	997491.700	6.00
9K13038-CAL4	250	2.520315E+08	1008126.000	6.00
9K13038-CAL5	500	5.023739E+08	1004748.000	6.00
9K13038-CAL6	1000	1.048818E+09	1048818.000	6.00
9K13038-CAL7	2500	2.601758E+09	1040703.000	6.00
9K13038-CAL8	5000	5.181243E+09	1036249.000	6.00

AVE RF **1023479.000** RF RSD **1.94** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

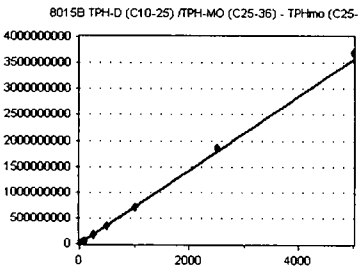


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	2.81322E+07	703305.000	8.00
0A13043-CAL2	80	5.330243E+07	666280.400	8.00
0A13043-CAL3	250	1.802498E+08	720999.200	8.00
0A13043-CAL4	500	3.470005E+08	694001.000	8.00
0A13043-CAL5	1000	7.160845E+08	716084.500	8.00
0A13043-CAL6	2500	1.849569E+09	739827.600	8.00
0A13043-CAL7	5000	3.704864E+09	740972.800	8.00

AVE RF **711638.600** RF RSD **3.72** AVE RT **8.00**

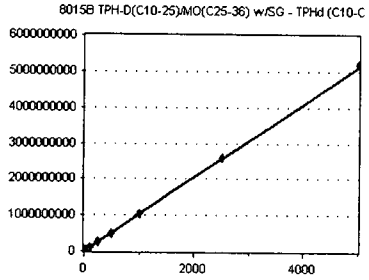
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **8015B TPH-D(C10-25)/MO(C** Instrument Cal ID: **A0A1404**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

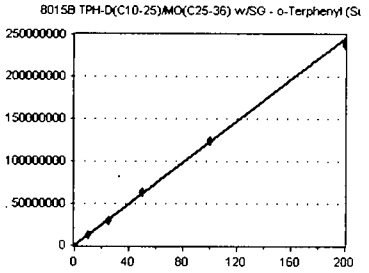


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.529767E+07	1011907.000	6.00
9K13038-CAL2	40	4.159173E+07	1039793.000	6.00
9K13038-CAL3	100	9.974917E+07	997491.700	6.00
9K13038-CAL4	250	2.520315E+08	1008126.000	6.00
9K13038-CAL5	500	5.023739E+08	1004748.000	6.00
9K13038-CAL6	1000	1.048818E+09	1048818.000	6.00
9K13038-CAL7	2500	2.601758E+09	1040703.000	6.00
9K13038-CAL8	5000	5.181243E+09	1036249.000	6.00

AVE RF **1023479.000** RF RSD **1.94** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

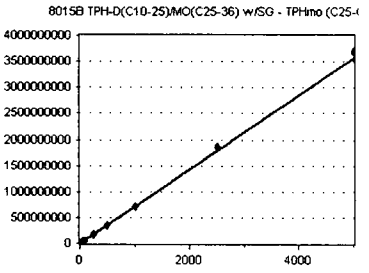


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	2.81322E+07	703305.000	8.00
0A13043-CAL2	80	5.330243E+07	666280.400	8.00
0A13043-CAL3	250	1.802498E+08	720999.200	8.00
0A13043-CAL4	500	3.470005E+08	694001.000	8.00
0A13043-CAL5	1000	7.160845E+08	716084.500	8.00
0A13043-CAL6	2500	1.849569E+09	739827.600	8.00
0A13043-CAL7	5000	3.704864E+09	740972.800	8.00

AVE RF **711638.600** RF RSD **3.72** AVE RT **8.00**

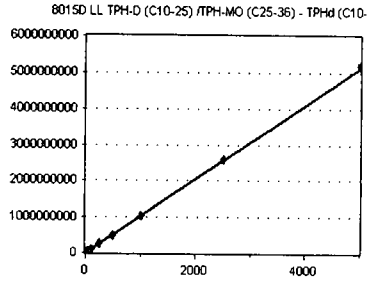
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **8015D LL TPH-D (C10-25) /T** Instrument Cal ID: **A0A1404**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

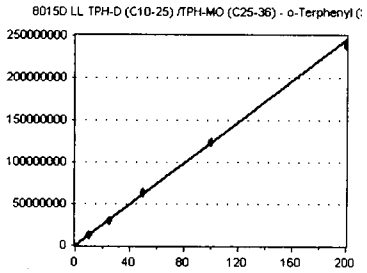


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.529767E+07	1011907.000	6.00
9K13038-CAL2	40	4.159173E+07	1039793.000	6.00
9K13038-CAL3	100	9.974917E+07	997491.700	6.00
9K13038-CAL4	250	2.520315E+08	1008126.000	6.00
9K13038-CAL5	500	5.023739E+08	1004748.000	6.00
9K13038-CAL6	1000	1.048818E+09	1048818.000	6.00
9K13038-CAL7	2500	2.601758E+09	1040703.000	6.00
9K13038-CAL8	5000	5.181243E+09	1036249.000	6.00

AVE RF **1023479.000** RF RSD **1.94** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

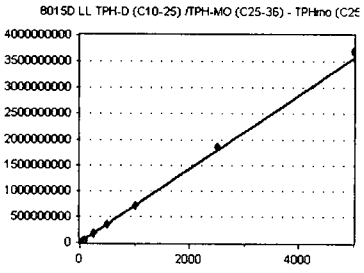


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	2.81322E+07	703305.000	8.00
0A13043-CAL2	80	5.330243E+07	666280.400	8.00
0A13043-CAL3	250	1.802498E+08	720999.200	8.00
0A13043-CAL4	500	3.470005E+08	694001.000	8.00
0A13043-CAL5	1000	7.160845E+08	716084.500	8.00
0A13043-CAL6	2500	1.849569E+09	739827.600	8.00
0A13043-CAL7	5000	3.704864E+09	740972.800	8.00

AVE RF **711638.600** RF RSD **3.72** AVE RT **8.00**

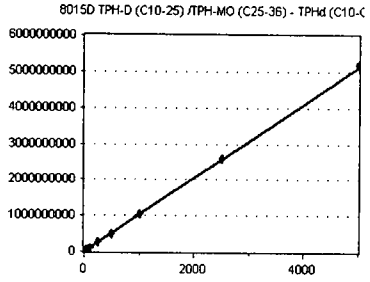
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **8015D TPH-D (C10-25) /TPH** Instrument Cal ID: **A0A1404**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

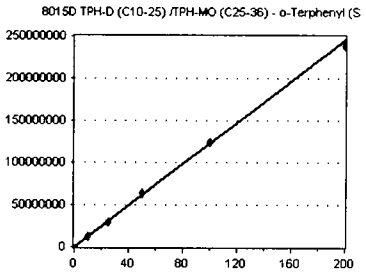


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.529767E+07	1011907.000	6.00
9K13038-CAL2	40	4.159173E+07	1039793.000	6.00
9K13038-CAL3	100	9.974917E+07	997491.700	6.00
9K13038-CAL4	250	2.520315E+08	1008126.000	6.00
9K13038-CAL5	500	5.023739E+08	1004748.000	6.00
9K13038-CAL6	1000	1.048818E+09	1048818.000	6.00
9K13038-CAL7	2500	2.601758E+09	1040703.000	6.00
9K13038-CAL8	5000	5.181243E+09	1036249.000	6.00

AVE RF **1023479.000** RF RSD **1.94** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

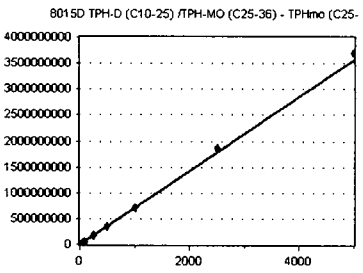


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	2.81322E+07	703305.000	8.00
0A13043-CAL2	80	5.330243E+07	666280.400	8.00
0A13043-CAL3	250	1.802498E+08	720999.200	8.00
0A13043-CAL4	500	3.470005E+08	694001.000	8.00
0A13043-CAL5	1000	7.160845E+08	716084.500	8.00
0A13043-CAL6	2500	1.849569E+09	739827.600	8.00
0A13043-CAL7	5000	3.704864E+09	740972.800	8.00

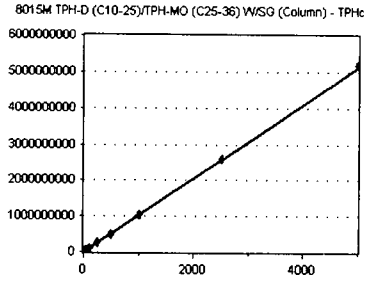
AVE RF **711638.600** RF RSD **3.72** AVE RT **8.00**

Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **8015M TPH-D (C10-25)/TPH-** Instrument Cal ID: **A0A1404**

TPHd (C10-C25)

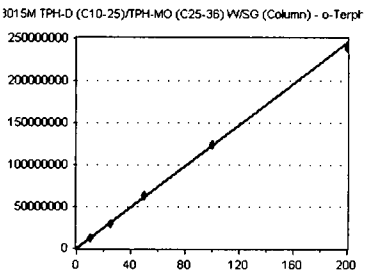


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.529767E+07	1011907.000	6.00
9K13038-CAL2	40	4.159173E+07	1039793.000	6.00
9K13038-CAL3	100	9.974917E+07	997491.700	6.00
9K13038-CAL4	250	2.520315E+08	1008126.000	6.00
9K13038-CAL5	500	5.023739E+08	1004748.000	6.00
9K13038-CAL6	1000	1.048818E+09	1048818.000	6.00
9K13038-CAL7	2500	2.601758E+09	1040703.000	6.00
9K13038-CAL8	5000	5.181243E+09	1036249.000	6.00

AVE RF **1023479.000** RF RSD **1.94** AVE RT **6.00**

o-Terphenyl (Surr)

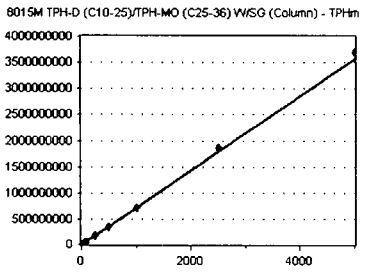


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

TPHmo (C25-C36)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	2.81322E+07	703305.000	8.00
0A13043-CAL2	80	5.330243E+07	666280.400	8.00
0A13043-CAL3	250	1.802498E+08	720999.200	8.00
0A13043-CAL4	500	3.470005E+08	694001.000	8.00
0A13043-CAL5	1000	7.160845E+08	716084.500	8.00
0A13043-CAL6	2500	1.849569E+09	739827.600	8.00
0A13043-CAL7	5000	3.704864E+09	740972.800	8.00

AVE RF **711638.600** RF RSD **3.72** AVE RT **8.00**

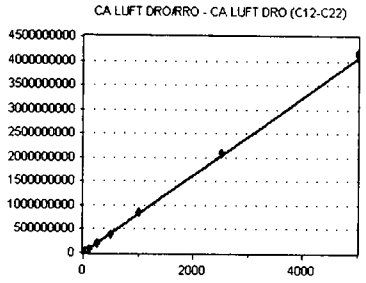
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **CA LUFT DRO/RRO** Instrument Cal ID: **A0A1404**

CA LUFT DRO (C12-C22)

Curve Fit: **AVERAGE RF**

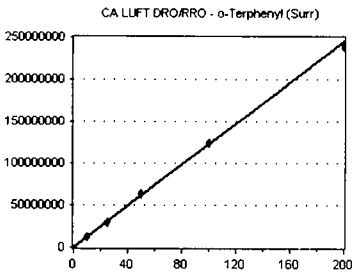


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	1.989938E+07	795975.200	6.00
9K13038-CAL2	40	3.23102E+07	807755.000	6.00
9K13038-CAL3	100	7.916526E+07	791652.600	6.00
9K13038-CAL4	250	1.998293E+08	799317.200	6.00
9K13038-CAL5	500	4.007107E+08	801421.400	6.00
9K13038-CAL6	1000	8.410977E+08	841097.800	6.00
9K13038-CAL7	2500	2.086708E+09	834683.200	6.00
9K13038-CAL8	5000	4.155971E+09	831194.200	6.00

AVE RF **812887.100** RF RSD **2.41** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

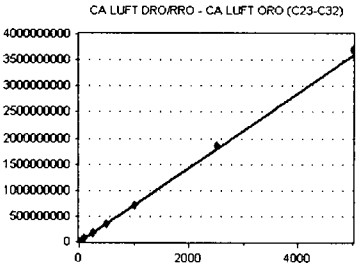


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

CA LUFT ORO (C23-C32)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	2.852809E+07	713202.300	7.50
0A13043-CAL2	80	5.412484E+07	676560.500	7.50
0A13043-CAL3	250	1.814625E+08	725850.000	7.50
0A13043-CAL4	500	3.493351E+08	698670.200	7.50
0A13043-CAL5	1000	7.19387E+08	719387.000	7.50
0A13043-CAL6	2500	1.859173E+09	743669.200	7.50
0A13043-CAL7	5000	3.697341E+09	739468.200	7.50

AVE RF **716686.800** RF RSD **3.26** AVE RT **7.50**

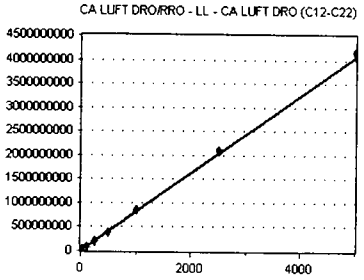
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **CA LUFT DRO/RRO - LL** Instrument Cal ID: **A0A1404**

CA LUFT DRO (C12-C22)

Curve Fit: **AVERAGE RF**

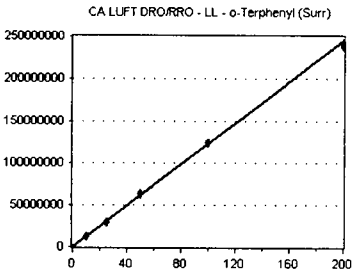


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	1.989938E+07	795975.200	6.00
9K13038-CAL2	40	3.23102E+07	807755.000	6.00
9K13038-CAL3	100	7.916526E+07	791652.600	6.00
9K13038-CAL4	250	1.998293E+08	799317.200	6.00
9K13038-CAL5	500	4.007107E+08	801421.400	6.00
9K13038-CAL6	1000	8.410977E+08	841097.800	6.00
9K13038-CAL7	2500	2.086708E+09	834683.200	6.00
9K13038-CAL8	5000	4.155971E+09	831194.200	6.00

AVE RF **812887.100** RF RSD **2.41** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

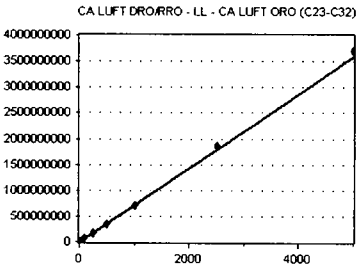


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

CA LUFT ORO (C23-C32)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	2.852809E+07	713202.300	7.50
0A13043-CAL2	80	5.412484E+07	676560.500	7.50
0A13043-CAL3	250	1.814625E+08	725850.000	7.50
0A13043-CAL4	500	3.493351E+08	698670.200	7.50
0A13043-CAL5	1000	7.19387E+08	719387.000	7.50
0A13043-CAL6	2500	1.859173E+09	743669.200	7.50
0A13043-CAL7	5000	3.697341E+09	739468.200	7.50

AVE RF **716686.800** RF RSD **3.26** AVE RT **7.50**

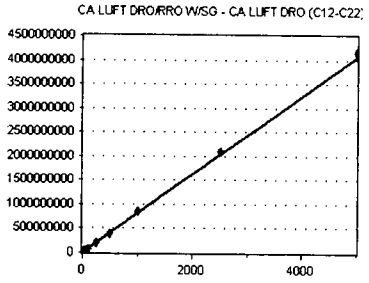
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **CA LUFT DRO/RRO W/SG** Instrument Cal ID: **A0A1404**

CA LUFT DRO (C12-C22)

Curve Fit: **AVERAGE RF**

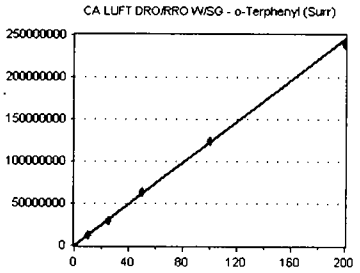


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	1.989938E+07	795975.200	6.00
9K13038-CAL2	40	3.23102E+07	807755.000	6.00
9K13038-CAL3	100	7.916526E+07	791652.600	6.00
9K13038-CAL4	250	1.998293E+08	799317.200	6.00
9K13038-CAL5	500	4.007107E+08	801421.400	6.00
9K13038-CAL6	1000	8.410977E+08	841097.800	6.00
9K13038-CAL7	2500	2.086708E+09	834683.200	6.00
9K13038-CAL8	5000	4.155971E+09	831194.200	6.00

AVE RF **812887.100** RF RSD **2.41** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

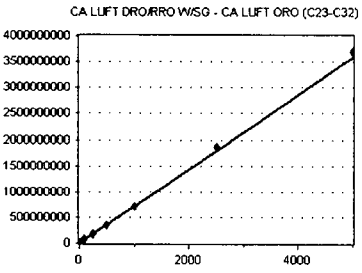


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

CA LUFT ORO (C23-C32)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	2.852809E+07	713202.300	7.50
0A13043-CAL2	80	5.412484E+07	676560.500	7.50
0A13043-CAL3	250	1.814625E+08	725850.000	7.50
0A13043-CAL4	500	3.493351E+08	698670.200	7.50
0A13043-CAL5	1000	7.19387E+08	719387.000	7.50
0A13043-CAL6	2500	1.859173E+09	743669.200	7.50
0A13043-CAL7	5000	3.697341E+09	739468.200	7.50

AVE RF **716686.800** RF RSD **3.26** AVE RT **7.50**

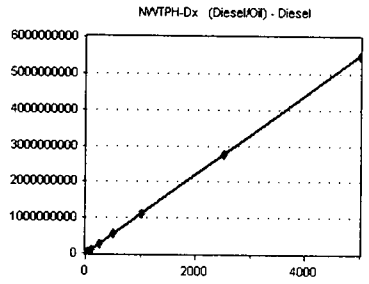
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **NWTPH-Dx (Diesel/Oil)** Instrument Cal ID: **A0A1404**

Diesel

Curve Fit: **AVERAGE RF**

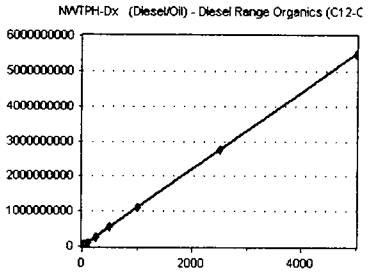


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

Diesel Range Organics (C12-C24)

Curve Fit: **AVERAGE RF**

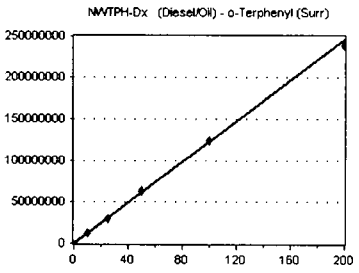


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

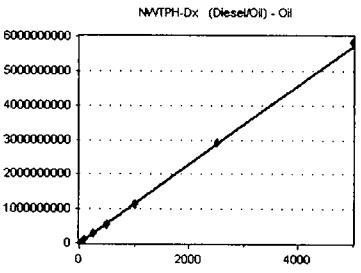


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	4.710398E+07	1177600.000	9.00
0A13043-CAL2	80	8.962548E+07	1120319.000	9.00
0A13043-CAL3	250	2.867732E+08	1147093.000	9.00
0A13043-CAL4	500	5.463687E+08	1092737.000	9.00
0A13043-CAL5	1000	1.129123E+09	1129123.000	9.00
0A13043-CAL6	2500	2.922946E+09	1169178.000	9.00
0A13043-CAL7	5000	5.85314E+09	1170628.000	9.00

AVE RF **1143811.000** RF RSD **2.74** AVE RT **9.00**

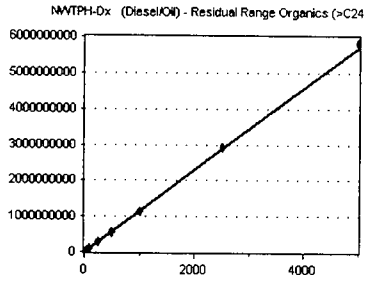
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **NWTPH-Dx (Diesel/Oil)** Instrument Cal ID: **A0A1404**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	4.710398E+07	1177600.000	9.00
0A13043-CAL2	80	8.962548E+07	1120319.000	9.00
0A13043-CAL3	250	2.867732E+08	1147093.000	9.00
0A13043-CAL4	500	5.463687E+08	1092737.000	9.00
0A13043-CAL5	1000	1.129123E+09	1129123.000	9.00
0A13043-CAL6	2500	2.922946E+09	1169178.000	9.00
0A13043-CAL7	5000	5.85314E+09	1170628.000	9.00

AVE RF **1143811.000** RF RSD **2.74** AVE RT **9.00**

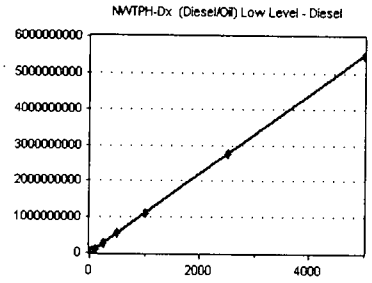
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **NWTPH-Dx (Diesel/Oil) Low** Instrument Cal ID: **A0A1404**

Diesel

Curve Fit: **AVERAGE RF**

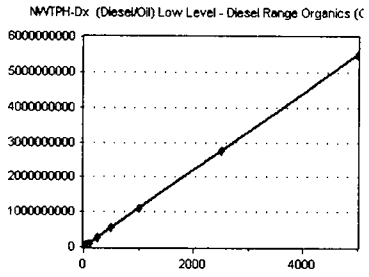


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

Diesel Range Organics (C12-C24)

Curve Fit: **AVERAGE RF**

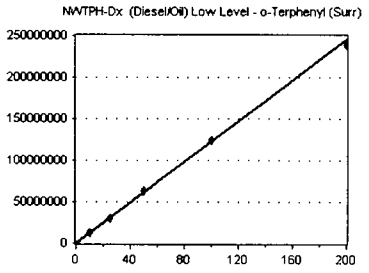


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

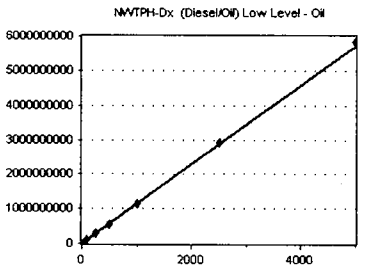


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	4.710398E+07	1177600.000	9.00
0A13043-CAL2	80	8.962548E+07	1120319.000	9.00
0A13043-CAL3	250	2.867732E+08	1147093.000	9.00
0A13043-CAL4	500	5.463687E+08	1092737.000	9.00
0A13043-CAL5	1000	1.129123E+09	1129123.000	9.00
0A13043-CAL6	2500	2.922946E+09	1169178.000	9.00
0A13043-CAL7	5000	5.85314E+09	1170628.000	9.00

AVE RF **1143811.000** RF RSD **2.74** AVE RT **9.00**

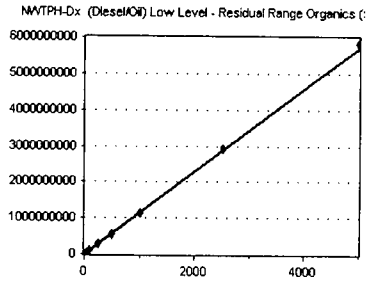
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **NWTPH-Dx (Diesel/Oil) Low** Instrument Cal ID: **A0A1404**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	4.710398E+07	1177600.000	9.00
0A13043-CAL2	80	8.962548E+07	1120319.000	9.00
0A13043-CAL3	250	2.867732E+08	1147093.000	9.00
0A13043-CAL4	500	5.463687E+08	1092737.000	9.00
0A13043-CAL5	1000	1.129123E+09	1129123.000	9.00
0A13043-CAL6	2500	2.922946E+09	1169178.000	9.00
0A13043-CAL7	5000	5.85314E+09	1170628.000	9.00

AVE RF **1143811.000** RF RSD **2.74** AVE RT **9.00**

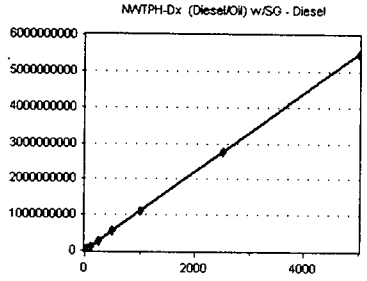
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S** Instrument Cal ID: **A0A1404**

Diesel

Curve Fit: **AVERAGE RF**

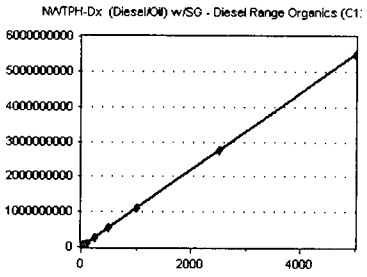


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

Diesel Range Organics (C12-C24

Curve Fit: **AVERAGE RF**

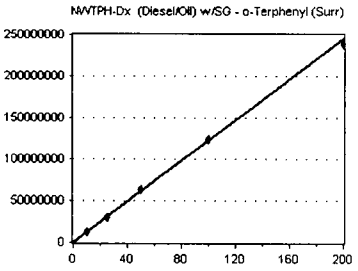


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

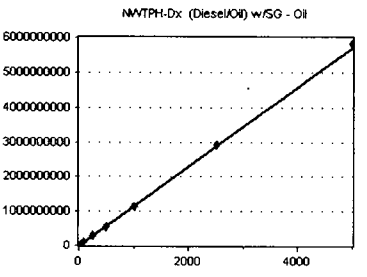


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	4.710398E+07	1177600.000	9.00
0A13043-CAL2	80	8.962548E+07	1120319.000	9.00
0A13043-CAL3	250	2.867732E+08	1147093.000	9.00
0A13043-CAL4	500	5.463687E+08	1092737.000	9.00
0A13043-CAL5	1000	1.129123E+09	1129123.000	9.00
0A13043-CAL6	2500	2.922946E+09	1169178.000	9.00
0A13043-CAL7	5000	5.85314E+09	1170628.000	9.00

AVE RF **1143811.000** RF RSD **2.74** AVE RT **9.00**

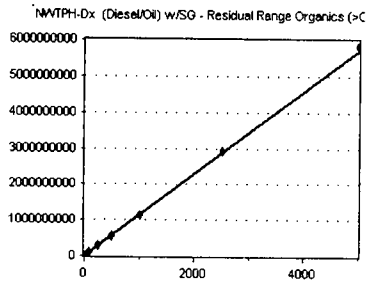
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S** Instrument Cal ID: **A0A1404**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	4.710398E+07	1177600.000	9.00
0A13043-CAL2	80	8.962548E+07	1120319.000	9.00
0A13043-CAL3	250	2.867732E+08	1147093.000	9.00
0A13043-CAL4	500	5.463687E+08	1092737.000	9.00
0A13043-CAL5	1000	1.129123E+09	1129123.000	9.00
0A13043-CAL6	2500	2.922946E+09	1169178.000	9.00
0A13043-CAL7	5000	5.85314E+09	1170628.000	9.00

AVE RF **1143811.000** RF RSD **2.74** AVE RT **9.00**

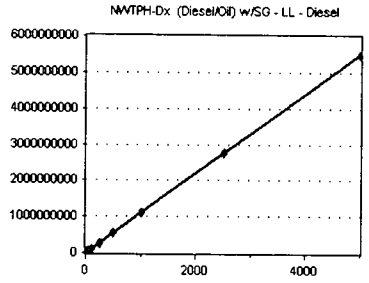
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S(** Instrument Cal ID: **A0A1404**

Diesel

Curve Fit: **AVERAGE RF**

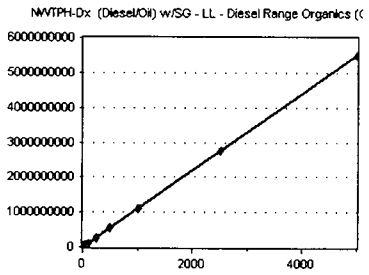


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

Diesel Range Organics (C12-C24

Curve Fit: **AVERAGE RF**

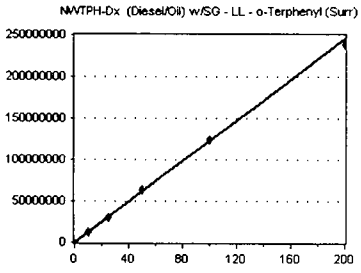


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

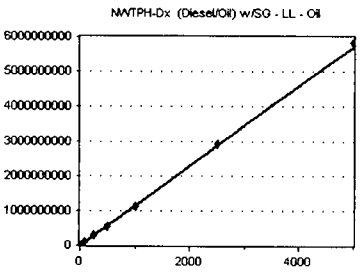


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	4.710398E+07	1177600.000	9.00
0A13043-CAL2	80	8.962548E+07	1120319.000	9.00
0A13043-CAL3	250	2.867732E+08	1147093.000	9.00
0A13043-CAL4	500	5.463687E+08	1092737.000	9.00
0A13043-CAL5	1000	1.129123E+09	1129123.000	9.00
0A13043-CAL6	2500	2.922946E+09	1169178.000	9.00
0A13043-CAL7	5000	5.85314E+09	1170628.000	9.00

AVE RF **1143811.000** RF RSD **2.74** AVE RT **9.00**

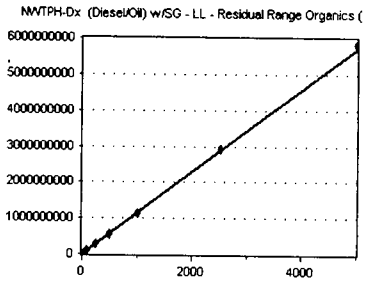
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S(** Instrument Cal ID: **A0A1404**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	4.710398E+07	1177600.000	9.00
0A13043-CAL2	80	8.962548E+07	1120319.000	9.00
0A13043-CAL3	250	2.867732E+08	1147093.000	9.00
0A13043-CAL4	500	5.463687E+08	1092737.000	9.00
0A13043-CAL5	1000	1.129123E+09	1129123.000	9.00
0A13043-CAL6	2500	2.922946E+09	1169178.000	9.00
0A13043-CAL7	5000	5.85314E+09	1170628.000	9.00

AVE RF **1143811.000** RF RSD **2.74** AVE RT **9.00**

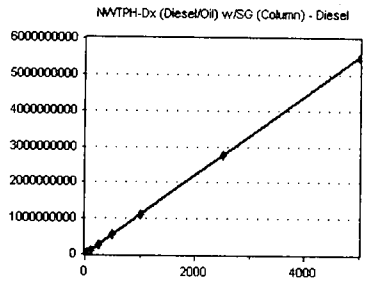
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **NWTPH-Dx (Diesel/Oil) w/SC** Instrument Cal ID: **A0A1404**

Diesel

Curve Fit: **AVERAGE RF**

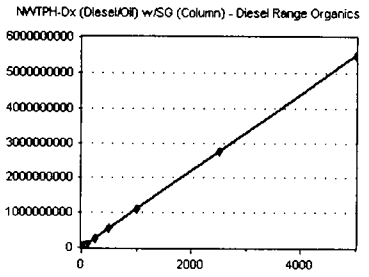


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

Diesel Range Organics (C12-C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
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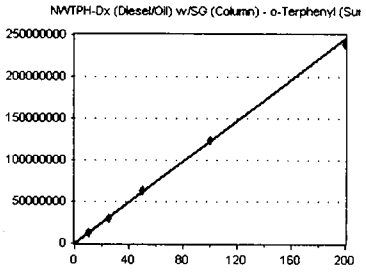
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

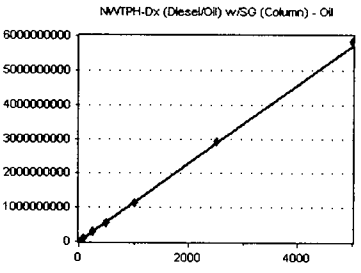


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	4.710398E+07	1177600.000	9.00
0A13043-CAL2	80	8.962548E+07	1120319.000	9.00
0A13043-CAL3	250	2.867732E+08	1147093.000	9.00
0A13043-CAL4	500	5.463687E+08	1092737.000	9.00
0A13043-CAL5	1000	1.129123E+09	1129123.000	9.00
0A13043-CAL6	2500	2.922946E+09	1169178.000	9.00
0A13043-CAL7	5000	5.85314E+09	1170628.000	9.00

AVE RF **1143811.000** RF RSD **2.74** AVE RT **9.00**

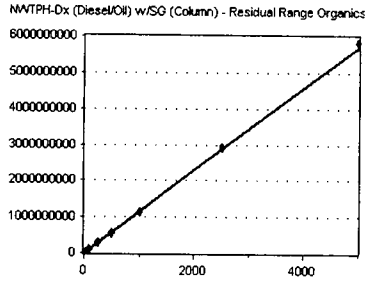
Element Calibration Review Sheet

Calibration ID: **A0A1404** Instrument: **DUALFID4R** Calibration Date: **01/14/2020**

Analysis: **NWTPH-Dx (Diesel/Oil) w/SC** Instrument Cal ID: **A0A1404**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A13043-CAL1	40	4.710398E+07	1177600.000	9.00
0A13043-CAL2	80	8.962548E+07	1120319.000	9.00
0A13043-CAL3	250	2.867732E+08	1147093.000	9.00
0A13043-CAL4	500	5.463687E+08	1092737.000	9.00
0A13043-CAL5	1000	1.129123E+09	1129123.000	9.00
0A13043-CAL6	2500	2.922946E+09	1169178.000	9.00
0A13043-CAL7	5000	5.85314E+09	1170628.000	9.00

AVE RF **1143811.000** RF RSD **2.74** AVE RT **9.00**

Calibration Status Report HP G1530A

Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:59:56 2020
Response via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	D1	25.00	0.00	G:\4\DATA\2019-11\9K13038\4R111305.D
2	D2	40.00	0.00	G:\4\DATA\2019-11\9K13038\4R111306.D
3	D3	100.00	0.00	G:\4\DATA\2019-11\9K13038\4R111307.D
4	D4	250.00	0.00	G:\4\DATA\2019-11\9K13038\4R111308.D
5	D5	500.00	0.00	G:\4\DATA\2019-11\9K13038\4R111309.D
6	D6	1000.00	0.00	G:\4\DATA\2019-11\9K13038\4R111310.D
7	D7	2500.00	0.00	G:\4\DATA\2019-11\9K13038\4R111311.D
8	D8	5000.00	0.00	G:\4\DATA\2019-11\9K13038\4R111312.D
9	S1	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111313.D
10	S2	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111314.D
11	S3	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111315.D
12	S4	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111316.D
13	S5	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111317.D
14	O1	-1.00	0.00	G:\4\DATA\2020-01\0A13043\4R011304.D
15	O2	-1.00	0.00	G:\4\DATA\2020-01\0A13043\4R011305.D
16	O3	-1.00	0.00	G:\4\DATA\2020-01\0A13043\4R011306.D
17	O4	-1.00	0.00	G:\4\DATA\2020-01\0A13043\4R011307.D
18	O5	-1.00	0.00	G:\4\DATA\2020-01\0A13043\4R011308.D
19	O6	-1.00	0.00	G:\4\DATA\2020-01\0A13043\4R011309.D
20	O7	-1.00	0.00	G:\4\DATA\2020-01\0A13043\4R011311.D

AM 1.14.20

#	ID	Update Time	Quant Time	Acquisition Time
1	D1	Nov 14 07:25 2019	Nov 14 07:09 2019	13 Nov 2019 11:21
2	D2	Nov 14 07:25 2019	Nov 14 07:11 2019	13 Nov 2019 11:41
3	D3	Nov 14 07:25 2019	Nov 14 07:10 2019	13 Nov 2019 12:01
4	D4	Nov 14 07:26 2019	Nov 14 07:11 2019	13 Nov 2019 12:22
5	D5	Nov 14 07:26 2019	Nov 14 07:11 2019	13 Nov 2019 12:43
6	D6	Nov 14 07:26 2019	Nov 14 07:12 2019	13 Nov 2019 13:04
7	D7	Nov 14 07:26 2019	Nov 14 07:12 2019	13 Nov 2019 13:26
8	D8	Nov 14 07:26 2019	Nov 14 07:12 2019	13 Nov 2019 13:47
9	S1	Nov 14 07:26 2019	Nov 14 07:12 2019	13 Nov 2019 14:09
10	S2	Nov 14 07:26 2019	Nov 14 07:12 2019	13 Nov 2019 14:30
11	S3	Nov 14 07:27 2019	Nov 14 07:12 2019	13 Nov 2019 14:52
12	S4	Nov 14 07:27 2019	Nov 14 07:12 2019	13 Nov 2019 15:12
13	S5	Nov 14 07:27 2019	Nov 14 07:13 2019	13 Nov 2019 15:34
14	O1	Jan 14 09:58 2020	Jan 14 09:53 2020	13 Jan 2020 18:08
15	O2	Jan 14 09:59 2020	Jan 14 09:53 2020	13 Jan 2020 18:29
16	O3	Jan 14 09:59 2020	Jan 14 09:53 2020	13 Jan 2020 21:14
17	O4	Jan 14 09:59 2020	Jan 14 09:53 2020	13 Jan 2020 21:34
18	O5	Jan 14 09:59 2020	Jan 14 09:54 2020	13 Jan 2020 21:55
19	O6	Jan 14 09:59 2020	Jan 14 09:54 2020	13 Jan 2020 22:16
20	O7	Jan 14 09:59 2020	Jan 14 09:55 2020	13 Jan 2020 22:57

4R00113D.M Tue Jan 14 10:00:28 2020 SV-GCMS3

Response Factor Report HP G1530A

Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:59:56 2020

AoA1404

Calibration Files
D1 =4R111305.D D2 =4R111306.D D3 =4R111307.D
D4 =4R111308.D D5 =4R111309.D D6 =4R111310.D

		Compound	D1	D2	D3	D4	D5	D6	Avg	%RSD
1)	H	Mineral Oil	1.137	1.150	1.079	1.080	1.072	1.115	1.104 E6	2.56
2)	H	Diesel	1.137	1.150	1.079	1.080	1.072	1.115	1.104 E6	2.56
3)	H	DRO(C12-C24)	1.137	1.150	1.079	1.080	1.072	1.115	1.104 E6	2.56
4)	H	CA LUFT DRO (C12-C2	7.960	8.078	7.917	7.993	8.014	8.411	8.129 E5	2.41
5)	H	TPHd (C10-C25)	1.012	1.040	0.997	1.008	1.005	1.049	1.023 E6	1.94
6)	S	o-Terphenyl							1.227 E6	2.67
7)	H	Oil							1.144 E6	2.74
8)	H	RRO (C24-C40)							1.144 E6	2.74
9)	H	TPHmo (C25-C36)							7.116 E5	3.72
10)	H	CA LUFT ORO (C23-C3							7.167 E5	3.26

BA 1.14.20

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

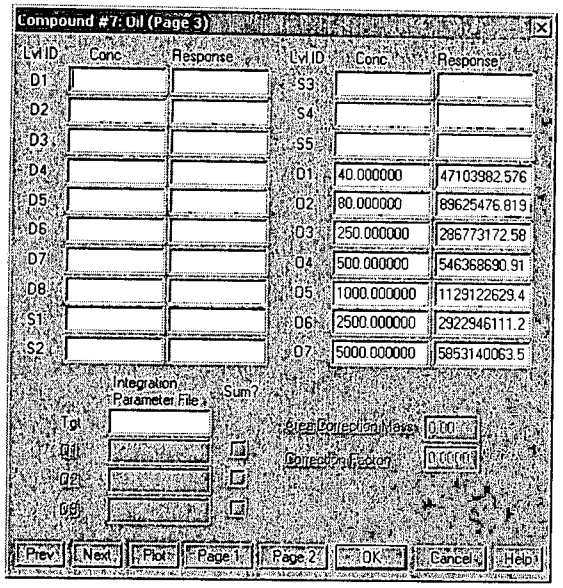
Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:59:56 2020
Response via : Initial Calibration
Total Cpnds : 10

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	H	Mineral Oil	6.00	1.000	A	A	A
2	H	Diesel	6.00	1.000	A	A	A
3	H	DRO(C12-C24)	6.00	1.000	A	A	A
4	H	CA LUFT DRO (C12-C22)	6.00	1.000	A	A	A
5	H	TPHd (C10-C25)	6.00	1.000	A	A	A
6	S	o-Terphenyl	6.36	1.000	A	A	R
7	H	Oil	9.00	1.000	A	A	A
8	H	RRO (C24-C40)	9.00	1.000	A	A	A
9	H	TPHmo (C25-C36)	8.00	1.000	A	A	A
10	H	CA LUFT ORO (C23-C32)	7.50	1.000	A	A	A

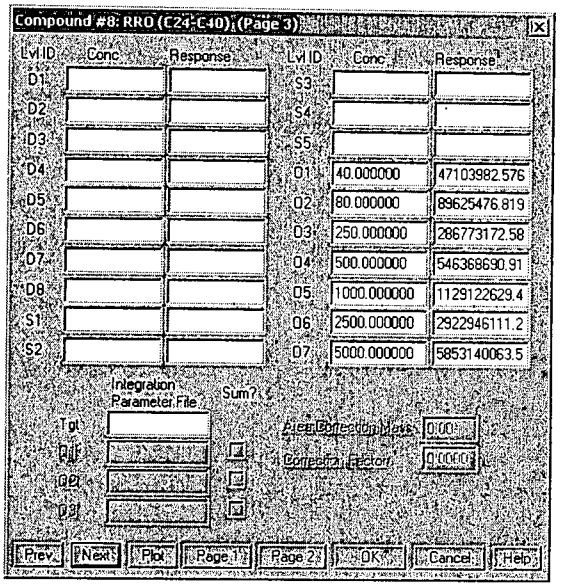
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

4R00113D.M Tue Jan 14 10:00:22 2020 SV-GCMS3

AA 1.14.20 ✓


Compound #7: Oil (Page 3)
Lvl ID
Conc
Response
D1
D2
D3
D4
D5
D6
D7
D8
S1
S2
S3
S4
S5
O1 40.000000 47103982.576
O2 80.000000 89625476.819
O3 250.000000 286773172.58
O4 500.000000 546368690.91
O5 1000.000000 1129122629.4
O6 2500.000000 2922946111.2
O7 5000.000000 5853140063.5
Integration Parameter File
Sum?
Tgt
Area Correction Mass 0.00
Correction Factor 0.00000
Prev
Next
Plot
Page 1
Page 2
OK
Cancel
Help

RM 1.14.20


Compound #8: RRO (C24-C40) (Page 3)
Lvl ID
Conc
Response
D1
D2
D3
D4
D5
D6
D7
D8
S1
S2
S3
S4
S5
O1 40.000000 47103982.576
O2 80.000000 89625476.819
O3 250.000000 286773172.58
O4 500.000000 546368690.91
O5 1000.000000 1129122629.4
O6 2500.000000 2922946111.2
O7 5000.000000 5853140063.5
Integration Parameter File
Sum?
Tgt
Prev
Next
Plot
Page 1
Page 2
OK
Cancel
Help

✓

✓ RM 1.14.20

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011303.D
Acq On : 13 Jan 2020 17:46
Sample : 0A13043-ICB1
Misc :
IntFile : SUR.E
Quant Time: Jan 14 10:16 2020 Quant Results File: 4R00113D.RES

Vial: 100
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:59:56 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	3925064	3.555	ug/ml
2)	H	Diesel	6.00	3925064	3.555	ug/ml
3)	H	DRO(C12-C24)	6.00	2022279	1.832	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	1850224	2.276	ug/ml
5)	H	TPHd (C10-C25)	6.00	2886844	2.821	ug/ml
7)	H	Oil	9.00	6992723	6.114	ug/ml
8)	H	RRO (C24-C40)	9.00	6992723	6.114	ug/ml
9)	H	TPHmo (C25-C36)	8.00	911370	1.281	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	644552	0.899	ug/ml

<1/2 RL

RM
1.14.20

(f)=RT Delta > 1/2 Window (m)=manual int.

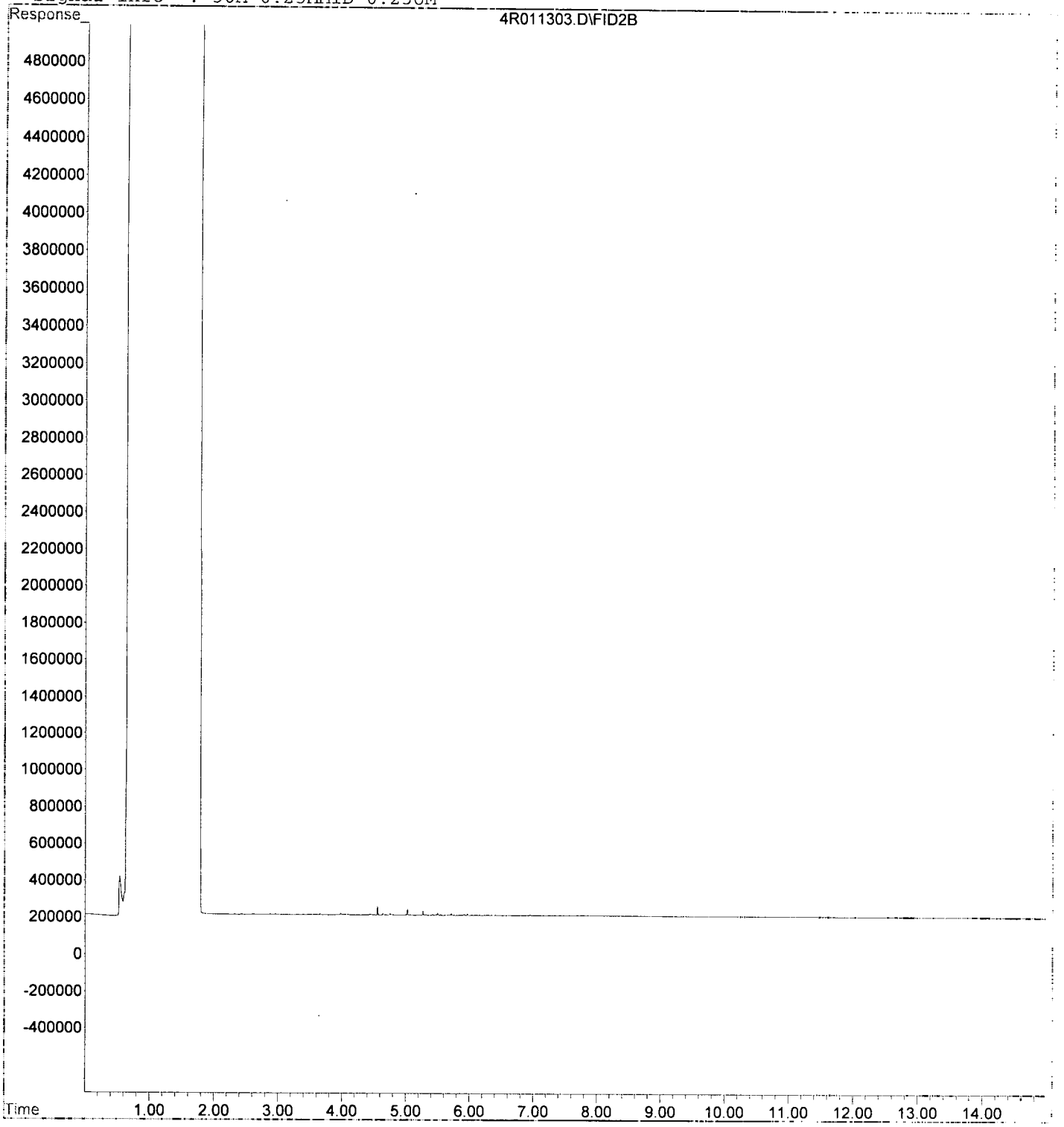
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011303.D
Acq On : 13 Jan 2020 17:46
Sample : 0A13043-ICB1
Misc :
IntFile : SUR.E
Quant Time: Jan 14 10:16 2020 Quant Results File: 4R00113D.RES

Vial: 100
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:59:56 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2020-01\0A13043\4R011313.D
Acq On : 13 Jan 2020 23:39
Sample : 0A13043-ICV1
Misc :
IntFile : SUR.E

Vial: 58
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:59:56 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	H	Mineral Oil	-1.000	703.912	0.0	90	0.00
2	H	Diesel	-1.000	703.912	0.0	90	0.00
3	H	DRO(C12-C24)	-1.000	168.181	0.0	92	0.00
4	H	CA LUFT DRO (C12-C22)	-1.000	78.264	0.0	93	0.00
5	H	TPHd (C10-C25)	-1.000	261.491	0.0	91	0.00
7	H	Oil	1000.000	887.118	11.3	90	0.00
8	H	RRO (C24-C40)	1000.000	887.118	11.3	90	0.00
9	H	TPHmo (C25-C36)	1000.000	902.979	9.7	90	0.00
10	H	CA LUFT ORO (C23-C32)	1000.000	901.459	9.9	90	0.00

AM 1.14.20

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

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011313.D
Acq On : 13 Jan 2020 23:39
Sample : 0A13043-ICV1
Misc :
IntFile : SUR.E
Quant Time: Jan 14 10:17 2020 Quant Results File: 4R00113D.RES

Vial: 58
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:59:56 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	777179881	703.912	ug/ml
2)	H	Diesel	6.00	777179881	703.912	ug/ml
3)	H	DRO(C12-C24)	6.00	185686142	168.181	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	63619423	78.264	ug/ml
5)	H	TPHd (C10-C25)	6.00	267630897	261.491	ug/ml
7)	H	Oil	9.00	1014695403	887.118	ug/ml
8)	H	RRO (C24-C40)	9.00	1014695403	887.118	ug/ml
9)	H	TPHmo (C25-C36)	8.00	642595072	902.979	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	646063792	901.459	ug/ml

≥ 89%

1.14.20

(f)=RT Delta > 1/2 window (m)=manual int.

4R011313.D 4R00113D.M Tue Jan 14 10:17:20 2020 SV-GCMS3

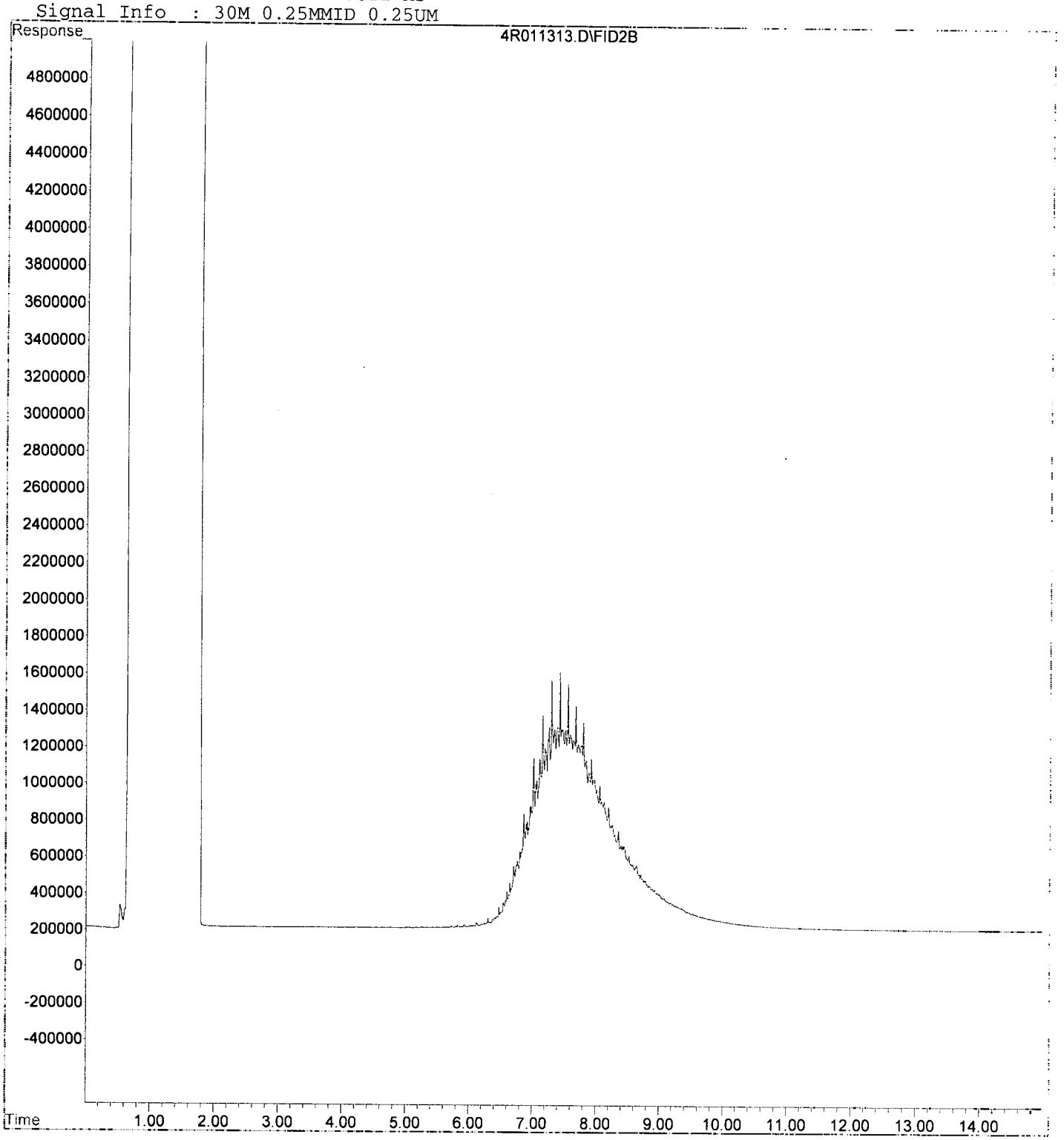
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011313.D
Acq On : 13 Jan 2020 23:39
Sample : 0A13043-ICV1
Misc :
IntFile : SUR.E
Quant Time: Jan 14 10:17 2020 Quant Results File: 4R00113D.RES

Vial: 58
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:59:56 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Sequence: C:\HPCHEM\4\SEQUENCE\0A13042.S

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 99	DCM	A4F60831	1	Sample		
2	Vial 94	0A13042-RES1	A4F60831	1	Sample		
3	Vial 1	0A13042-CCV1	A4F60831	1	Sample		
4	Vial 2	0A13042-CCV2	A4F60831	1	Sample		
5	Vial 99	0A13042-CCB1	A4F60831	1	Sample		
6	Vial 3	0010344-BLK1	A4F60831	1	Sample		
7	Vial 4	0010344-BS1	A4F60831	1	Sample		
8	Vial 5	0010344-BSD1	A4F60831	1	Sample		
9	Vial 6	A0A0177-02	A4F60831	1	Sample		
10	Vial 7	A0A0177-03	A4F60831	1	Sample		
11	Vial 8	A0A0177-04	A4F60831	1	Sample		
12	Vial 9	A0A0177-05	A4F60831	1	Sample		
13	Vial 99	0A13042-IBL1	A4F60831	1	Sample		
14	Vial 10	0010366-BLK1	A4F60831	1	Sample		
15	Vial 11	0010366-BS1	A4F60831	1	Sample		
16	Vial 12	A0A0288-01	A4F60831	1	Sample		
17	Vial 13	A0A0288-02	A4F60831	1	Sample		
18	Vial 99	0A13042-IBL2	A4F60831	1	Sample		
19	Vial 14	0A13042-CCV3	A4F60831	1	Sample		
20	Vial 15	0A13042-CCV4	A4F60831	1	Sample		
21	Vial 99	DCM	A4F60831	1	Sample		

AR 1.14.20

Sequence Table (Back Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 100	DCM	A4F60831	1	Sample		
2	Vial 95	0A13043-RES1	A4F60831	1	Sample		
3	Vial 100	0A13043-ICB1	A4F60831	1	Sample		
4	Vial 51	0A13043-CAL1	A4F60831	1	Sample		
5	Vial 52	0A13043-CAL2	A4F60831	1	Sample		
6	Vial 53	0A13043-CAL3	A4F60831	1	Sample		
7	Vial 54	0A13043-CAL4	A4F60831	1	Sample		
8	Vial 55	0A13043-CAL5	A4F60831	1	Sample		
9	Vial 56	0A13043-CAL6	A4F60831	1	Sample		
10	Vial 100	0A13043-IBL1	A4F60831	1	Sample		
11	Vial 57	0A13043-CAL7	A4F60831	1	Sample		
12	Vial 100	0A13043-IBL2	A4F60831	1	Sample		
13	Vial 58	0A13043-ICV1	A4F60831	1	Sample		
14	Vial 100	DCM	A4F60831	1	Sample		
15	Vial 100	DCM	A4F60831	1	Sample		
16	Vial 100	DCM	A4F60831	1	Sample		
17	Vial 100	DCM	A4F60831	1	Sample		
18	Vial 100	DCM	A4F60831	1	Sample		
19	Vial 100	DCM	A4F60831	1	Sample		
20	Vial 100	DCM	A4F60831	1	Sample		
21	Vial 100	DCM	A4F60831	1	Sample		

AR 1.14.20

Injection Log

Directory: G:\4\DATA\2020-01\0A13043

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	100	4r011301.d	1.	DCM		13 Jan 2020 17:04
2	95	4r011302.d	1.	0A13043-RES1		13 Jan 2020 17:25
3	100	4r011303.d	1.	0A13043-ICB1		13 Jan 2020 17:46
4	51	4r011304.d	1.	0A13043-CAL1		13 Jan 2020 18:08
5	52	4r011305.d	1.	0A13043-CAL2		13 Jan 2020 18:29
6	53	4r011306.d	1.	0A13043-CAL3		13 Jan 2020 21:14
7	54	4r011307.d	1.	0A13043-CAL4		13 Jan 2020 21:34
8	55	4r011308.d	1.	0A13043-CAL5		13 Jan 2020 21:55
9	56	4r011309.d	1.	0A13043-CAL6		13 Jan 2020 22:16
10	100	4r011310.d	1.	0A13043-IBL1		13 Jan 2020 22:36
11	57	4r011311.d	1.	0A13043-CAL7		13 Jan 2020 22:57
12	100	4r011312.d	1.	0A13043-IBL2		13 Jan 2020 23:18
13	58	4r011313.d	1.	0A13043-ICV1		13 Jan 2020 23:39
14	100	4r011314.d	1.	DCM		13 Jan 2020 23:59
15	100	4r011315.d	1.	DCM		14 Jan 2020 00:20
16	100	4r011316.d	1.	DCM		14 Jan 2020 00:40
17	100	4r011317.d	1.	DCM		14 Jan 2020 01:00
18	100	4r011318.d	1.	DCM		14 Jan 2020 01:21
19	100	4r011319.d	1.	DCM		14 Jan 2020 01:42
20	100	4r011320.d	1.	DCM		14 Jan 2020 02:02
21	100	4r011321.d	1.	DCM		14 Jan 2020 02:23

RM 1.14.20

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011302.D Vial: 95
Acq On : 13 Jan 2020 17:25 Operator: BLL
Sample : 0A13043-RES1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:52 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	288163092	260.997	ug/ml
2)	H	Diesel	6.00	288163092	260.997	ug/ml
3)	H	DRO(C12-C24)	6.00	241604364	218.827	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	209398421	257.598	ug/ml
5)	H	TPHd (C10-C25)	6.00	251403298	245.636	ug/ml
7)	H	Oil	9.00	179593840	172.005	ug/ml
8)	H	RRO (C24-C40)	9.00	179593840	172.005	ug/ml
9)	H	TPHmo (C25-C36)	8.00	50026185	75.583	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	68181519	103.734	ug/ml

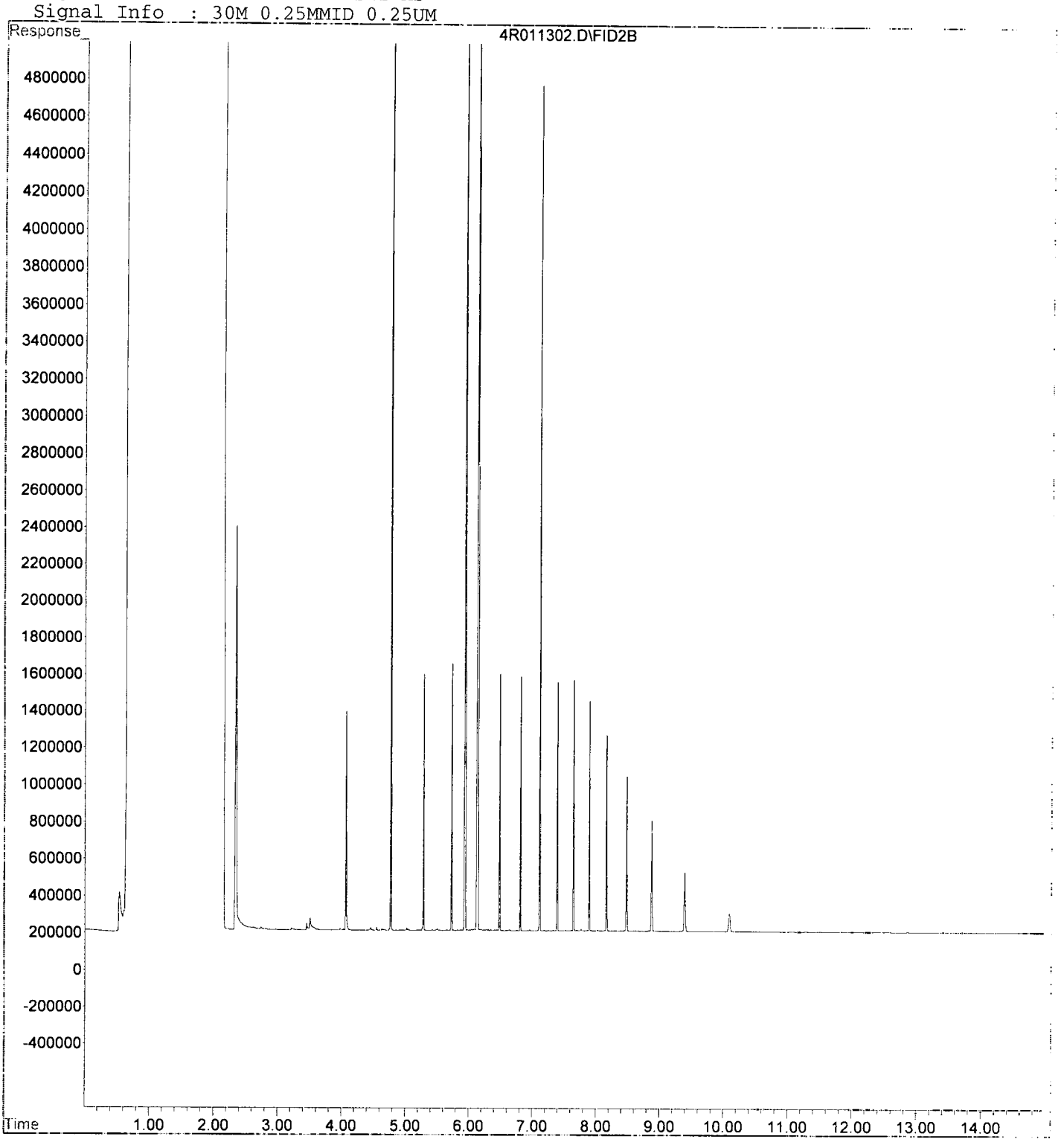
Quantitation Report (Not Reviewed)

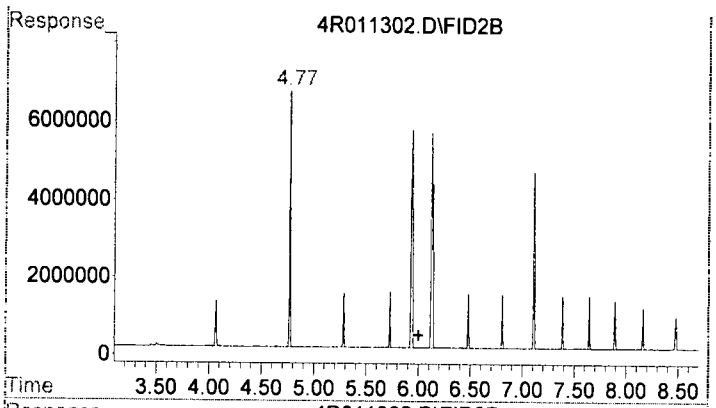
Data File : G:\4\DATA\2020-01\0A13043\4R011302.D
Acq On : 13 Jan 2020 17:25
Sample : 0A13043-RES1
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:52 2020 Quant Results File: 4R00113D.RES

Vial: 95
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

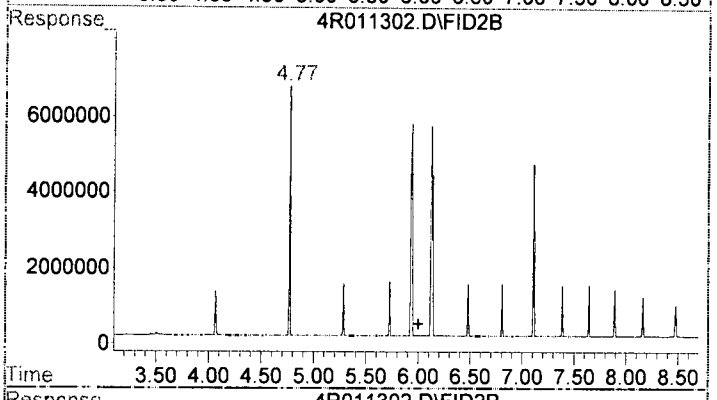
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





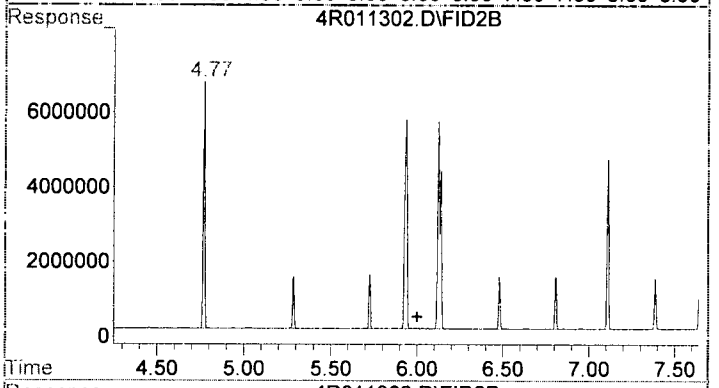
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 288163092
Conc: 261.00 ug/ml m



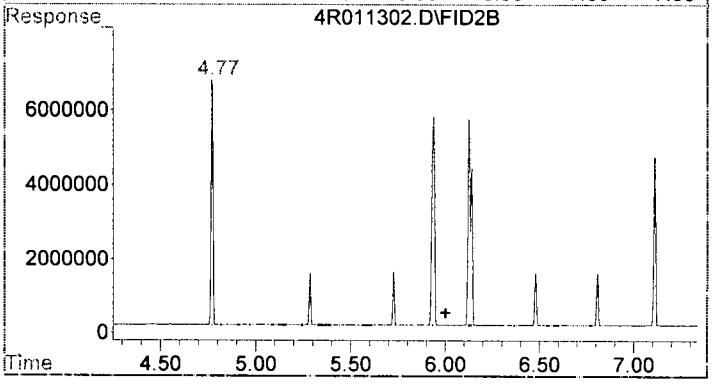
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 288163092
Conc: 261.00 ug/ml m



#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 241604364
Conc: 218.83 ug/ml m

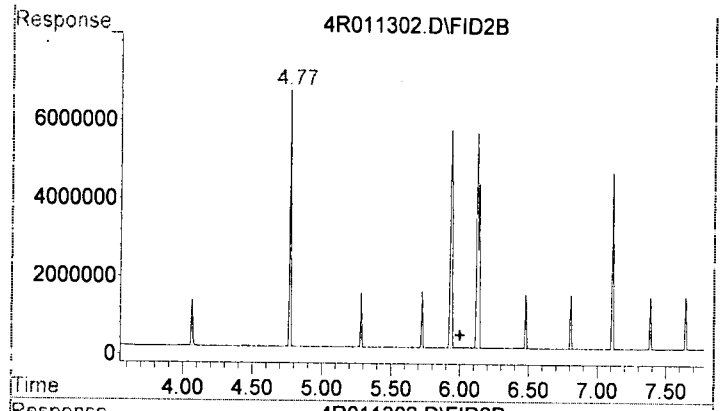


#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 209398421
Conc: 257.60 ug/ml m

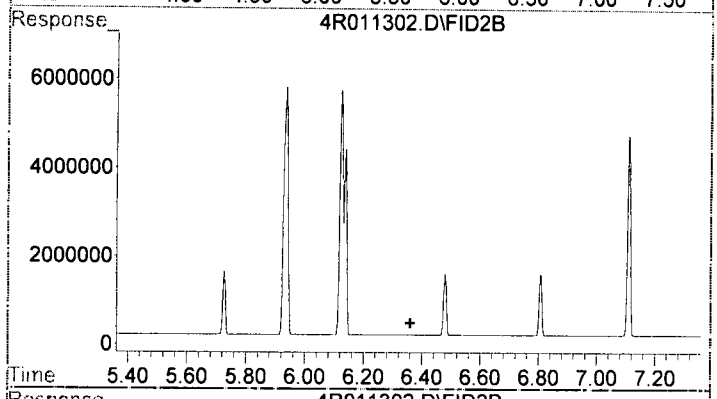
✓

✓ AM 1.14.20



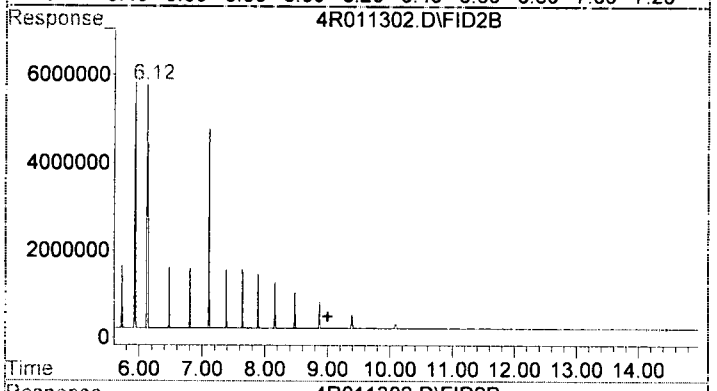
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 251403298
Conc: 245.64 ug/ml m



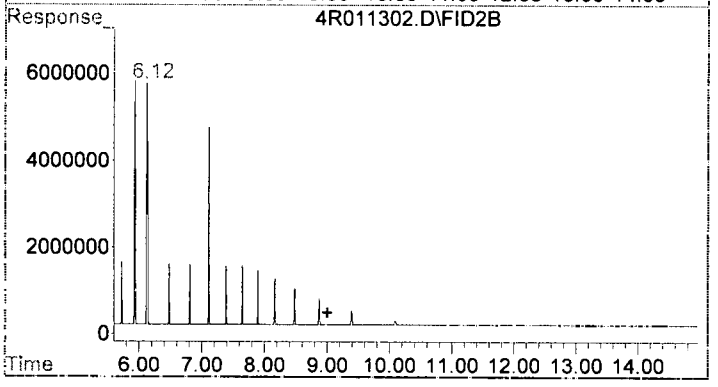
#6 o-Terphenyl

R.T.: 0.000 min
Exp R.T. : 6.360 min
Response: 0
Conc: N.D.



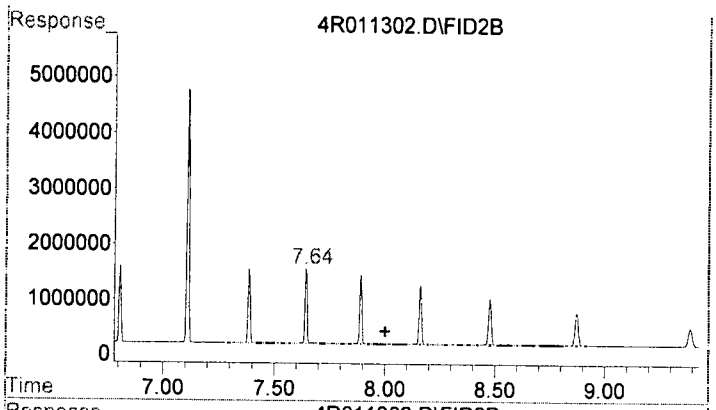
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 179593840
Conc: 172.00 ug/ml m



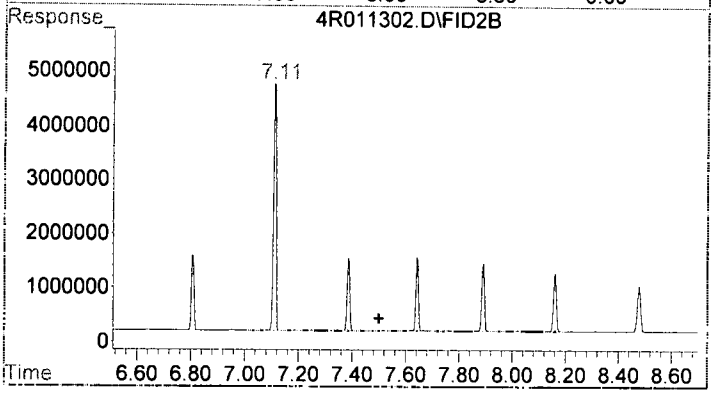
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 179593840
Conc: 172.00 ug/ml m



#9 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 50026185
Conc: 75.58 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.: 7.500 min
Delta R.T.: 0.000 min
Response: 68181519
Conc: 103.73 ug/ml m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011303.D Vial: 100
Acq On : 13 Jan 2020 17:46 Operator: BLL
Sample : 0A13043-ICB1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:52 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	3925064	3.555	ug/ml
2)	H	Diesel	6.00	3925064	3.555	ug/ml
3)	H	DRO(C12-C24)	6.00	2022279	1.832	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	1850224	2.276	ug/ml
5)	H	TPHd (C10-C25)	6.00	2886844	2.821	ug/ml
7)	H	Oil	9.00	6992723	6.697	ug/ml
8)	H	RRO (C24-C40)	9.00	6992723	6.697	ug/ml
9)	H	TPHmo (C25-C36)	8.00	911370	1.377	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	644552	0.981	ug/ml

1.14.20

(f)=RT Delta > 1/2 window (m)=manual int.

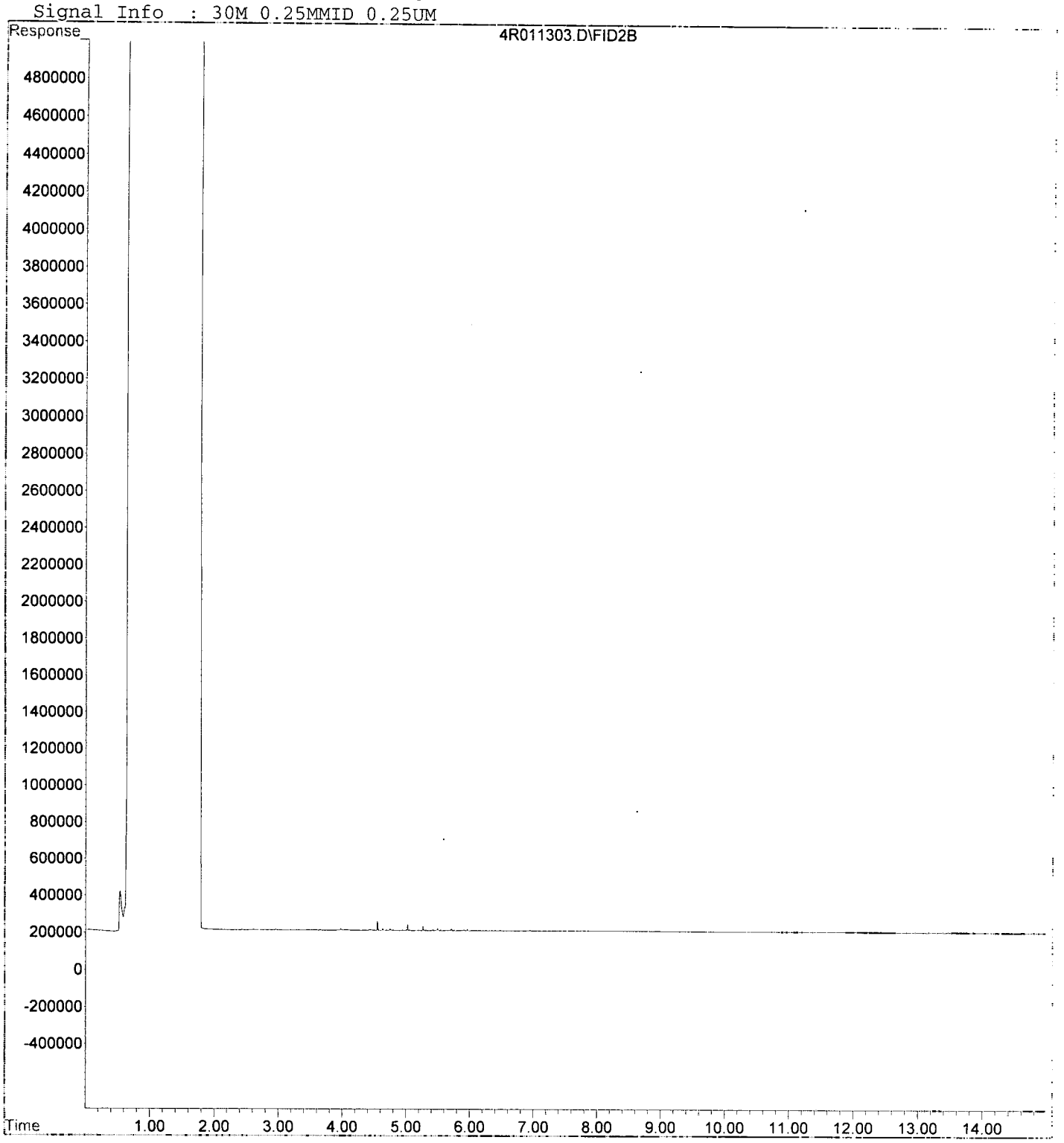
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011303.D
Acq On : 13 Jan 2020 17:46
Sample : 0A13043-ICB1
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:52 2020 Quant Results File: 4R00113D.RES

Vial: 100
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011304.D Vial: 51
Acq On : 13 Jan 2020 18:08 Operator: BLL
Sample : 0A13043-CAL1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:53 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	36480538	33.041	ug/ml
2)	H	Diesel	6.00	36480538	33.041	ug/ml
3)	H	DRO(C12-C24)	6.00	9543100	8.643	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	4149013	5.104	ug/ml
5)	H	TPHd (C10-C25)	6.00	13583990	13.272	ug/ml
7)	H	Oil	9.00	47103983	45.114	ug/ml
8)	H	RRO (C24-C40)	9.00	47103983	45.114	ug/ml
9)	H	TPHmo (C25-C36)	8.00	28132204	42.504	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	28528086	43.404	ug/ml

RL 1.14.20

✓

(f)=RT Delta > 1/2 Window (m)=manual int.

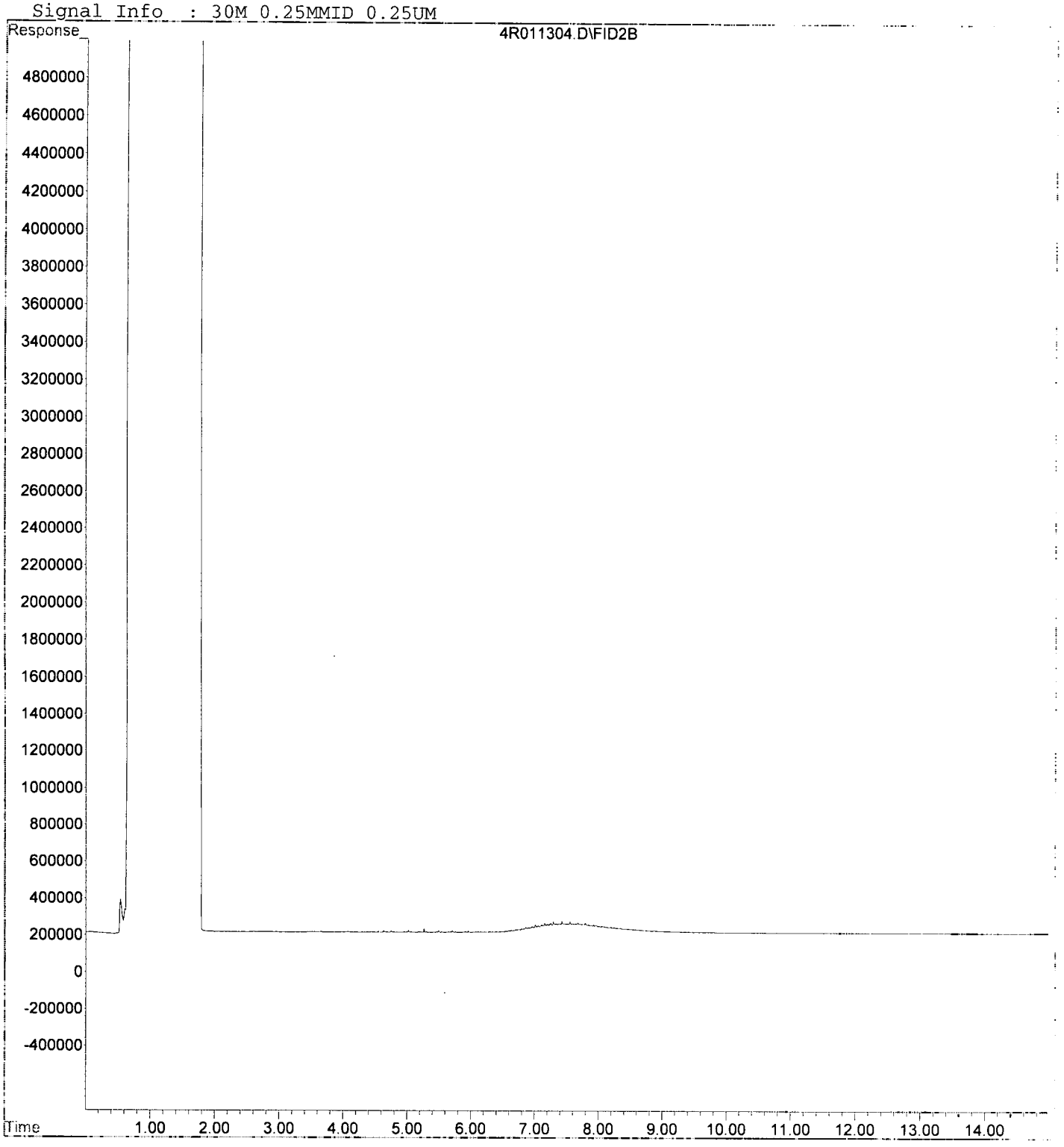
4R011304.D 4R00113D.M Tue Jan 14 09:53:00 2020 SV-GCMS3

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011304.D Vial: 51
Acq On : 13 Jan 2020 18:08 Operator: BLL
Sample : 0A13043-CAL1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:53 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011305.D
Acq On : 13 Jan 2020 18:29
Sample : 0A13043-CAL2
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:53 2020 Quant Results File: 4R00113D.RES

Vial: 52
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	66869932	60.566	ug/ml
2)	H	Diesel	6.00	66869932	60.566	ug/ml
3)	H	DRO(C12-C24)	6.00	16620183	15.053	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	6424085	7.903	ug/ml
5)	H	TPHd (C10-C25)	6.00	23861322	23.314	ug/ml
7)	H	Oil	9.00	89625477	85.838	ug/ml
8)	H	RRO (C24-C40)	9.00	89625477	85.838	ug/ml
9)	H	TPHmo (C25-C36)	8.00	53302433	80.533	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	54124839	82.348	ug/ml

AM 1.14.20

(f)=RT Delta > 1/2 window (m)=manual int.

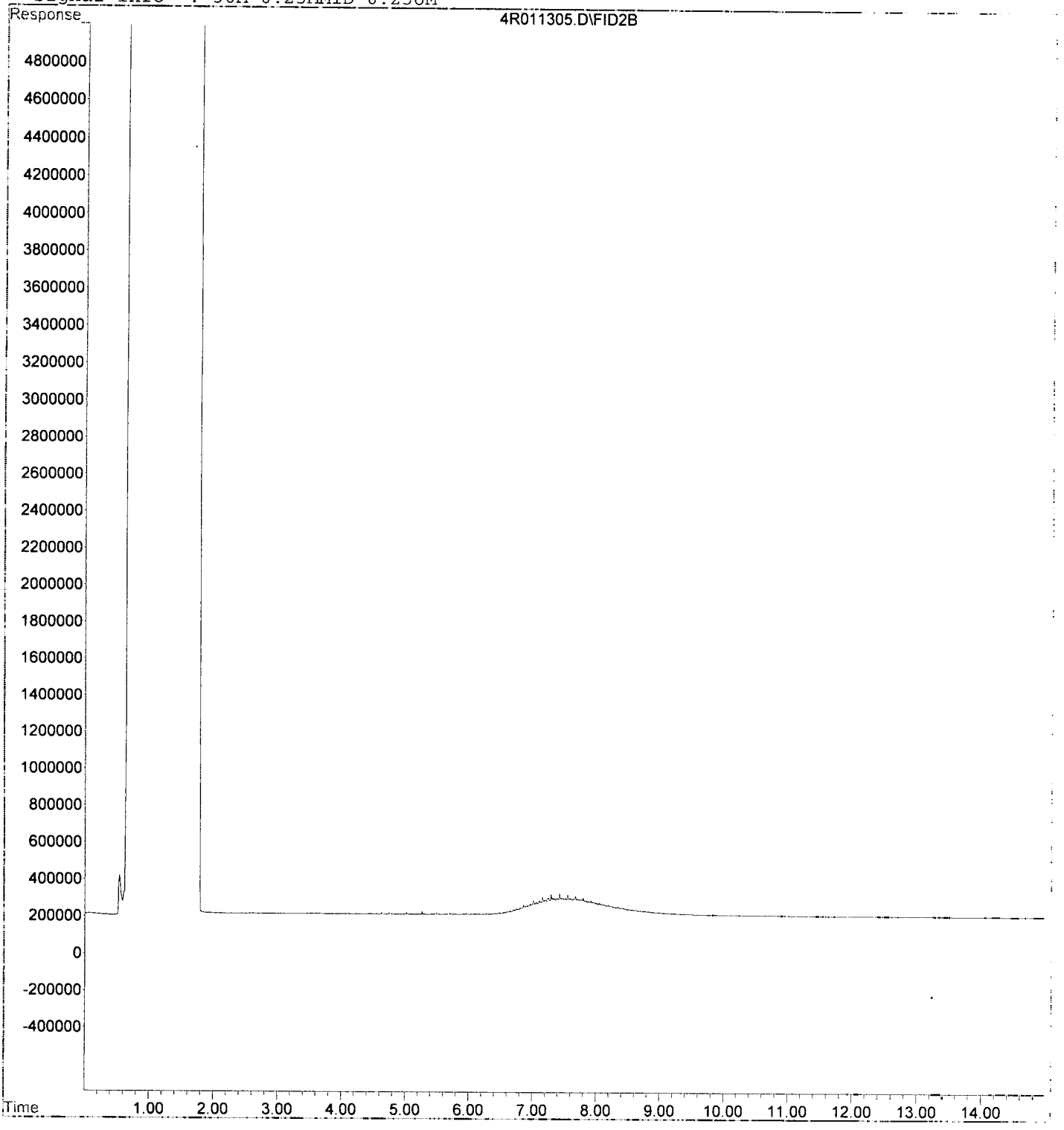
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011305.D
Acq On : 13 Jan 2020 18:29
Sample : 0A13043-CAL2
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:53 2020 Quant Results File: 4R00113D.RES

Vial: 52
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011306.D Vial: 53
Acq On : 13 Jan 2020 21:14 Operator: BLL
Sample : 0A13043-CAL3 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:53 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	219583369	198.882	ug/ml
2)	H	Diesel	6.00	219583369	198.882	ug/ml
3)	H	DRO(C12-C24)	6.00	52042096	47.136	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	18277405	22.485	ug/ml
5)	H	TPHd (C10-C25)	6.00	75246503	73.520	ug/ml
7)	H	Oil	9.00	286773173	274.655	ug/ml
8)	H	RRO (C24-C40)	9.00	286773173	274.655	ug/ml
9)	H	TPHmo (C25-C36)	8.00	180249774	272.335	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	181462468	276.084	ug/ml

AL 1.14.20

✓

(f)=RT Delta > 1/2 window (m)=manual int.

4R011306.D 4R00113D.M Tue Jan 14 09:53:19 2020 SV-GCMS3 Page 1

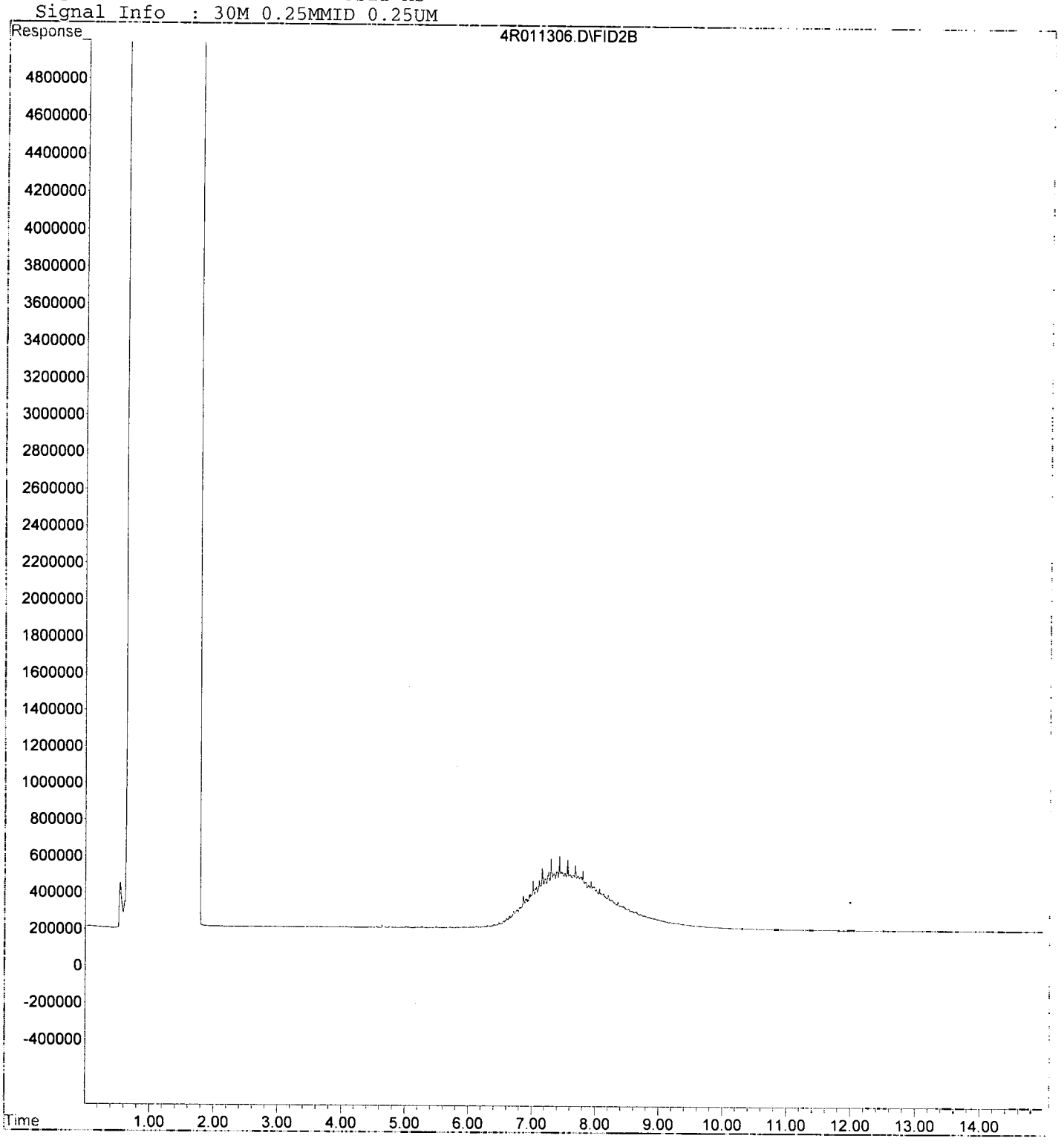
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011306.D
Acq On : 13 Jan 2020 21:14
Sample : 0A13043-CAL3
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:53 2020 Quant Results File: 4R00113D.RES

Vial: 53
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011307.D Vial: 54
Acq On : 13 Jan 2020 21:34 Operator: BLL
Sample : 0A13043-CAL4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:53 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	420292694	380.670	ug/ml
2)	H	Diesel	6.00	420292694	380.670	ug/ml
3)	H	DRO(C12-C24)	6.00	100168434	90.725	ug/ml
4)	H	CA LUFT DRO (C12-C22)	0.00	0	N.D.	ug/ml
5)	H	TPHd (C10-C25)	6.00	144596019	141.279	ug/ml
7)	H	Oil	9.00	546368691	523.281	ug/ml
8)	H	RRO (C24-C40)	9.00	546368691	523.281	ug/ml
9)	H	TPHmo (C25-C36)	8.00	347000549	524.274	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	349335096	531.492	ug/ml

AR 1-14-20

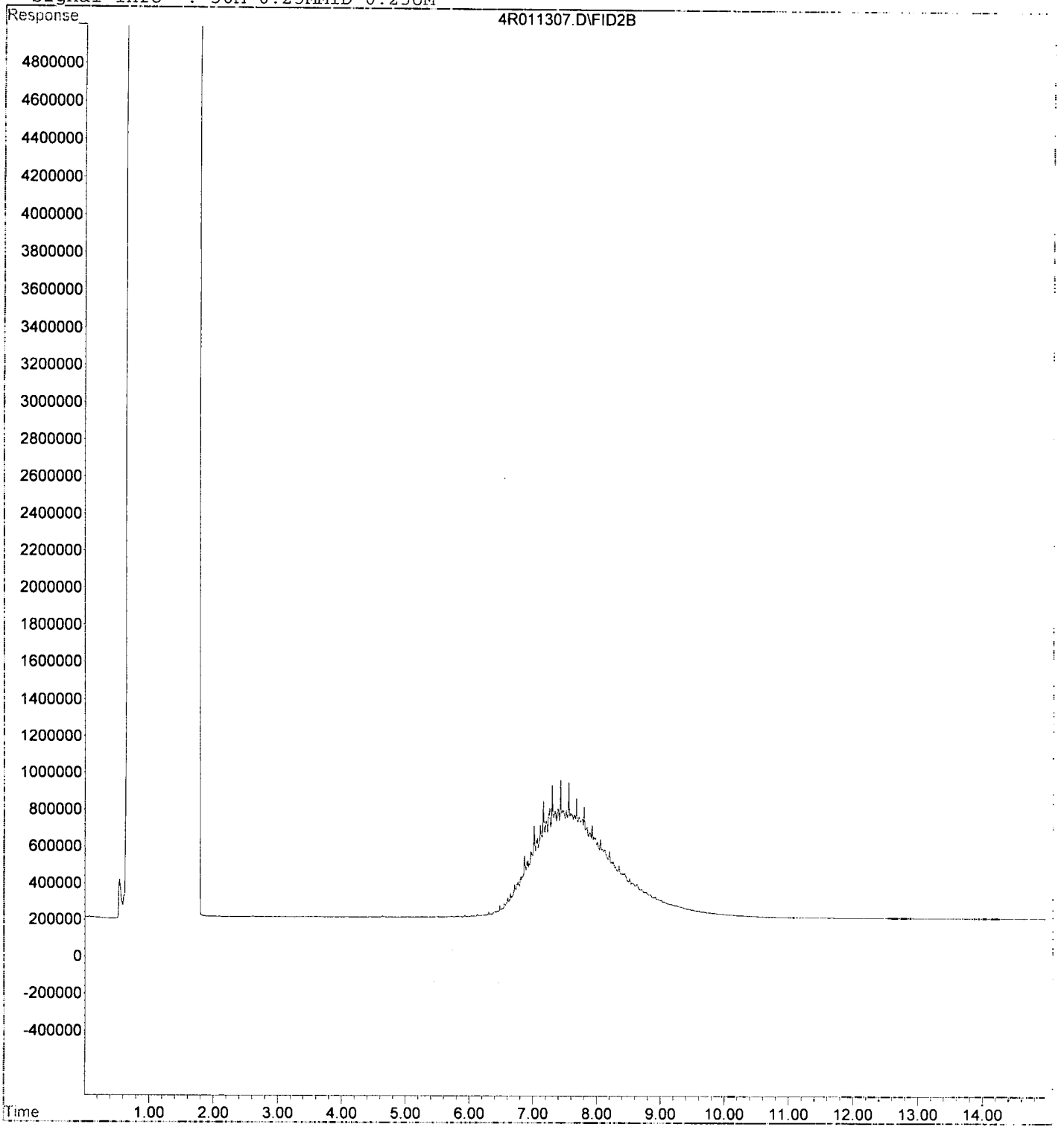
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011307.D Vial: 54
Acq On : 13 Jan 2020 21:34 Operator: BLL
Sample : 0A13043-CAL4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:53 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011308.D Vial: 55
Acq On : 13 Jan 2020 21:55 Operator: BLL
Sample : 0A13043-CAL5 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:54 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	863707357	782.282	ug/ml
2)	H	Diesel	6.00	863707357	782.282	ug/ml
3)	H	DRO(C12-C24)	6.00	201988763	182.946	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	68264281	83.978	ug/ml
5)	H	TPHd (C10-C25)	6.00	293039015	286.316	ug/ml
7)	H	Oil	9.00	1129122629	1081.410	ug/ml
8)	H	RRO (C24-C40)	9.00	1129122629	1081.410	ug/ml
9)	H	TPHmo (C25-C36)	8.00	716084573	1081.914	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	719387014	1094.504	ug/ml

AR 1.14.20

(f)=RT Delta > 1/2 window (m)=manual int.

4R011308.D 4R00113D.M Tue Jan 14 09:54:19 2020 SV-GCMS3

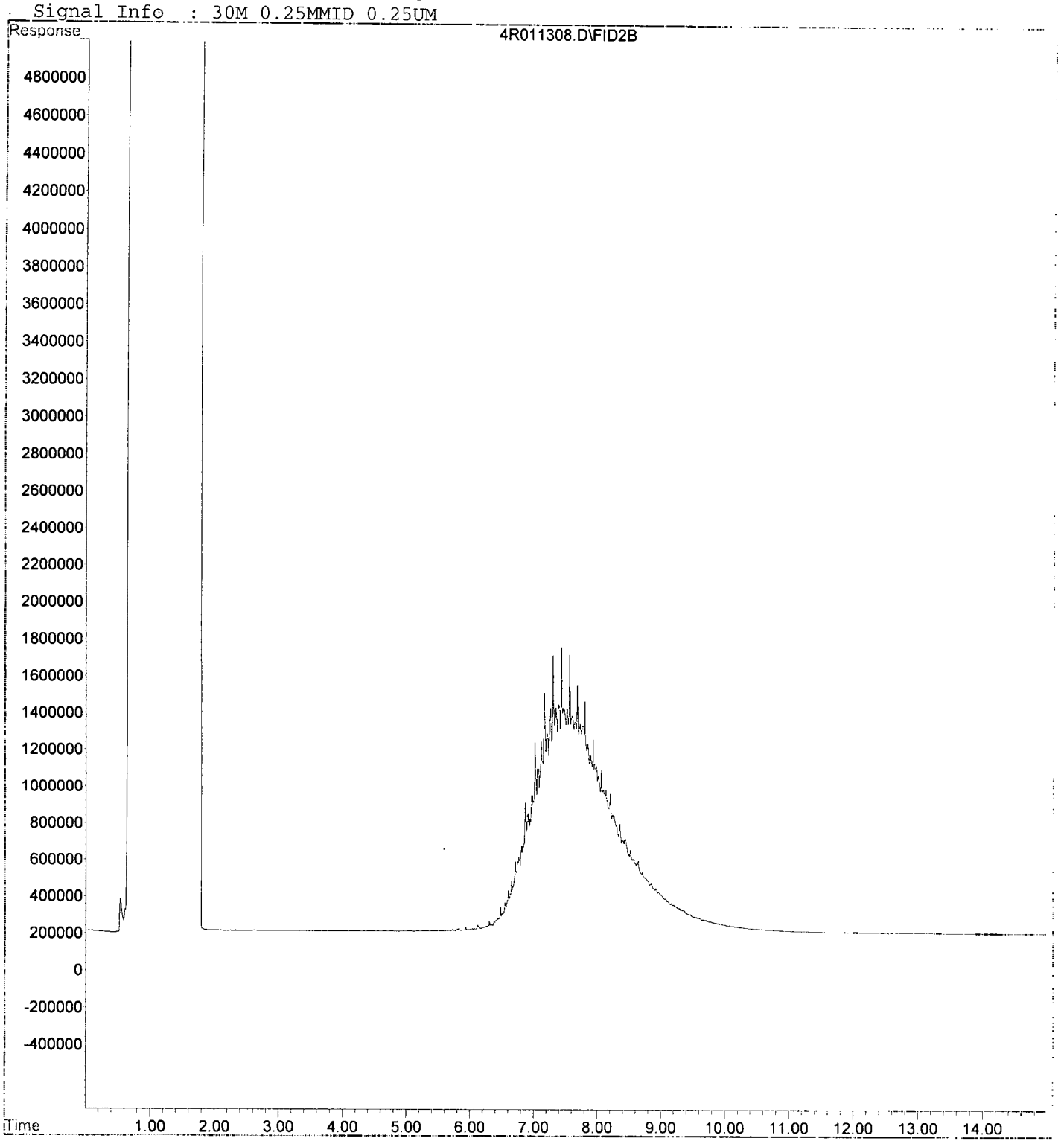
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011308.D
Acq On : 13 Jan 2020 21:55
Sample : 0A13043-CAL5
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:54 2020 Quant Results File: 4R00113D.RES

Vial: 55
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011309.D Vial: 56
Acq On : 13 Jan 2020 22:16 Operator: BLL
Sample : 0A13043-CAL6 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:54 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	2235895164	2025.107	ug/ml
2)	H	Diesel	6.00	2235895164	2025.107	ug/ml
3)	H	DRO(C12-C24)	6.00	535077841	484.634	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	184893671	227.453	ug/ml
5)	H	TPHd (C10-C25)	6.00	768766464	751.130	ug/ml
7)	H	Oil	9.00	2922946111	2799.433	ug/ml
8)	H	RRO (C24-C40)	9.00	2922946111	2799.433	ug/ml
9)	H	TPHmo (C25-C36)	8.00	1849568531	2794.466	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	1859172875	2828.620	ug/ml

AR 1.14.20

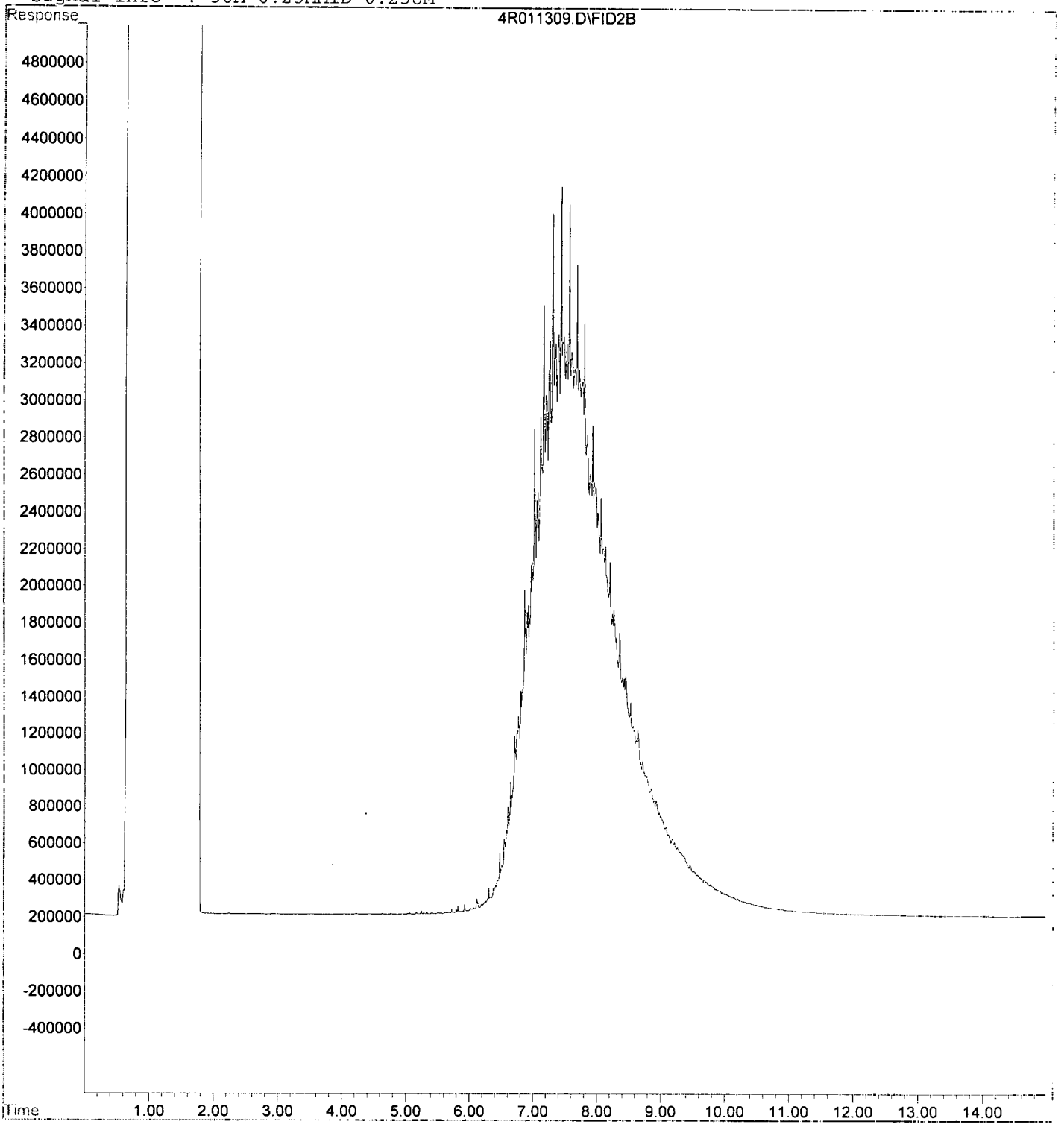
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011309.D Vial: 56
Acq On : 13 Jan 2020 22:16 Operator: BLL
Sample : 0A13043-CAL6 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:54 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011310.D Vial: 100
Acq On : 13 Jan 2020 22:36 Operator: BLL
Sample : 0A13043-IBL1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:55 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	4533772	4.106	ug/ml
2)	H	Diesel	6.00	4533772	4.106	ug/ml
3)	H	DRO(C12-C24)	6.00	1964219	1.779	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	1691939	2.081	ug/ml
5)	H	TPHd (C10-C25)	6.00	2883983	2.818	ug/ml
7)	H	Oil	9.00	12643015	12.109	ug/ml
8)	H	RRO (C24-C40)	9.00	12643015	12.109	ug/ml
9)	H	TPHmo (C25-C36)	8.00	1622769	2.452	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	1252257	1.905	ug/ml

AM 1-14-20

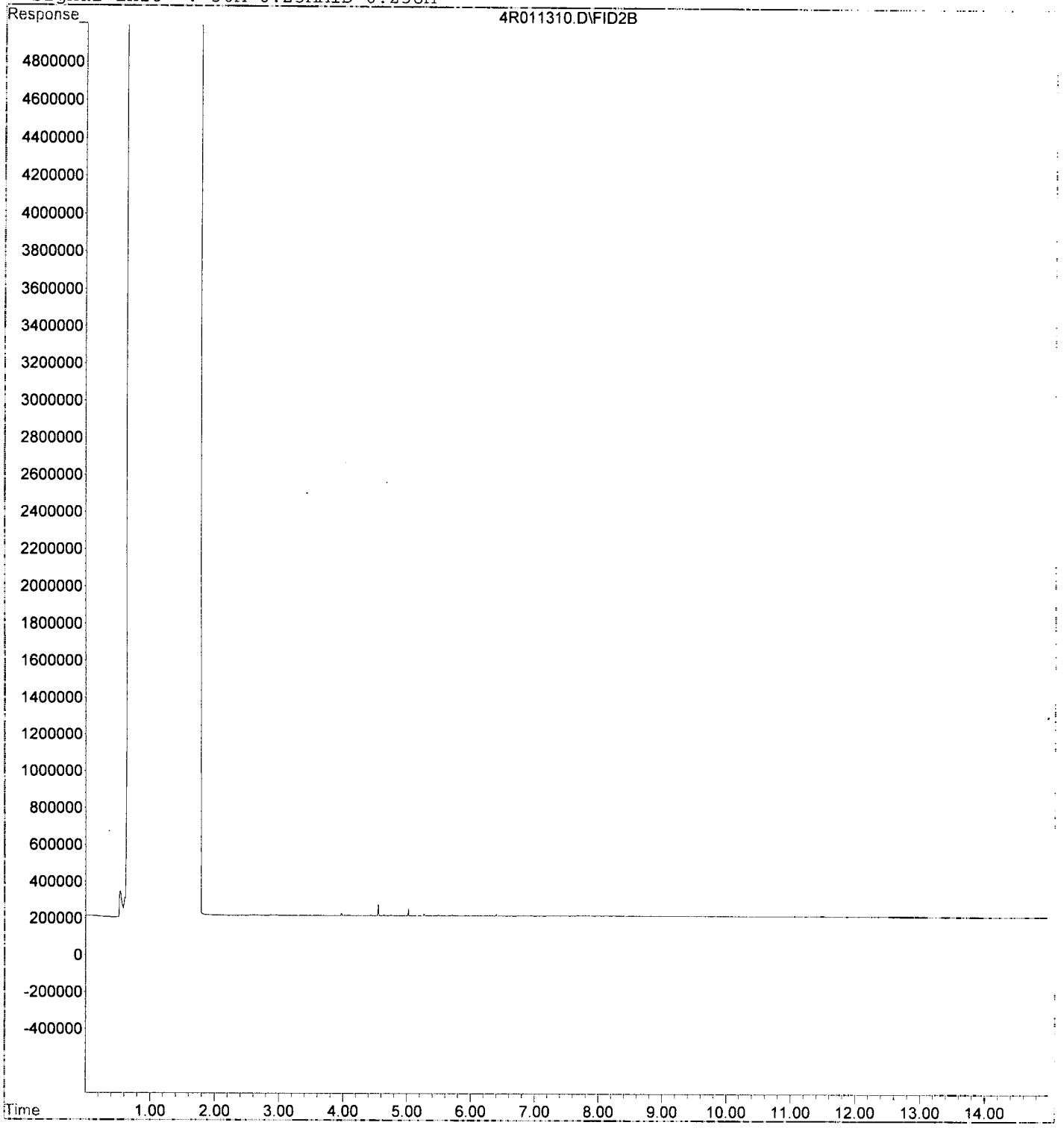
(f)=RT Delta > 1/2 window (m)=manual int.
4R011310.D 4R00113D.M Tue Jan 14 09:55:03 2020 SV-GCMS3

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011310.D Vial: 100
Acq On : 13 Jan 2020 22:36 Operator: BLL
Sample : 0A13043-IBL1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Jan 14 9:55 2020 Quant Results File: 4R00113D.RES

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011311.D
Acq On : 13 Jan 2020 22:57
Sample : 0A13043-CAL7
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:55 2020 Quant Results File: 4R00113D.RES

Vial: 57
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	4439485875	4020.955	ug/ml
2)	H	Diesel	6.00	4439485875	4020.955	ug/ml
3)	H	DRO(C12-C24)	6.00	1049709867	950.749	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	366033266	450.288	ug/ml
5)	H	TPHd (C10-C25)	6.00	1510626909	1475.972	ug/ml
7)	H	Oil	9.00	5853140064	5605.807	ug/ml
8)	H	RRO (C24-C40)	9.00	5853140064	5605.807	ug/ml
9)	H	TPHmo (C25-C36)	8.00	3704863737	5597.585	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	3697341563	5625.284	ug/ml

AL 1.14.20

(f)=RT Delta > 1/2 window (m)=manual int.

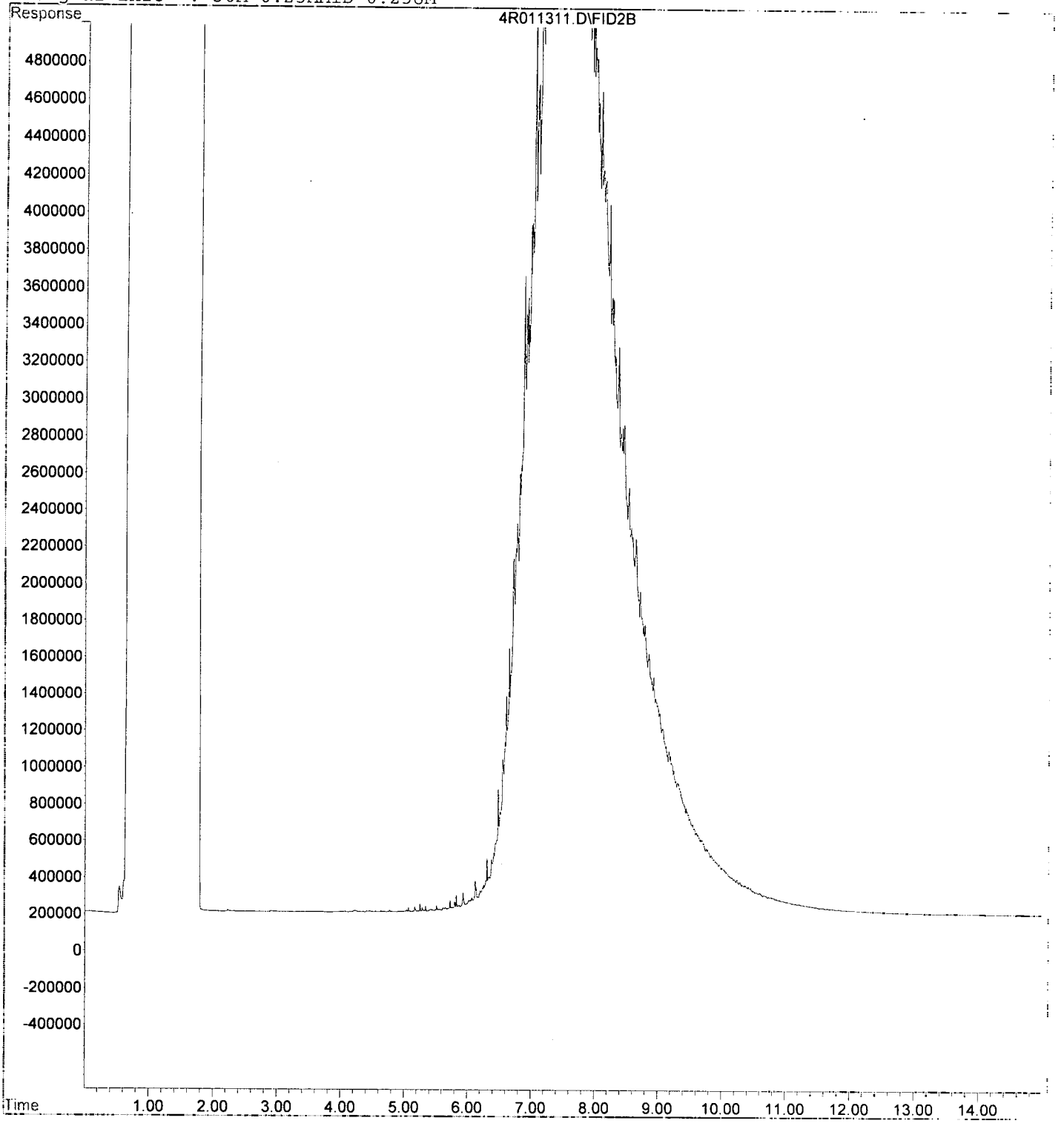
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011311.D
Acq On : 13 Jan 2020 22:57
Sample : 0A13043-CAL7
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:55 2020 Quant Results File: 4R00113D.RES

Vial: 57
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011312.D
Acq On : 13 Jan 2020 23:18
Sample : 0A13043-IBL2
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:55 2020 Quant Results File: 4R00113D.RES

Vial: 100
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	5027729	4.554	ug/ml
2)	H	Diesel	6.00	5027729	4.554	ug/ml
3)	H	DRO(C12-C24)	6.00	2037390	1.845	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	1658597	2.040	ug/ml
5)	H	TPHd (C10-C25)	6.00	2935129	2.868	ug/ml
7)	H	Oil	9.00	9213564	8.824	ug/ml
8)	H	RRO (C24-C40)	9.00	9213564	8.824	ug/ml
9)	H	TPHmo (C25-C36)	8.00	2243257	3.389	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	1708753	2.600	ug/ml

AM 1.14.20

(f)=RT Delta > 1/2 window (m)=manual int.

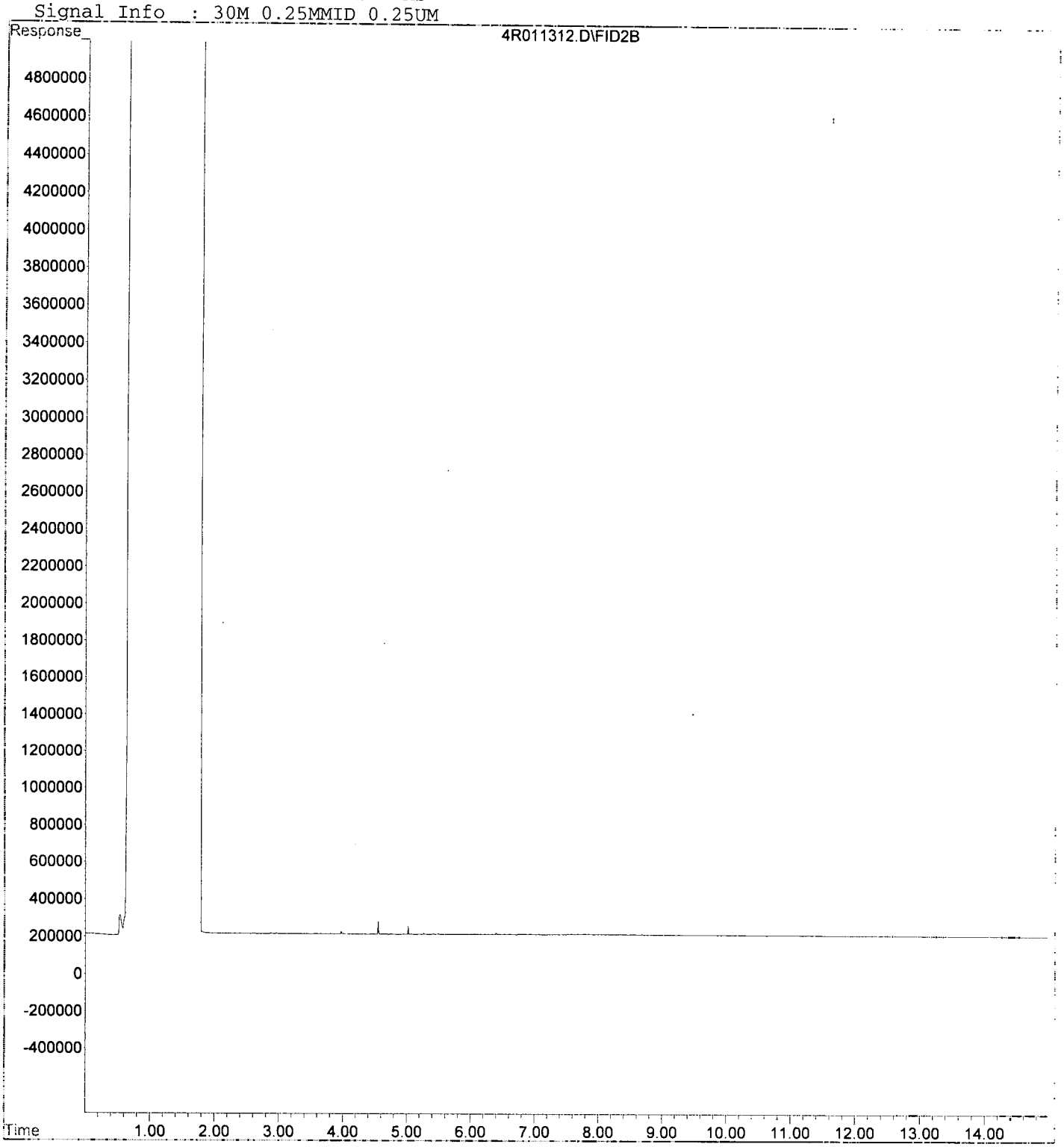
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011312.D
Acq On : 13 Jan 2020 23:18
Sample : 0A13043-IBL2
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:55 2020 Quant Results File: 4R00113D.RES

Vial: 100
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011313.D
Acq On : 13 Jan 2020 23:39
Sample : 0A13043-ICV1
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:56 2020 Quant Results File: 4R00113D.RES

Vial: 58
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	777179881	703.912	ug/ml
2)	H	Diesel	6.00	777179881	703.912	ug/ml
3)	H	DRO(C12-C24)	6.00	185686142	168.181	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	63619423	78.264	ug/ml
5)	H	TPHd (C10-C25)	6.00	267630897	261.491	ug/ml
7)	H	Oil	9.00	1014695403	971.818	ug/ml
8)	H	RRO (C24-C40)	9.00	1014695403	971.818	ug/ml
9)	H	TPHmo (C25-C36)	8.00	642595072	970.881	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	646063792	982.947	ug/ml

RL 1.14.20

(f)=RT Delta > 1/2 window (m)=manual int.

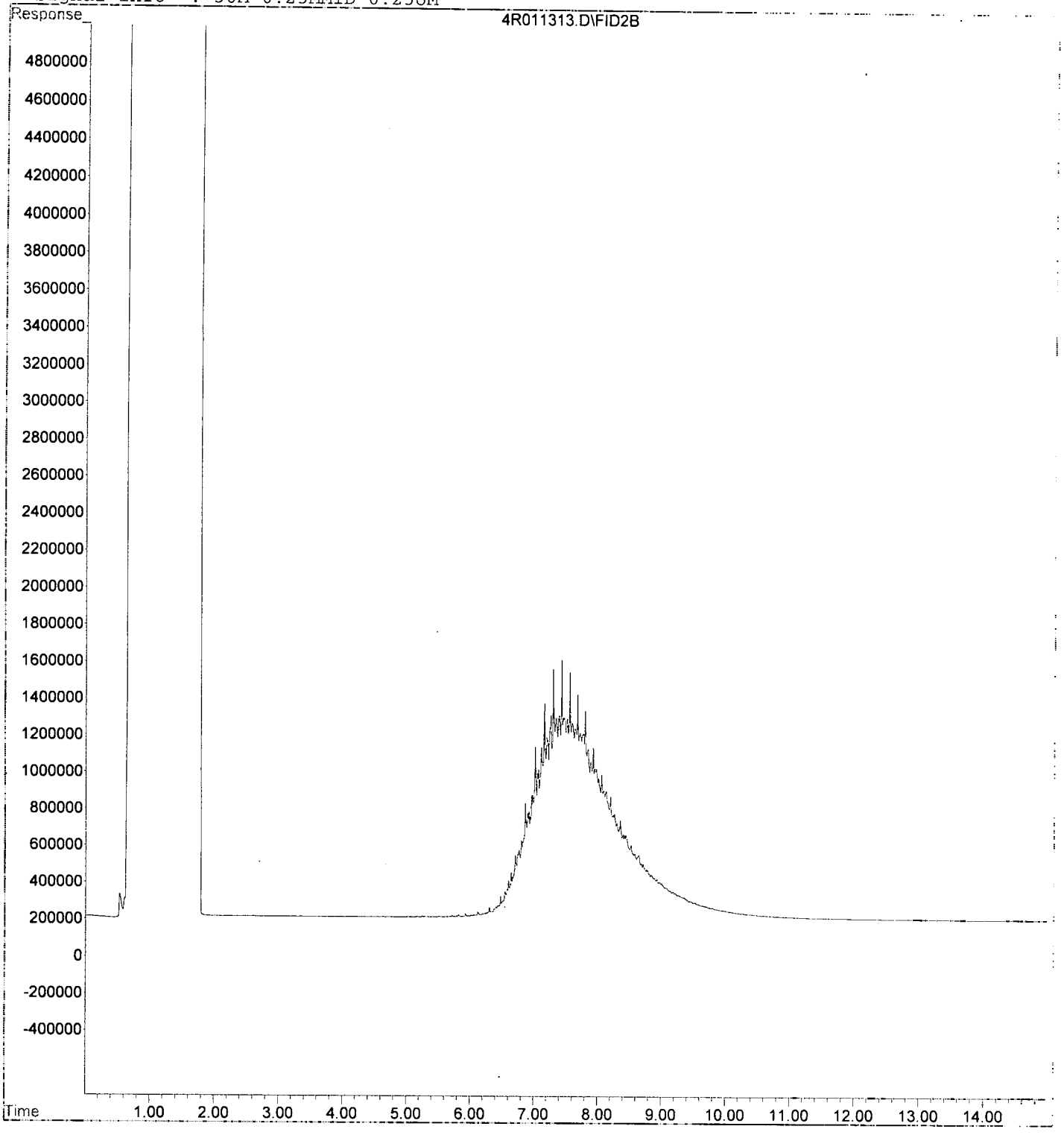
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2020-01\0A13043\4R011313.D
Acq On : 13 Jan 2020 23:39
Sample : 0A13043-ICV1
Misc :
IntFile : SUR.E
Quant Time: Jan 14 9:56 2020 Quant Results File: 4R00113D.RES

Vial: 58
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Quant Method : G:\4\METHODS\4R00113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Tue Jan 14 09:52:22 2020
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



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

Diesel and/or Oil Hydrocarbons by NWTPH-Dx
Calibration Data

Sequence 9K13038 (Cal ID A0A1404) DUALFID4R

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9K13038**	Instrument:	**DUALFID4R**
Date:	**11/13/19 09:21**	Calibration:	**A9K1402**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K13038-RES1	Water	QC	QC				A19J322
2	9K13038-ICB1	Water	QC	QC				
3	9K13038-CAL1	Water	QC	QC				A19K029
4	9K13038-CAL2	Water	QC	QC				A19K030
5	9K13038-CAL3	Water	QC	QC				A19K031
6	9K13038-CAL4	Water	QC	QC				A19K032
7	9K13038-CAL5	Water	QC	QC				A19K033
8	9K13038-CAL6	Water	QC	QC				A19K034
9	9K13038-CAL7	Water	QC	QC				A19K035
10	9K13038-CAL8	Water	QC	QC				A19I034
11	9K13038-CAL9	Water	QC	QC				A19K002
12	9K13038-CALA	Water	QC	QC				A19K003
13	9K13038-CALB	Water	QC	QC				A19K004
14	9K13038-CALC	Water	QC	QC				A19K005
15	9K13038-CALD	Water	QC	QC				A19K001
16	9K13038-CALE	Water	QC	QC				A19K021
17	9K13038-CALF	Water	QC	QC				A19K022
18	9K13038-CALG	Water	QC	QC				A19K023
19	9K13038-CALH	Water	QC	QC				A19K024
20	9K13038-CALI	Water	QC	QC				A19K025
21	9K13038-CALJ	Water	QC	QC				A19K027
22	9K13038-CALK	Water	QC	QC				A19I110
23	9K13038-ICV1	Water	QC	QC				A19K190
24	9K13038-ICV2	Water	QC	QC				A19K191

Data Entered By: 11-14-19

Data Reviewed By: 11/14/19

Comments:

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K13038 **Seq. Date: 11/13/2019**

SEQUENCE LOG

SampleID	Analysis	Matrix	STDID	Analyzed
9K13038-ICB1	8015B TPH-D (C10-25) /TPH-MO	Water		1/13/2019 10:59:00AM
"	+8015B TPH-D(C10-25)/MO(C2	"		"
"	+8015D LL TPH-D (C10-25) /TPI	"		"
"	+8015D TPH-D (C10-25) /TPH-M	"		"
"	+8015M TPH-D (C10-25)/TPH-M	"		"
"	+CA LUFT DRO/RRO	"		"
"	+CA LUFT DRO/RRO - LL	"		"
"	+CA LUFT DRO/RRO W/SG	"		"
"	+NWTPH-Dx (Diesel/Oil)	"		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"		"
"	+NWTPH-Dx - Extract and Hold	"		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"		"
9K13038-CAL1	8015B TPH-D (C10-25) /TPH-MO	Water	A19K029	1/13/2019 11:21:00AM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K029	"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K029	"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K029	"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K029	"
"	+CA LUFT DRO/RRO	"	A19K029	"
"	+CA LUFT DRO/RRO - LL	"	A19K029	"
"	+CA LUFT DRO/RRO W/SG	"	A19K029	"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K029	"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K029	"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K029	"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K029	"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K029	"
9K13038-CAL2	8015B TPH-D (C10-25) /TPH-MO	Water	A19K030	1/13/2019 11:41:00AM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K030	"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K030	"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K030	"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K030	"
"	+CA LUFT DRO/RRO	"	A19K030	"
"	+CA LUFT DRO/RRO - LL	"	A19K030	"
"	+CA LUFT DRO/RRO W/SG	"	A19K030	"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K030	"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K030	"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K030	"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K030	"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K030	"
9K13038-CAL3	8015B TPH-D (C10-25) /TPH-MO	Water	A19K031	1/13/2019 12:01:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K031	"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K031	"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K031	"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K031	"

"	+CA LUFT DRO/RRO	"	A19K031	"
"	+CA LUFT DRO/RRO - LL	"	A19K031	"
"	+CA LUFT DRO/RRO W/SG	"	A19K031	"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K031	"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K031	"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K031	"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K031	"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K031	"
9K13038-CAL4	8015B TPH-D (C10-25) /TPH-MO	Water	A19K032	1/13/2019 12:22:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K032	"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K032	"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K032	"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K032	"
"	+CA LUFT DRO/RRO	"	A19K032	"
"	+CA LUFT DRO/RRO - LL	"	A19K032	"
"	+CA LUFT DRO/RRO W/SG	"	A19K032	"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K032	"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K032	"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K032	"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K032	"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K032	"
9K13038-CAL5	8015B TPH-D (C10-25) /TPH-MO	Water	A19K033	1/13/2019 12:43:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K033	"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K033	"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K033	"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K033	"
"	+CA LUFT DRO/RRO	"	A19K033	"
"	+CA LUFT DRO/RRO - LL	"	A19K033	"
"	+CA LUFT DRO/RRO W/SG	"	A19K033	"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K033	"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K033	"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K033	"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K033	"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K033	"
9K13038-CAL6	8015B TPH-D (C10-25) /TPH-MO	Water	A19K034	11/13/2019 1:04:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K034	"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K034	"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K034	"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K034	"
"	+CA LUFT DRO/RRO	"	A19K034	"
"	+CA LUFT DRO/RRO - LL	"	A19K034	"
"	+CA LUFT DRO/RRO W/SG	"	A19K034	"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K034	"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K034	"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K034	"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K034	"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K034	"
9K13038-CAL7	8015B TPH-D (C10-25) /TPH-MO	Water	A19K035	11/13/2019 1:26:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K035	"

"	+8015D LL TPH-D (C10-25) /TPI	"	A19K035		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K035		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K035		"
"	+CA LUFT DRO/RRO	"	A19K035		"
"	+CA LUFT DRO/RRO - LL	"	A19K035		"
"	+CA LUFT DRO/RRO W/SG	"	A19K035		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K035		"
"	+NWTPH-Dx (Diesel/Oil) Low Le	"	A19K035		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K035		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K035		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K035		"
9K13038-CAL8	8015B TPH-D (C10-25) /TPH-MO	Water	A19I034	11/13/2019	1:47:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19I034		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19I034		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19I034		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19I034		"
"	+CA LUFT DRO/RRO	"	A19I034		"
"	+CA LUFT DRO/RRO - LL	"	A19I034		"
"	+CA LUFT DRO/RRO W/SG	"	A19I034		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19I034		"
"	+NWTPH-Dx (Diesel/Oil) Low Le	"	A19I034		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19I034		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19I034		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19I034		"
9K13038-CAL9	8015B TPH-D (C10-25) /TPH-MO	Water	A19K002	11/13/2019	2:09:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K002		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K002		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K002		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K002		"
"	+CA LUFT DRO/RRO	"	A19K002		"
"	+CA LUFT DRO/RRO - LL	"	A19K002		"
"	+CA LUFT DRO/RRO W/SG	"	A19K002		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K002		"
"	+NWTPH-Dx (Diesel/Oil) Low Le	"	A19K002		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K002		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K002		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K002		"
9K13038-CALA	8015B TPH-D (C10-25) /TPH-MO	Water	A19K003	11/13/2019	2:30:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K003		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K003		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K003		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K003		"
"	+CA LUFT DRO/RRO	"	A19K003		"
"	+CA LUFT DRO/RRO - LL	"	A19K003		"
"	+CA LUFT DRO/RRO W/SG	"	A19K003		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K003		"
"	+NWTPH-Dx (Diesel/Oil) Low Le	"	A19K003		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K003		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K003		"

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K13038 **Seq. Date: 11/13/2019**

"	+NWTPH-Dx (Diesel/Oil) w/SG ("	A19K003		"
9K13038-CALB	8015B TPH-D (C10-25) /TPH-MO Water	A19K004	11/13/2019	2:52:00PM
"	+8015B TPH-D(C10-25)/MO(C2 "	A19K004		"
"	+8015D LL TPH-D (C10-25) /TPI "	A19K004		"
"	+8015D TPH-D (C10-25) /TPH-M "	A19K004		"
"	+8015M TPH-D (C10-25)/TPH-M "	A19K004		"
"	+CA LUFT DRO/RRO "	A19K004		"
"	+CA LUFT DRO/RRO - LL "	A19K004		"
"	+CA LUFT DRO/RRO W/SG "	A19K004		"
"	+NWTPH-Dx (Diesel/Oil) "	A19K004		"
"	+NWTPH-Dx (Diesel/Oil) Low L "	A19K004		"
"	+NWTPH-Dx (Diesel/Oil) w/SG "	A19K004		"
"	+NWTPH-Dx (Diesel/Oil) w/SG - "	A19K004		"
"	+NWTPH-Dx (Diesel/Oil) w/SG ("	A19K004		"
9K13038-CALC	8015B TPH-D (C10-25) /TPH-MO Water	A19K005	11/13/2019	3:12:00PM
"	+8015B TPH-D(C10-25)/MO(C2 "	A19K005		"
"	+8015D LL TPH-D (C10-25) /TPI "	A19K005		"
"	+8015D TPH-D (C10-25) /TPH-M "	A19K005		"
"	+8015M TPH-D (C10-25)/TPH-M "	A19K005		"
"	+CA LUFT DRO/RRO "	A19K005		"
"	+CA LUFT DRO/RRO - LL "	A19K005		"
"	+CA LUFT DRO/RRO W/SG "	A19K005		"
"	+NWTPH-Dx (Diesel/Oil) "	A19K005		"
"	+NWTPH-Dx (Diesel/Oil) Low L "	A19K005		"
"	+NWTPH-Dx (Diesel/Oil) w/SG "	A19K005		"
"	+NWTPH-Dx (Diesel/Oil) w/SG - "	A19K005		"
"	+NWTPH-Dx (Diesel/Oil) w/SG ("	A19K005		"
9K13038-CALD	8015B TPH-D (C10-25) /TPH-MO Water	A19K001	11/13/2019	3:34:00PM
"	+8015B TPH-D(C10-25)/MO(C2 "	A19K001		"
"	+8015D LL TPH-D (C10-25) /TPI "	A19K001		"
"	+8015D TPH-D (C10-25) /TPH-M "	A19K001		"
"	+8015M TPH-D (C10-25)/TPH-M "	A19K001		"
"	+CA LUFT DRO/RRO "	A19K001		"
"	+CA LUFT DRO/RRO - LL "	A19K001		"
"	+CA LUFT DRO/RRO W/SG "	A19K001		"
"	+NWTPH-Dx (Diesel/Oil) "	A19K001		"
"	+NWTPH-Dx (Diesel/Oil) Low L "	A19K001		"
"	+NWTPH-Dx (Diesel/Oil) w/SG "	A19K001		"
"	+NWTPH-Dx (Diesel/Oil) w/SG - "	A19K001		"
"	+NWTPH-Dx (Diesel/Oil) w/SG ("	A19K001		"
9K13038-CALE	8015B TPH-D (C10-25) /TPH-MO Water	A19K021	11/13/2019	3:54:00PM
"	+8015B TPH-D(C10-25)/MO(C2 "	A19K021		"
"	+8015D LL TPH-D (C10-25) /TPI "	A19K021		"
"	+8015D TPH-D (C10-25) /TPH-M "	A19K021		"
"	+8015M TPH-D (C10-25)/TPH-M "	A19K021		"
"	+CA LUFT DRO/RRO "	A19K021		"
"	+CA LUFT DRO/RRO - LL "	A19K021		"
"	+CA LUFT DRO/RRO W/SG "	A19K021		"
"	+NWTPH-Dx (Diesel/Oil) "	A19K021		"

"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K021		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K021		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K021		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K021		"
9K13038-CALF	8015B TPH-D (C10-25) /TPH-MO	Water	A19K022	11/13/2019	4:16:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K022		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K022		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K022		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K022		"
"	+CA LUFT DRO/RRO	"	A19K022		"
"	+CA LUFT DRO/RRO - LL	"	A19K022		"
"	+CA LUFT DRO/RRO W/SG	"	A19K022		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K022		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K022		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K022		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K022		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K022		"
9K13038-CALG	8015B TPH-D (C10-25) /TPH-MO	Water	A19K023	11/13/2019	4:37:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K023		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K023		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K023		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K023		"
"	+CA LUFT DRO/RRO	"	A19K023		"
"	+CA LUFT DRO/RRO - LL	"	A19K023		"
"	+CA LUFT DRO/RRO W/SG	"	A19K023		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K023		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K023		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K023		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K023		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K023		"
9K13038-CALH	8015B TPH-D (C10-25) /TPH-MO	Water	A19K024	11/13/2019	4:59:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K024		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K024		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K024		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K024		"
"	+CA LUFT DRO/RRO	"	A19K024		"
"	+CA LUFT DRO/RRO - LL	"	A19K024		"
"	+CA LUFT DRO/RRO W/SG	"	A19K024		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K024		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K024		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K024		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K024		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K024		"
9K13038-CALI	8015B TPH-D (C10-25) /TPH-MO	Water	A19K025	11/13/2019	5:21:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K025		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K025		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K025		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K025		"
"	+CA LUFT DRO/RRO	"	A19K025		"

"	+CA LUFT DRO/RRO - LL	"	A19K025		"
"	+CA LUFT DRO/RRO W/SG	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K025		"
9K13038-CALJ	8015B TPH-D (C10-25) /TPH-MO	Water	A19K027	11/13/2019	5:42:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K027		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K027		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K027		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K027		"
"	+CA LUFT DRO/RRO	"	A19K027		"
"	+CA LUFT DRO/RRO - LL	"	A19K027		"
"	+CA LUFT DRO/RRO W/SG	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K027		"
9K13038-CALK	8015B TPH-D (C10-25) /TPH-MO	Water	A19I110	11/13/2019	6:23:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19I110		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19I110		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19I110		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19I110		"
"	+CA LUFT DRO/RRO	"	A19I110		"
"	+CA LUFT DRO/RRO - LL	"	A19I110		"
"	+CA LUFT DRO/RRO W/SG	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19I110		"
9K13038-ICV1	8015B TPH-D (C10-25) /TPH-MO	Water	A19K190	11/13/2019	7:05:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K190		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K190		"
"	+8015D TPH-D (C10-25) /TPH-M	"	A19K190		"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K190		"
"	+CA LUFT DRO/RRO	"	A19K190		"
"	+CA LUFT DRO/RRO - LL	"	A19K190		"
"	+CA LUFT DRO/RRO W/SG	"	A19K190		"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K190		"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K190		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K190		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K190		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K190		"
9K13038-ICV2	8015B TPH-D (C10-25) /TPH-MO	Water	A19K191	11/13/2019	7:25:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K191		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K191		"

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K13038 **Seq. Date: 11/13/2019**

"	+8015D TPH-D (C10-25) /TPH-M	"	A19K191	"
"	+8015M TPH-D (C10-25)/TPH-M	"	A19K191	"
"	+CA LUFT DRO/RRO	"	A19K191	"
"	+CA LUFT DRO/RRO - LL	"	A19K191	"
"	+CA LUFT DRO/RRO W/SG	"	A19K191	"
"	+NWTPH-Dx (Diesel/Oil)	"	A19K191	"
"	+NWTPH-Dx (Diesel/Oil) Low L	"	A19K191	"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K191	"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K191	"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K191	"

CALIBRATION STANDARD RECOVERIES

Calibration: **A9K1402** Instrument: **DUALFID4R**

8015B TPH-D (C10-25) /TPH- Sequence: **9K13038** Matrix: **Water**

9K13038-CAL1	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CAL2	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CAL6	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CAL7	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CAL8	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CALE	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CALF	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CALG	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CALH	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CALI	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CALJ	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13038-CALK	**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.

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K13038 **Seq. Date: 11/13/2019**

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: **A9K1402** Instrument: **DUALFID4R**

8015D LL TPH-D (C10-25) /T Sequence: **9K13038** Matrix: **Water**

9K13038-ICV1	**Inst. MRL**	**ICV Level**	**Result**	**%Rec.**	**Qual**
9K13038-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.

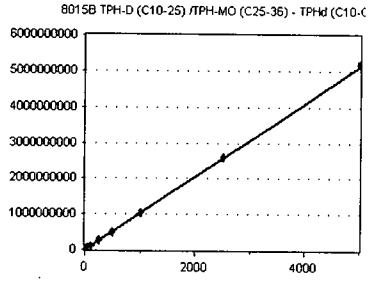
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **8015B TPH-D (C10-25) /TPH-** Instrument Cal ID: **A9K1402**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

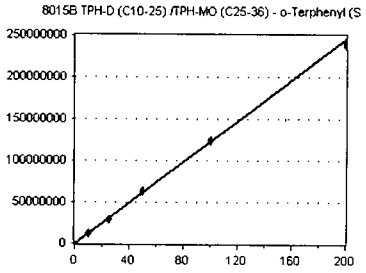


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.529767E+07	1011907.000	6.00
9K13038-CAL2	40	4.159173E+07	1039793.000	6.00
9K13038-CAL3	100	9.974917E+07	997491.700	6.00
9K13038-CAL4	250	2.520315E+08	1008126.000	6.00
9K13038-CAL5	500	5.023739E+08	1004748.000	6.00
9K13038-CAL6	1000	1.048818E+09	1048818.000	6.00
9K13038-CAL7	2500	2.601758E+09	1040703.000	6.00
9K13038-CAL8	5000	5.181243E+09	1036249.000	6.00

AVE RF **1023479.000** RF RSD **1.94** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

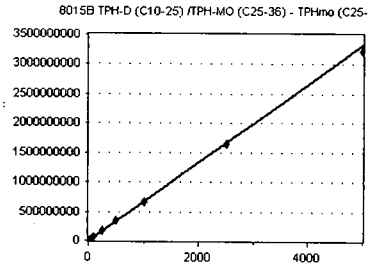


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	2.758359E+07	689589.800	8.00
9K13038-CALF	80	5.155511E+07	644438.900	8.00
9K13038-CALG	250	1.698305E+08	679322.000	8.00
9K13038-CALH	500	3.35404E+08	670808.000	8.00
9K13038-CALI	1000	6.626188E+08	662618.800	8.00
9K13038-CALJ	2500	1.649979E+09	659991.600	8.00
9K13038-CALK	5000	3.212504E+09	642500.800	8.00

AVE RF **664181.400** RF RSD **2.61** AVE RT **8.00**

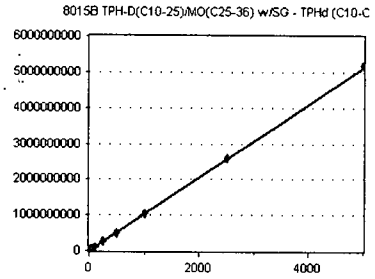
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **8015B TPH-D(C10-25)/MO(C:** Instrument Cal ID: **A9K1402**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

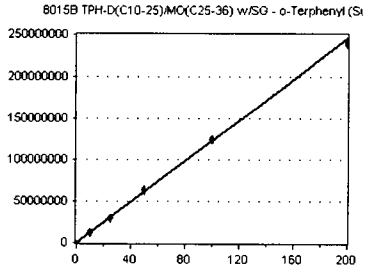


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.529767E+07	1011907.000	6.00
9K13038-CAL2	40	4.159173E+07	1039793.000	6.00
9K13038-CAL3	100	9.974917E+07	997491.700	6.00
9K13038-CAL4	250	2.520315E+08	1008126.000	6.00
9K13038-CAL5	500	5.023739E+08	1004748.000	6.00
9K13038-CAL6	1000	1.048818E+09	1048818.000	6.00
9K13038-CAL7	2500	2.601758E+09	1040703.000	6.00
9K13038-CAL8	5000	5.181243E+09	1036249.000	6.00

AVE RF **1023479.000** RF RSD **1.94** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

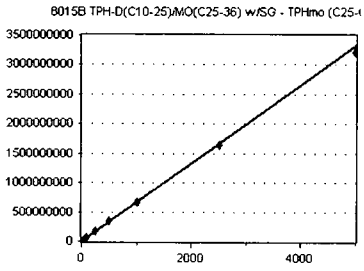


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	2.758359E+07	689589.800	8.00
9K13038-CALF	80	5.155511E+07	644438.900	8.00
9K13038-CALG	250	1.698305E+08	679322.000	8.00
9K13038-CALH	500	3.35404E+08	670808.000	8.00
9K13038-CALI	1000	6.626188E+08	662618.800	8.00
9K13038-CALJ	2500	1.649979E+09	659991.600	8.00
9K13038-CALK	5000	3.212504E+09	642500.800	8.00

AVE RF **664181.400** RF RSD **2.61** AVE RT **8.00**

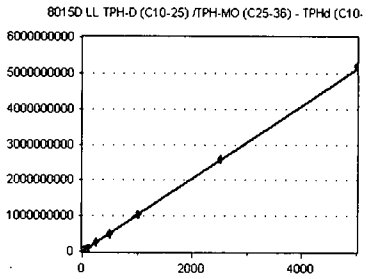
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **8015D LL TPH-D (C10-25) /T** Instrument Cal ID: **A9K1402**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

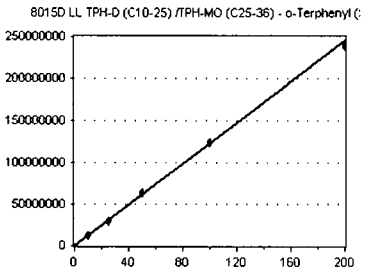


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.529767E+07	1011907.000	6.00
9K13038-CAL2	40	4.159173E+07	1039793.000	6.00
9K13038-CAL3	100	9.974917E+07	997491.700	6.00
9K13038-CAL4	250	2.520315E+08	1008126.000	6.00
9K13038-CAL5	500	5.023739E+08	1004748.000	6.00
9K13038-CAL6	1000	1.048818E+09	1048818.000	6.00
9K13038-CAL7	2500	2.601758E+09	1040703.000	6.00
9K13038-CAL8	5000	5.181243E+09	1036249.000	6.00

AVE RF **1023479.000** RF RSD **1.94** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

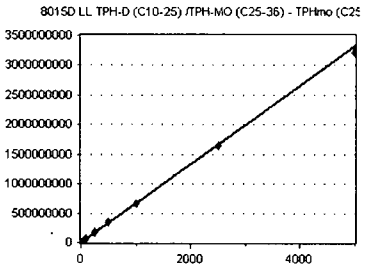


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	2.758359E+07	689589.800	8.00
9K13038-CALF	80	5.155511E+07	644438.900	8.00
9K13038-CALG	250	1.698305E+08	679322.000	8.00
9K13038-CALH	500	3.35404E+08	670808.000	8.00
9K13038-CALI	1000	6.626188E+08	662618.800	8.00
9K13038-CALJ	2500	1.649979E+09	659991.600	8.00
9K13038-CALK	5000	3.212504E+09	642500.800	8.00

AVE RF **664181.400** RF RSD **2.61** AVE RT **8.00**

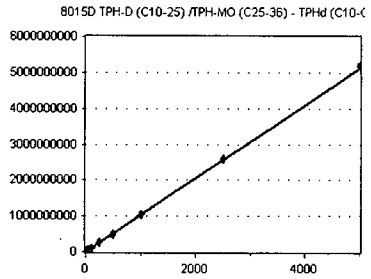
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **8015D TPH-D (C10-25) /TPH-** Instrument Cal ID: **A9K1402**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

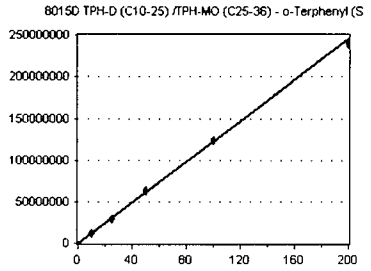


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.529767E+07	1011907.000	6.00
9K13038-CAL2	40	4.159173E+07	1039793.000	6.00
9K13038-CAL3	100	9.974917E+07	997491.700	6.00
9K13038-CAL4	250	2.520315E+08	1008126.000	6.00
9K13038-CAL5	500	5.023739E+08	1004748.000	6.00
9K13038-CAL6	1000	1.048818E+09	1048818.000	6.00
9K13038-CAL7	2500	2.601758E+09	1040703.000	6.00
9K13038-CAL8	5000	5.181243E+09	1036249.000	6.00

AVE RF **1023479.000** RF RSD **1.94** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

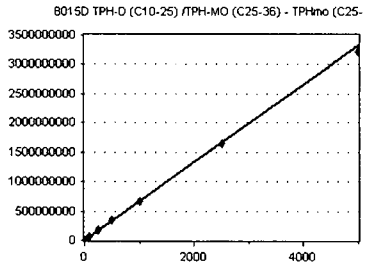


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	2.758359E+07	689589.800	8.00
9K13038-CALF	80	5.155511E+07	644438.900	8.00
9K13038-CALG	250	1.698305E+08	679322.000	8.00
9K13038-CALH	500	3.35404E+08	670808.000	8.00
9K13038-CALI	1000	6.626188E+08	662618.800	8.00
9K13038-CALJ	2500	1.649979E+09	659991.600	8.00
9K13038-CALK	5000	3.212504E+09	642500.800	8.00

AVE RF **664181.400** RF RSD **2.61** AVE RT **8.00**

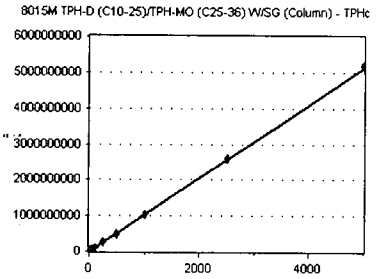
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **8015M TPH-D (C10-25)/TPH-** Instrument Cal ID: **A9K1402**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

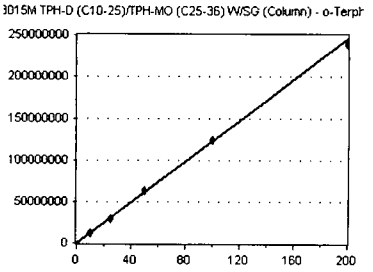


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.529767E+07	1011907.000	6.00
9K13038-CAL2	40	4.159173E+07	1039793.000	6.00
9K13038-CAL3	100	9.974917E+07	997491.700	6.00
9K13038-CAL4	250	2.520315E+08	1008126.000	6.00
9K13038-CAL5	500	5.023739E+08	1004748.000	6.00
9K13038-CAL6	1000	1.048818E+09	1048818.000	6.00
9K13038-CAL7	2500	2.601758E+09	1040703.000	6.00
9K13038-CAL8	5000	5.181243E+09	1036249.000	6.00

AVE RF **1023479.000** RF RSD **1.94** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

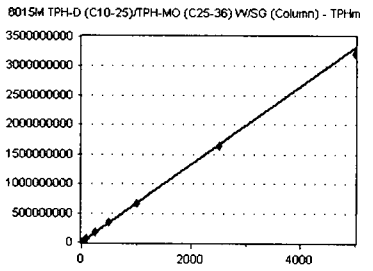


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	2.758359E+07	689589.800	8.00
9K13038-CALF	80	5.155511E+07	644438.900	8.00
9K13038-CALG	250	1.698305E+08	679322.000	8.00
9K13038-CALH	500	3.35404E+08	670808.000	8.00
9K13038-CALI	1000	6.626188E+08	662618.800	8.00
9K13038-CALJ	2500	1.649979E+09	659991.600	8.00
9K13038-CALK	5000	3.212504E+09	642500.800	8.00

AVE RF **664181.400** RF RSD **2.61** AVE RT **8.00**

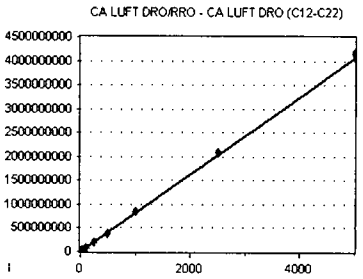
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **CA LUFT DRO/RRO** Instrument Cal ID: **A9K1402**

CA LUFT DRO (C12-C22)

Curve Fit: **AVERAGE RF**

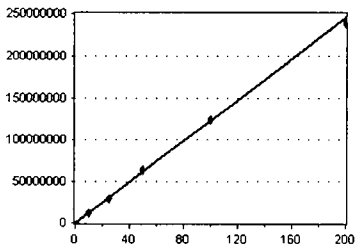


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	1.989938E+07	795975.200	6.00
9K13038-CAL2	40	3.23102E+07	807755.000	6.00
9K13038-CAL3	100	7.916526E+07	791652.600	6.00
9K13038-CAL4	250	1.998293E+08	799317.200	6.00
9K13038-CAL5	500	4.007107E+08	801421.400	6.00
9K13038-CAL6	1000	8.410977E+08	841097.800	6.00
9K13038-CAL7	2500	2.086708E+09	834683.200	6.00
9K13038-CAL8	5000	4.155971E+09	831194.200	6.00

AVE RF **812887.100** RF RSD **2.41** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

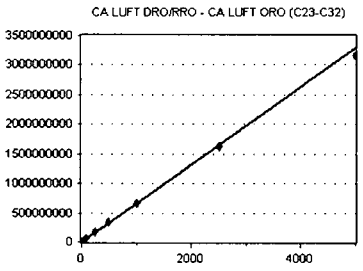


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

CA LUFT ORO (C23-C32)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	2.742169E+07	685542.300	7.50
9K13038-CALF	80	5.14927E+07	643658.800	7.50
9K13038-CALG	250	1.693531E+08	677412.400	7.50
9K13038-CALH	500	3.335008E+08	667001.600	7.50
9K13038-CALI	1000	6.597496E+08	659749.600	7.50
9K13038-CALJ	2500	1.632345E+09	652938.000	7.50
9K13038-CALK	5000	3.165883E+09	633176.600	7.50

AVE RF **659925.600** RF RSD **2.79** AVE RT **7.50**

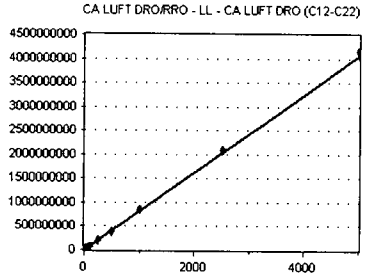
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **CA LUFT DRO/RRO - LL** Instrument Cal ID: **A9K1402**

CA LUFT DRO (C12-C22)

Curve Fit: **AVERAGE RF**

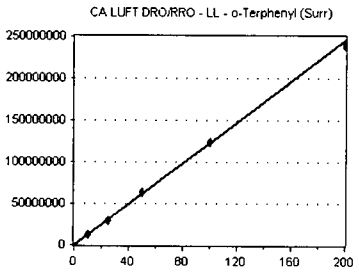


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	1.989938E+07	795975.200	6.00
9K13038-CAL2	40	3.23102E+07	807755.000	6.00
9K13038-CAL3	100	7.916526E+07	791652.600	6.00
9K13038-CAL4	250	1.998293E+08	799317.200	6.00
9K13038-CAL5	500	4.007107E+08	801421.400	6.00
9K13038-CAL6	1000	8.410977E+08	841097.800	6.00
9K13038-CAL7	2500	2.086708E+09	834683.200	6.00
9K13038-CAL8	5000	4.155971E+09	831194.200	6.00

AVE RF **812887.100** RF RSD **2.41** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

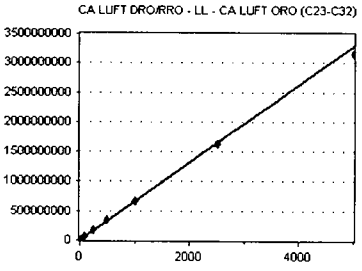


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

CA LUFT ORO (C23-C32)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	2.742169E+07	685542.300	7.50
9K13038-CALF	80	5.14927E+07	643658.800	7.50
9K13038-CALG	250	1.693531E+08	677412.400	7.50
9K13038-CALH	500	3.335008E+08	667001.600	7.50
9K13038-CALI	1000	6.597496E+08	659749.600	7.50
9K13038-CALJ	2500	1.632345E+09	652938.000	7.50
9K13038-CALK	5000	3.165883E+09	633176.600	7.50

AVE RF **659925.600** RF RSD **2.79** AVE RT **7.50**

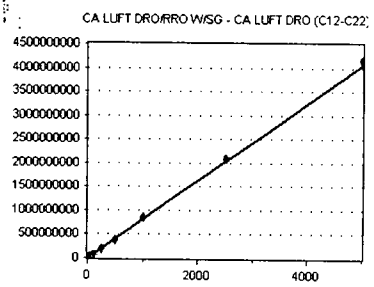
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **CA LUFT DRO/RRO W/SG** Instrument Cal ID: **A9K1402**

CA LUFT DRO (C12-C22)

Curve Fit: **AVERAGE RF**

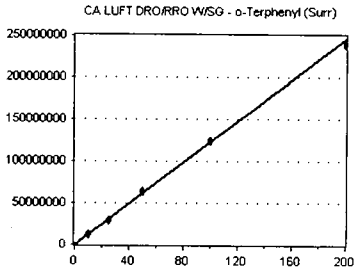


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	1.989938E+07	795975.200	6.00
9K13038-CAL2	40	3.23102E+07	807755.000	6.00
9K13038-CAL3	100	7.916526E+07	791652.600	6.00
9K13038-CAL4	250	1.998293E+08	799317.200	6.00
9K13038-CAL5	500	4.007107E+08	801421.400	6.00
9K13038-CAL6	1000	8.410977E+08	841097.800	6.00
9K13038-CAL7	2500	2.086708E+09	834683.200	6.00
9K13038-CAL8	5000	4.155971E+09	831194.200	6.00

AVE RF **812887.100** RF RSD **2.41** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

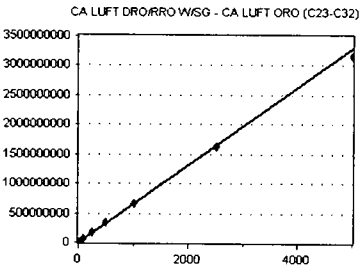


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

CA LUFT ORO (C23-C32)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	2.742169E+07	685542.300	7.50
9K13038-CALF	80	5.14927E+07	643658.800	7.50
9K13038-CALG	250	1.693531E+08	677412.400	7.50
9K13038-CALH	500	3.335008E+08	667001.600	7.50
9K13038-CALI	1000	6.597496E+08	659749.600	7.50
9K13038-CALJ	2500	1.632345E+09	652938.000	7.50
9K13038-CALK	5000	3.165883E+09	633176.600	7.50

AVE RF **659925.600** RF RSD **2.79** AVE RT **7.50**

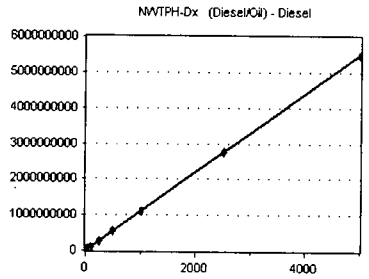
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil)** Instrument Cal ID: **A9K1402**

Diesel

Curve Fit: **AVERAGE RF**

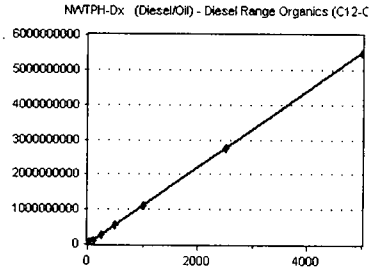


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

Diesel Range Organics (C12-C24)

Curve Fit: **AVERAGE RF**

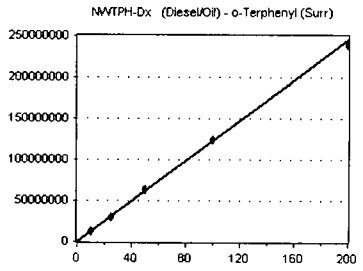


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

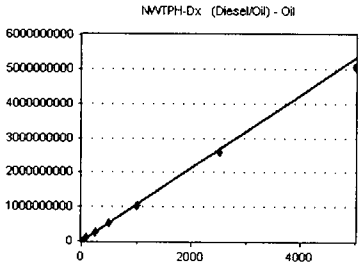


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	4.627001E+07	1156750.000	9.00
9K13038-CALF	80	8.448242E+07	1056030.000	9.00
9K13038-CALG	250	2.676582E+08	1070633.000	9.00
9K13038-CALH	500	5.2512E+08	1050240.000	9.00
9K13038-CALI	1000	1.040681E+09	1040681.000	9.00
9K13038-CALJ	2500	2.592788E+09	1037115.000	9.00
9K13038-CALK	5000	5.065612E+09	1013122.000	9.00

AVE RF **1060653.000** RF RSD **4.33** AVE RT **9.00**

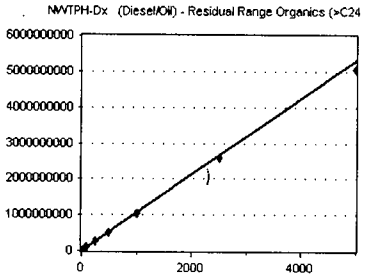
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil)** Instrument Cal ID: **A9K1402**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	4.627001E+07	1156750.000	9.00
9K13038-CALF	80	8.448242E+07	1056030.000	9.00
9K13038-CALG	250	2.676582E+08	1070633.000	9.00
9K13038-CALH	500	5.2512E+08	1050240.000	9.00
9K13038-CALI	1000	1.040681E+09	1040681.000	9.00
9K13038-CALJ	2500	2.592788E+09	1037115.000	9.00
9K13038-CALK	5000	5.065612E+09	1013122.000	9.00

AVE RF **1060653.000** RF RSD **4.33** AVE RT **9.00**

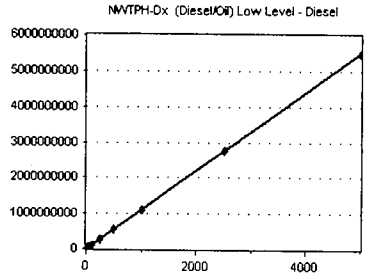
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) Low** Instrument Cal ID: **A9K1402**

Diesel

Curve Fit: **AVERAGE RF**

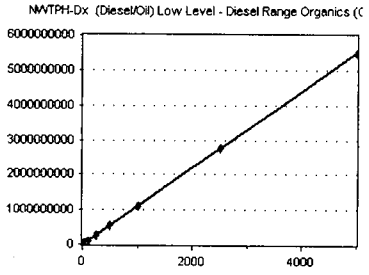


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

Diesel Range Organics (C12-C24)

Curve Fit: **AVERAGE RF**

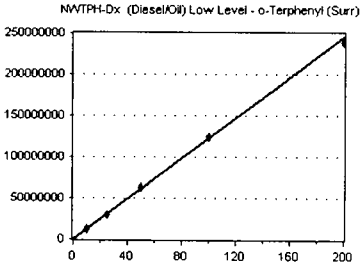


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

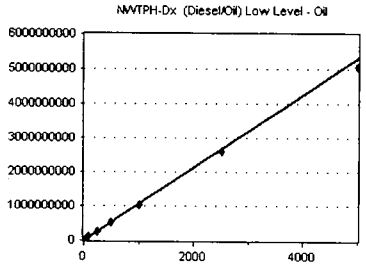


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	4.627001E+07	1156750.000	9.00
9K13038-CALF	80	8.448242E+07	1056030.000	9.00
9K13038-CALG	250	2.676582E+08	1070633.000	9.00
9K13038-CALH	500	5.2512E+08	1050240.000	9.00
9K13038-CALI	1000	1.040681E+09	1040681.000	9.00
9K13038-CALJ	2500	2.592788E+09	1037115.000	9.00
9K13038-CALK	5000	5.065612E+09	1013122.000	9.00

AVE RF **1060653.000** RF RSD **4.33** AVE RT **9.00**

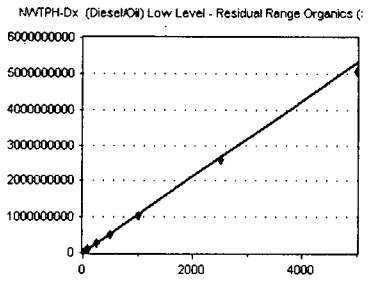
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) Low** Instrument Cal ID: **A9K1402**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	4.627001E+07	1156750.000	9.00
9K13038-CALF	80	8.448242E+07	1056030.000	9.00
9K13038-CALG	250	2.676582E+08	1070633.000	9.00
9K13038-CALH	500	5.2512E+08	1050240.000	9.00
9K13038-CALI	1000	1.040681E+09	1040681.000	9.00
9K13038-CALJ	2500	2.592788E+09	1037115.000	9.00
9K13038-CALK	5000	5.065612E+09	1013122.000	9.00

AVE RF **1060653.000** RF RSD **4.33** AVE RT **9.00**

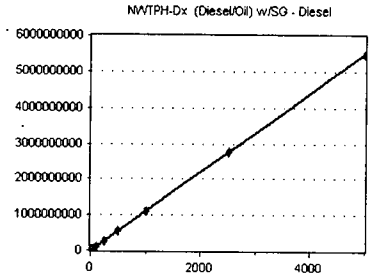
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S** Instrument Cal ID: **A9K1402**

Diesel

Curve Fit: **AVERAGE RF**

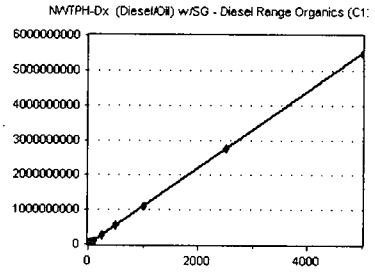


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

Diesel Range Organics (C12-C24)

Curve Fit: **AVERAGE RF**

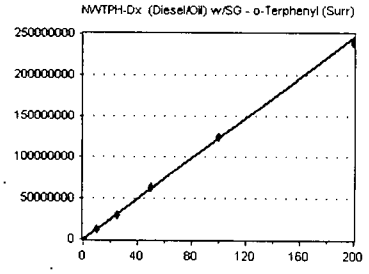


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

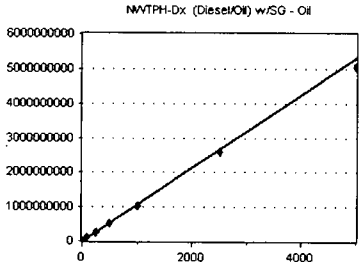


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	4.627001E+07	1156750.000	9.00
9K13038-CALF	80	8.448242E+07	1056030.000	9.00
9K13038-CALG	250	2.676582E+08	1070633.000	9.00
9K13038-CALH	500	5.2512E+08	1050240.000	9.00
9K13038-CALI	1000	1.040681E+09	1040681.000	9.00
9K13038-CALJ	2500	2.592788E+09	1037115.000	9.00
9K13038-CALK	5000	5.065612E+09	1013122.000	9.00

AVE RF **1060653.000** RF RSD **4.33** AVE RT **9.00**

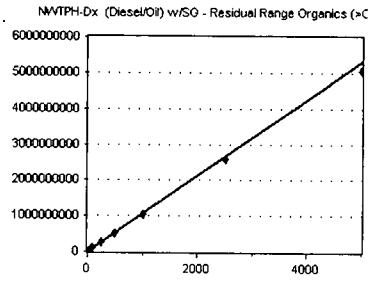
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S** Instrument Cal ID: **A9K1402**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	4.627001E+07	1156750.000	9.00
9K13038-CALF	80	8.448242E+07	1056030.000	9.00
9K13038-CALG	250	2.676582E+08	1070633.000	9.00
9K13038-CALH	500	5.2512E+08	1050240.000	9.00
9K13038-CALI	1000	1.040681E+09	1040681.000	9.00
9K13038-CALJ	2500	2.592788E+09	1037115.000	9.00
9K13038-CALK	5000	5.065612E+09	1013122.000	9.00

AVE RF **1060653.000** RF RSD **4.33** AVE RT **9.00**

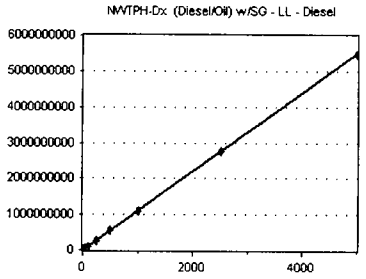
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S** Instrument Cal ID: **A9K1402**

Diesel

Curve Fit: **AVERAGE RF**

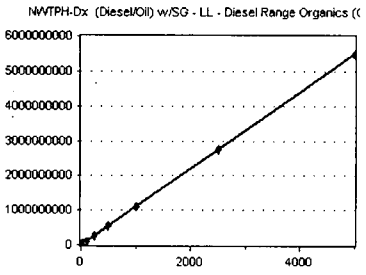


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

Diesel Range Organics (C12-C24

Curve Fit: **AVERAGE RF**

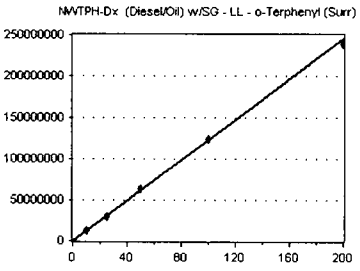


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

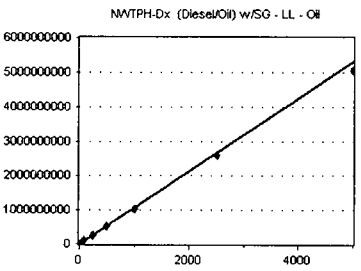


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	4.627001E+07	1156750.000	9.00
9K13038-CALF	80	8.448242E+07	1056030.000	9.00
9K13038-CALG	250	2.676582E+08	1070633.000	9.00
9K13038-CALH	500	5.2512E+08	1050240.000	9.00
9K13038-CALI	1000	1.040681E+09	1040681.000	9.00
9K13038-CALJ	2500	2.592788E+09	1037115.000	9.00
9K13038-CALK	5000	5.065612E+09	1013122.000	9.00

AVE RF **1060653.000** RF RSD **4.33** AVE RT **9.00**

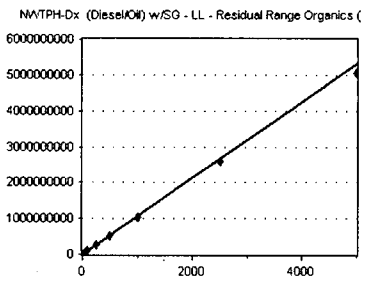
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S** Instrument Cal ID: **A9K1402**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	4.627001E+07	1156750.000	9.00
9K13038-CALF	80	8.448242E+07	1056030.000	9.00
9K13038-CALG	250	2.676582E+08	1070633.000	9.00
9K13038-CALH	500	5.2512E+08	1050240.000	9.00
9K13038-CALI	1000	1.040681E+09	1040681.000	9.00
9K13038-CALJ	2500	2.592788E+09	1037115.000	9.00
9K13038-CALK	5000	5.065612E+09	1013122.000	9.00

AVE RF **1060653.000** RF RSD **4.33** AVE RT **9.00**

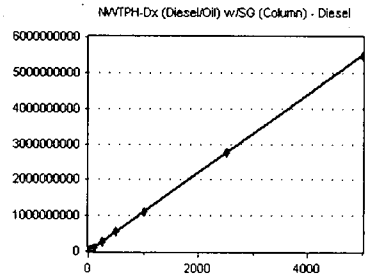
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/SG** Instrument Cal ID: **A9K1402**

Diesel

Curve Fit: **AVERAGE RF**

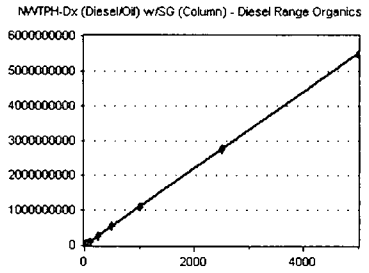


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

Diesel Range Organics (C12-C24)

Curve Fit: **AVERAGE RF**

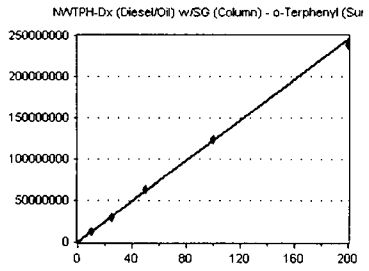


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL1	25	2.842765E+07	1137106.000	6.00
9K13038-CAL2	40	4.599917E+07	1149979.000	6.00
9K13038-CAL3	100	1.078911E+08	1078911.000	6.00
9K13038-CAL4	250	2.700105E+08	1080042.000	6.00
9K13038-CAL5	500	5.359907E+08	1071981.000	6.00
9K13038-CAL6	1000	1.1149E+09	1114900.000	6.00
9K13038-CAL7	2500	2.757614E+09	1103046.000	6.00
9K13038-CAL8	5000	5.483666E+09	1096733.000	6.00

AVE RF **1104087.000** RF RSD **2.56** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

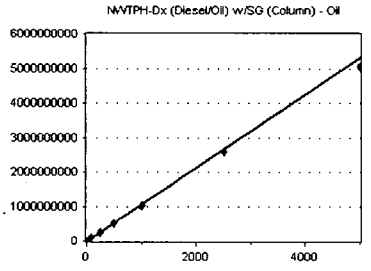


Standard	Concentration	Response	Response Factor	RT
9K13038-CAL9	10	1.214393E+07	1214393.000	6.38
9K13038-CALA	25	3.012889E+07	1205156.000	6.38
9K13038-CALB	50	6.365252E+07	1273050.000	6.38
9K13038-CALC	100	1.248929E+08	1248929.000	6.38
9K13038-CALD	200	2.388505E+08	1194253.000	6.39

AVE RF **1227156.000** RF RSD **2.67** AVE RT **6.38**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	4.627001E+07	1156750.000	9.00
9K13038-CALF	80	8.448242E+07	1056030.000	9.00
9K13038-CALG	250	2.676582E+08	1070633.000	9.00
9K13038-CALH	500	5.2512E+08	1050240.000	9.00
9K13038-CALI	1000	1.040681E+09	1040681.000	9.00
9K13038-CALJ	2500	2.592788E+09	1037115.000	9.00
9K13038-CALK	5000	5.065612E+09	1013122.000	9.00

AVE RF **1060653.000** RF RSD **4.33** AVE RT **9.00**

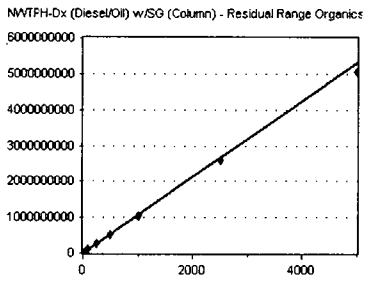
Element Calibration Review Sheet

Calibration ID: **A9K1402** Instrument: **DUALFID4R** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/SC** Instrument Cal ID: **A9K1402**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13038-CALE	40	4.627001E+07	1156750.000	9.00
9K13038-CALF	80	8.448242E+07	1056030.000	9.00
9K13038-CALG	250	2.676582E+08	1070633.000	9.00
9K13038-CALH	500	5.2512E+08	1050240.000	9.00
9K13038-CALI	1000	1.040681E+09	1040681.000	9.00
9K13038-CALJ	2500	2.592788E+09	1037115.000	9.00
9K13038-CALK	5000	5.065612E+09	1013122.000	9.00

AVE RF **1060653.000** RF RSD **4.33** AVE RT **9.00**

Calibration Status Report HP G1530A

Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019
Response via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	D1	25.00	0.00	G:\4\DATA\2019-11\9K13038\4R111305.D
2	D2	40.00	0.00	G:\4\DATA\2019-11\9K13038\4R111306.D
3	D3	100.00	0.00	G:\4\DATA\2019-11\9K13038\4R111307.D
4	D4	250.00	0.00	G:\4\DATA\2019-11\9K13038\4R111308.D
5	D5	500.00	0.00	G:\4\DATA\2019-11\9K13038\4R111309.D
6	D6	1000.00	0.00	G:\4\DATA\2019-11\9K13038\4R111310.D
7	D7	2500.00	0.00	G:\4\DATA\2019-11\9K13038\4R111311.D
8	D8	5000.00	0.00	G:\4\DATA\2019-11\9K13038\4R111312.D
9	S1	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111313.D
10	S2	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111314.D
11	S3	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111315.D
12	S4	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111316.D
13	S5	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111317.D
14	O1	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111318.D
15	O2	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111319.D
16	O3	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111320.D
17	O4	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111321.D
18	O5	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111322.D
19	O6	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111323.D
20	O7	-1.00	0.00	G:\4\DATA\2019-11\9K13038\4R111325.D

RA 11.14.19

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#	ID	Update Time	Quant Time	Acquisition Time
1	D1	Nov 14 07:25 2019	Nov 14 07:09 2019	13 Nov 2019 11:21
2	D2	Nov 14 07:25 2019	Nov 14 07:11 2019	13 Nov 2019 11:41
3	D3	Nov 14 07:25 2019	Nov 14 07:10 2019	13 Nov 2019 12:01
4	D4	Nov 14 07:26 2019	Nov 14 07:11 2019	13 Nov 2019 12:22
5	D5	Nov 14 07:26 2019	Nov 14 07:11 2019	13 Nov 2019 12:43
6	D6	Nov 14 07:26 2019	Nov 14 07:12 2019	13 Nov 2019 13:04
7	D7	Nov 14 07:26 2019	Nov 14 07:12 2019	13 Nov 2019 13:26
8	D8	Nov 14 07:26 2019	Nov 14 07:12 2019	13 Nov 2019 13:47
9	S1	Nov 14 07:26 2019	Nov 14 07:12 2019	13 Nov 2019 14:09
10	S2	Nov 14 07:26 2019	Nov 14 07:12 2019	13 Nov 2019 14:30
11	S3	Nov 14 07:27 2019	Nov 14 07:12 2019	13 Nov 2019 14:52
12	S4	Nov 14 07:27 2019	Nov 14 07:12 2019	13 Nov 2019 15:12
13	S5	Nov 14 07:27 2019	Nov 14 07:13 2019	13 Nov 2019 15:34
14	O1	Nov 14 07:27 2019	Nov 14 07:13 2019	13 Nov 2019 15:54
15	O2	Nov 14 07:27 2019	Nov 14 07:13 2019	13 Nov 2019 16:16
16	O3	Nov 14 07:27 2019	Nov 14 07:13 2019	13 Nov 2019 16:37
17	O4	Nov 14 07:27 2019	Nov 14 07:14 2019	13 Nov 2019 16:59
18	O5	Nov 14 07:28 2019	Nov 14 07:14 2019	13 Nov 2019 17:21
19	O6	Nov 14 07:28 2019	Nov 14 07:14 2019	13 Nov 2019 17:42
20	O7	Nov 14 07:28 2019	Nov 14 07:15 2019	13 Nov 2019 18:23

4R91113D.M Thu Nov 14 07:28:46 2019 SV-GCMS3

Response Factor Report HP G1530A

Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019

A9K1402

Calibration Files
D1 =4R111305.D D2 =4R111306.D D3 =4R111307.D
D4 =4R111308.D D5 =4R111309.D D6 =4R111310.D

		Compound	D1	D2	D3	D4	D5	D6	Avg		%RSD
1)	H	Mineral Oil	1.137	1.150	1.079	1.080	1.072	1.115	1.104	E6	2.56
2)	H	Diesel	1.137	1.150	1.079	1.080	1.072	1.115	1.104	E6	2.56
3)	H	DRO(C12-C24)	1.137	1.150	1.079	1.080	1.072	1.115	1.104	E6	2.56
4)	H	CA LUFT DRO (C12-C2	7.960	8.078	7.917	7.993	8.014	8.411	8.129	E5	2.41
5)	H	TPHd (C10-C25)	1.012	1.040	0.997	1.008	1.005	1.049	1.023	E6	1.94
6)	S	o-Terphenyl							1.227	E6	2.67
7)	H	Oil							1.061	E6	4.33
8)	H	RRO (C24-C40)							1.061	E6	4.33
9)	H	TPHmo (C25-C36)							6.642	E5	2.61
10)	H	CA LUFT ORO (C23-C3							6.599	E5	2.79

AN 11.14.19

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019
Response via : Initial Calibration
Total Cpnds : 10

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	H	Mineral Oil	6.00	1.000	A	A	A
2	H	Diesel	6.00	1.000	A	A	A
3	H	DRO(C12-C24)	6.00	1.000	A	A	A
4	H	CA LUFT DRO (C12-C22)	6.00	1.000	A	A	A
5	H	TPHd (C10-C25)	6.00	1.000	A	A	A
6	S	o-Terphenyl	6.38	1.000	A	A	R
7	H	Oil	9.00	1.000	A	A	A
8	H	RRO (C24-C40)	9.00	1.000	A	A	A
9	H	TPHmo (C25-C36)	8.00	1.000	A	A	A
10	H	CA LUFT ORO (C23-C32)	7.50	1.000	A	A	A

AN 11.14.19

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

4R91113D.M Thu Nov 14 07:28:55 2019 SV-GCMS3

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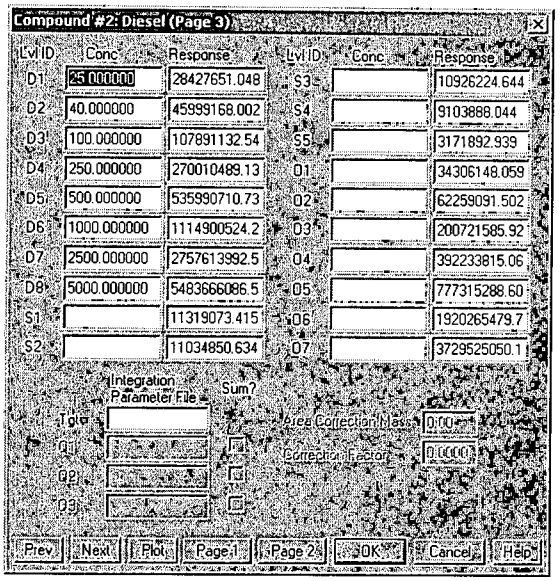
Compound #2: Diesel (Page 3)
Lvl ID
Conc
Response
D1 25.000000 28427651.048
D2 40.000000 45999168.002
D3 100.000000 107891132.54
D4 250.000000 270010489.13
D5 500.000000 535990710.73
D6 1000.000000 1114900524.2
D7 2500.000000 2757613992.5
D8 5000.000000 5483666086.5
S1 11319073.415
S2 11034850.634
S3 10926224.644
S4 9103888.044
S5 3171892.939
01 34306148.059
02 62259091.502
03 200721585.92
04 392233815.06
05 777315288.60
06 1920265479.7
07 3729525050.1
Integration Parameter File
Sum?
Area Correction Mass
Correction Factor
0.00
0.0000
Prev
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Plot
Page 1
Page 2
OK
Cancel
Help

RL 11.14.19

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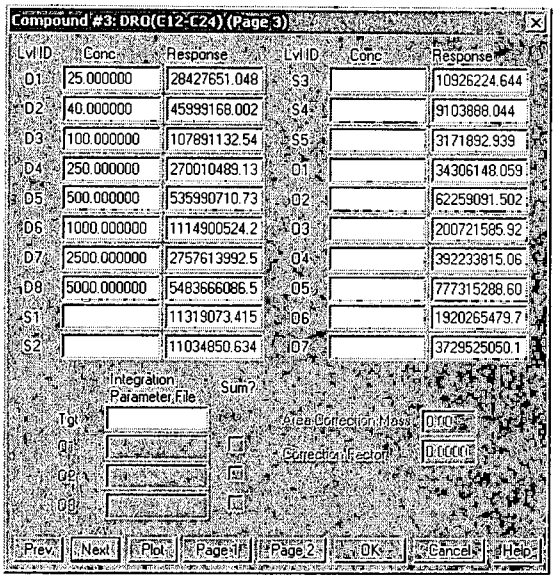
Compound #3: DRO(C12-C24) (Page 3)
LvlID Conc Response
D1 25.000000 28427651.048
D2 40.000000 45999168.002
D3 100.000000 107891132.54
D4 250.000000 270010489.13
D5 500.000000 535990710.73
D6 1000.000000 1114900524.2
D7 2500.000000 2757613992.5
D8 5000.000000 5483666086.5
S1 11319073.415
S2 11034850.634
LvlID Conc Response
S3 10926224.644
S4 9103888.044
S5 3171892.939
O1 34306148.059
O2 62259091.502
O3 200721585.92
O4 392233815.06
O5 777315288.60
O6 1920265479.7
O7 3729525050.1
Integration Parameter File
Sum?
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Q1
Q2
Q3
Area Correction Mass
Correction Factor
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Cancel
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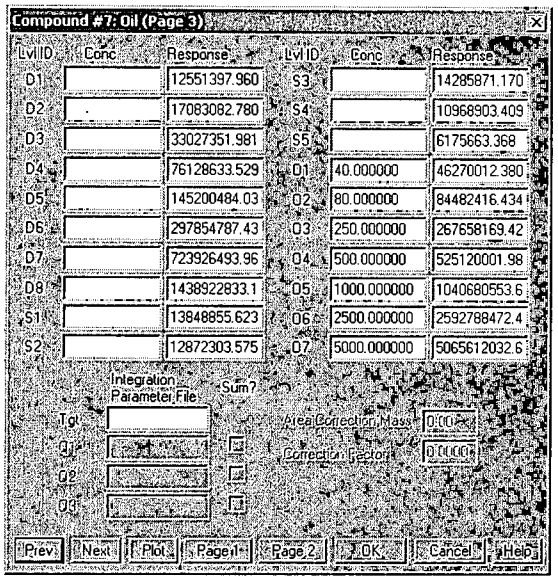
11-14-19


Compound #7: Oil (Page 3)
Lvl ID
Conc
Response
D1 12551397.960
D2 17083082.780
D3 33027351.981
D4 76128633.529
D5 145200484.03
D6 297854787.43
D7 723926493.96
D8 1438922833.1
S1 13848855.623
S2 12872303.575
Lvl ID
Conc
Response
S3 14285871.170
S4 10968903.409
S5 6175663.368
O1 40.000000 46270012.380
O2 80.000000 84482416.434
O3 250.000000 267658169.42
O4 500.000000 525120001.98
O5 1000.000000 1040680553.6
O6 2500.000000 2592788472.4
O7 5000.000000 5065612032.6
Integration Parameter File
Sum?
Tgt
Q1
Q2
Q3
Area Correction, Mass
Correction Factor
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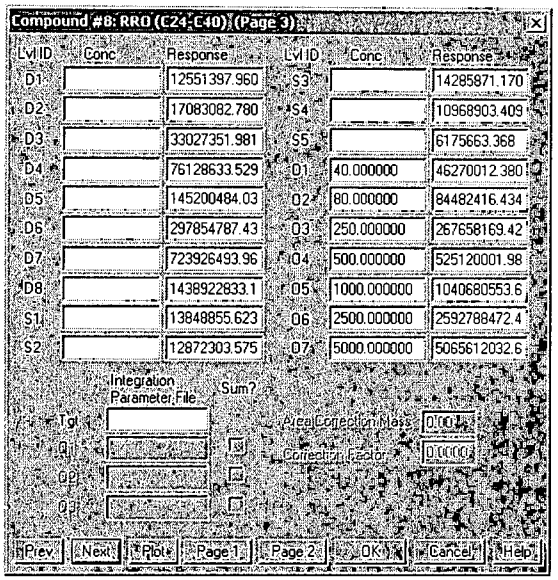
11.14.19


Compound #8: RRO (C24-C40) (Page 3)
Lvl ID
Conc
Response
D1
12551397.960
D2
17083082.780
D3
33027351.981
D4
76128633.529
D5
145200484.03
D6
297854787.43
D7
723926493.96
D8
1438922833.1
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13848855.623
S2
12872303.575
S3
14285871.170
S4
10968903.409
S5
6175663.368
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46270012.380
O2
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84482416.434
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267658169.42
O4
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525120001.98
O5
1000.000000
1040680553.6
O6
2500.000000
2592788472.4
O7
5000.000000
5065612032.6
Integration Parameter File
Sum?
Tgt
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QP
QF
Area/Correction Mass
Correction Factor
Prev
Next
Plot
Page 1
Page 2
OK
Cancel
Help

11/4/19

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111304.D Vial: 100
Acq On : 13 Nov 2019 10:59 Operator: BLL
Sample : 9K13038-ICB1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 9:10 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	4061887	3.679	ug/ml
2)	H	Diesel	6.00	4061887	3.679	ug/ml
3)	H	DRO(C12-C24)	6.00	4061887	3.679	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	851486	1.047	ug/ml
5)	H	TPHd (C10-C25)	6.00	1623740	1.586	ug/ml
7)	H	Oil	9.00	6387384	6.022	ug/ml
8)	H	RRO (C24-C40)	9.00	6387384	6.022	ug/ml
9)	H	TPHmo (C25-C36)	8.00	3006340	4.526	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	2296054	3.479	ug/ml

< 1/2 RL

RM 11.14.19

J

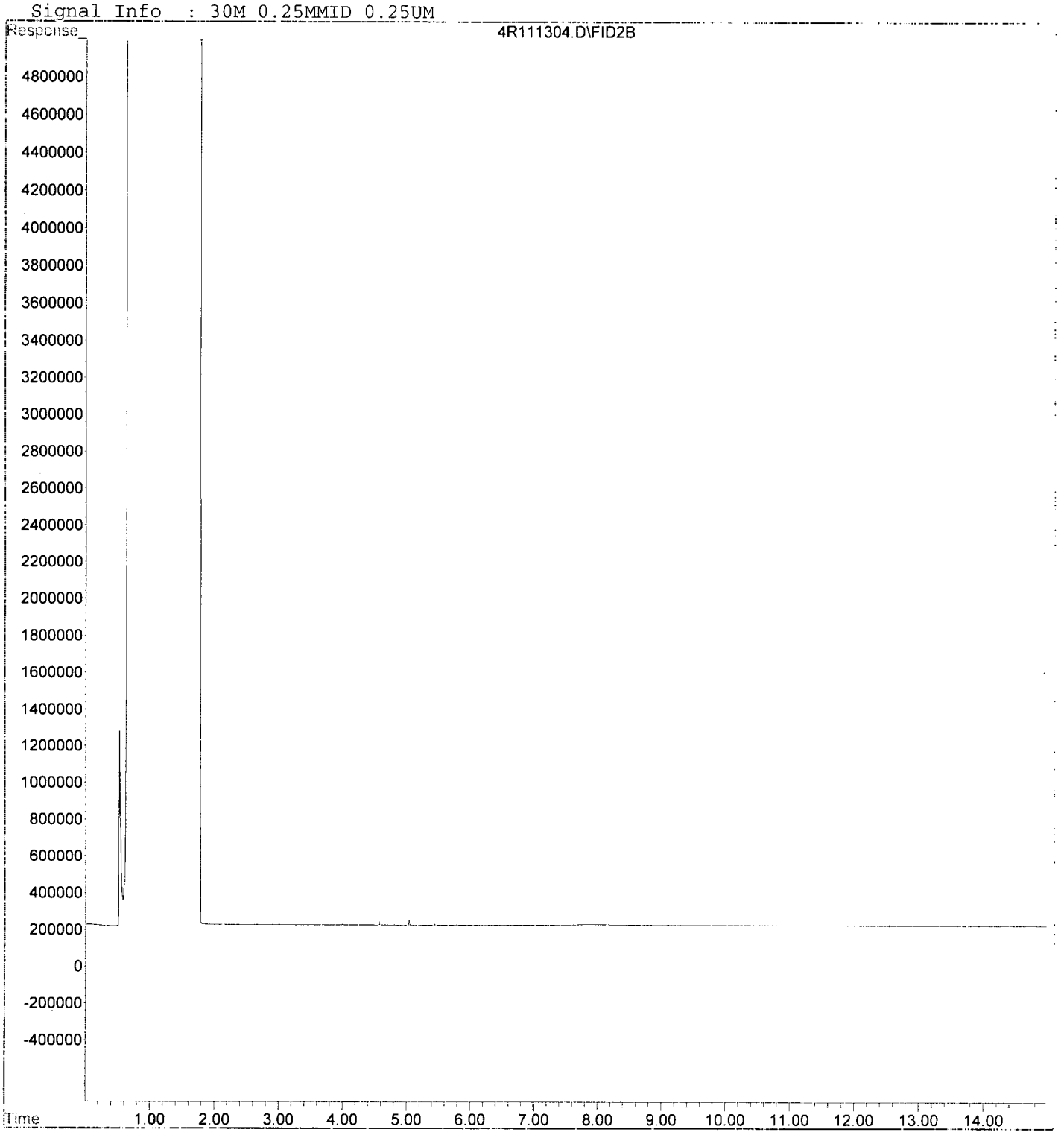
(f)=RT Delta > 1/2 window (m) =manual int.

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111304.D Vial: 100
Acq On : 13 Nov 2019 10:59 Operator: BLL
Sample : 9K13038-ICB1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 9:10 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2019-11\9K13038\4R111327.D Vial: 21
Acq On : 13 Nov 2019 19:05 Operator: BLL
Sample : 9K13038-ICV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E

Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	H	Mineral Oil	1000.000	962.730	3.7	95	0.00
2	H	Diesel	1000.000	962.730	3.7	95	0.00
3	H	DRO(C12-C24)	1000.000	962.730	3.7	95	0.00
4	H	CA LUFT DRO (C12-C22)	1000.000	985.061	1.5	95	0.00
5	H	TPHd (C10-C25)	1000.000	974.478	2.6	95	0.00
7	H	Oil	-1.000	270.245	0.0	96	0.00
8	H	RRO (C24-C40)	-1.000	270.245	0.0	96	0.00
9	H	TPHmo (C25-C36)	-1.000	22.190	0.0	104	0.00
10	H	CA LUFT ORO (C23-C32)	-1.000	47.374	0.0	98	0.00

11.14.19

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

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111327.D Vial: 21
Acq On : 13 Nov 2019 19:05 Operator: BLL
Sample : 9K13038-ICV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 9:11 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	1062938432	962.730	ug/ml
2)	H	Diesel	6.00	1062938432	962.730	ug/ml
3)	H	DRO(C12-C24)	6.00	1062938432	962.730	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	800743497	985.061	ug/ml
5)	H	TPHd (C10-C25)	6.00	997357903	974.478	ug/ml
7)	H	Oil	9.00	286636287	270.245	ug/ml
8)	H	RRO (C24-C40)	9.00	286636287	270.245	ug/ml
9)	H	TPHmo (C25-C36)	8.00	14738423	22.190	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	31263124	47.374	ug/ml

≈ 96%

11.14.19

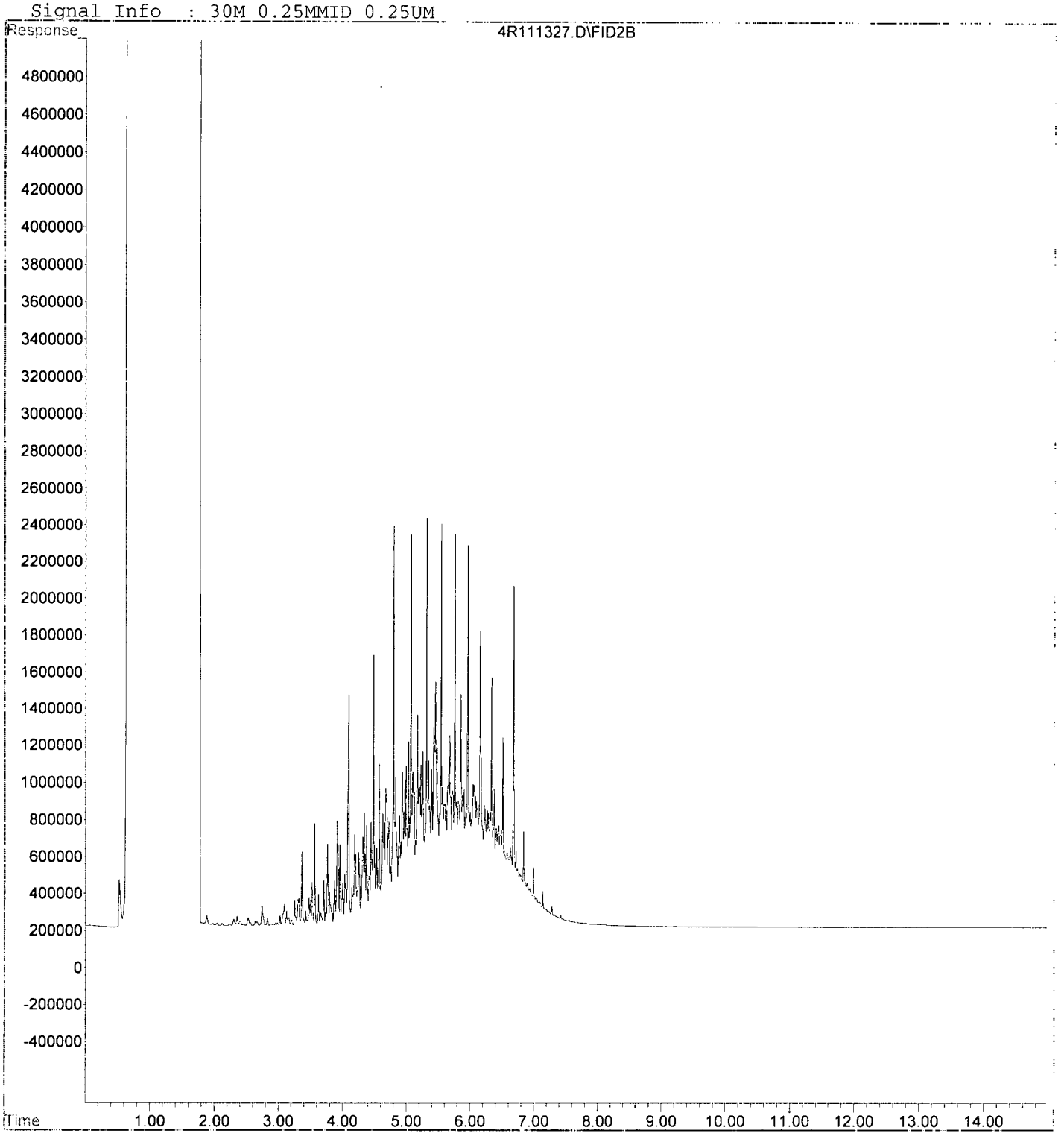
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111327.D Vial: 21
Acq On : 13 Nov 2019 19:05 Operator: BLL
Sample : 9K13038-ICV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 9:11 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2019-11\9K13038\4R111328.D Vial: 22
Acq On : 13 Nov 2019 19:25 Operator: BLL
Sample : 9K13038-ICV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E

Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	H	Mineral Oil	-1.000	637.754	0.0	91	0.00
2	H	Diesel	-1.000	637.754	0.0	91	0.00
3	H	DRO(C12-C24)	-1.000	637.754	0.0	91	0.00
4	H	CA LUFT DRO (C12-C22)	-1.000	68.024	0.0	92	0.00
5	H	TPHd (C10-C25)	-1.000	231.455	0.0	91	0.00
7	H	Oil	1000.000	892.612	10.7	91	0.00
8	H	RRO (C24-C40)	1000.000	892.612	10.7	91	0.00
9	H	TPHmo (C25-C36)	1000.000	896.897	10.3	90	0.00
10	H	CA LUFT ORO (C23-C32)	1000.000	904.681	9.5	90	0.00

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

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111328.D Vial: 22
Acq On : 13 Nov 2019 19:25 Operator: BLL
Sample : 9K13038-ICV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 9:11 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	704135954	637.754	ug/ml
2)	H	Diesel	6.00	704135954	637.754	ug/ml
3)	H	DRO(C12-C24)	6.00	704135954	637.754	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	55296143	68.024	ug/ml
5)	H	TPHd (C10-C25)	6.00	236888957	231.455	ug/ml
7)	H	Oil	9.00	946751217	892.612	ug/ml
8)	H	RRO (C24-C40)	9.00	946751217	892.612	ug/ml
9)	H	TPHmo (C25-C36)	8.00	595702224	896.897	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	597022423	904.681	ug/ml

AR 11.14.19

≈ 89%

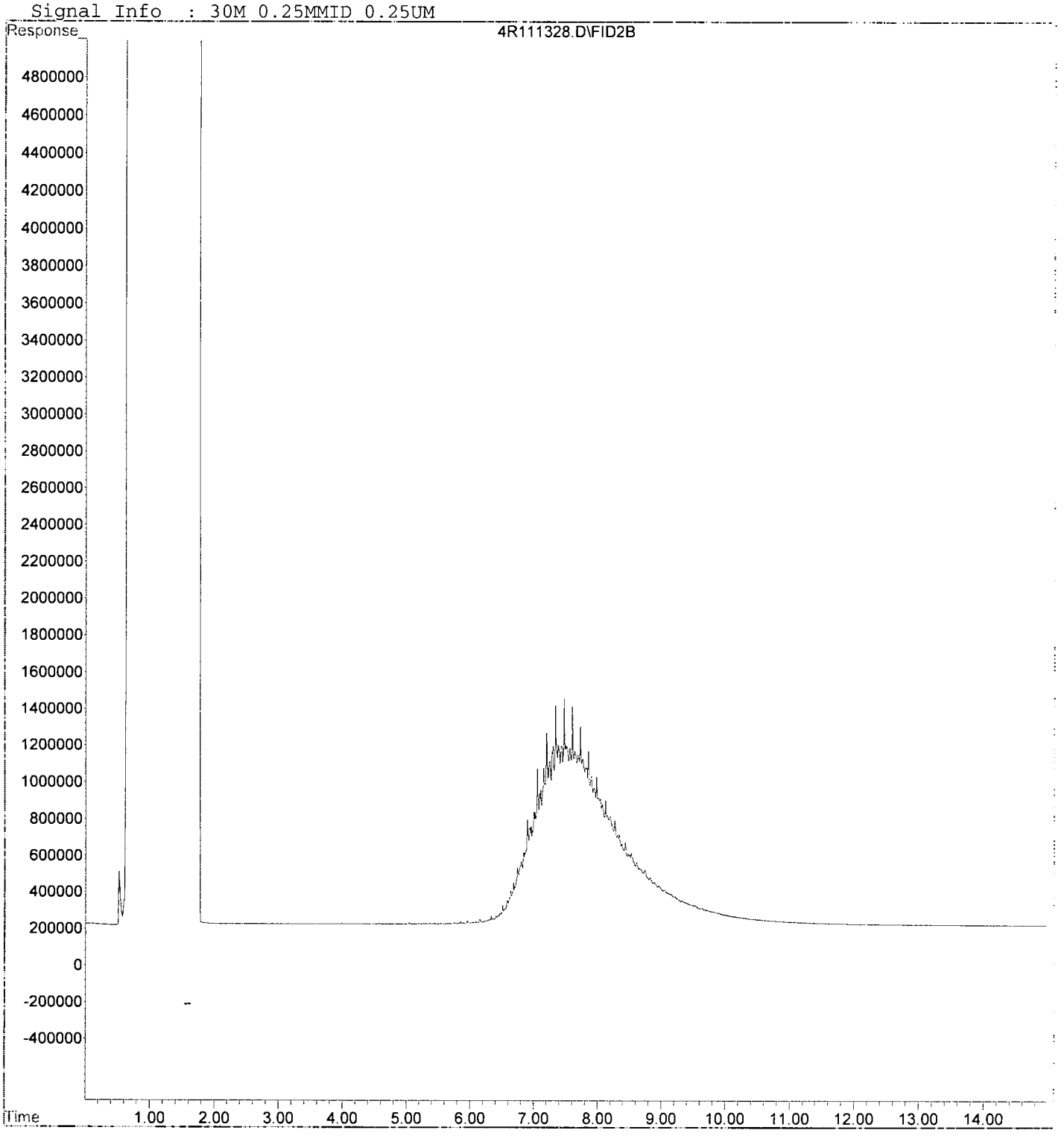
✓

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111328.D Vial: 22
Acq On : 13 Nov 2019 19:25 Operator: BLL
Sample : 9K13038-ICV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 9:11 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:28:24 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Sequence: C:\HPCHEM\4\SEQUENCE\9K13037.S

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 99	DCM	A4F60831	1	Sample		
2	Vial 94	9K13037-RES1	A4F60831	1	Sample		
3	Vial 99	9K13037-ICB1	A4F60831	1	Sample		
4	Vial 1	9K13037-CAL1	A4F60831	1	Sample		
5	Vial 2	9K13037-CAL2	A4F60831	1	Sample		
6	Vial 3	9K13037-CAL3	A4F60831	1	Sample		
7	Vial 4	9K13037-CAL4	A4F60831	1	Sample		
8	Vial 5	9K13037-CAL5	A4F60831	1	Sample		
9	Vial 6	9K13037-CAL6	A4F60831	1	Sample		
10	Vial 7	9K13037-CAL7	A4F60831	1	Sample		
11	Vial 8	9K13037-CAL8	A4F60831	1	Sample		
12	Vial 9	9K13037-CAL9	A4F60831	1	Sample		
13	Vial 10	9K13037-CALA	A4F60831	1	Sample		
14	Vial 11	9K13037-CALB	A4F60831	1	Sample		
15	Vial 12	9K13037-CALC	A4F60831	1	Sample		
16	Vial 13	9K13037-CALD	A4F60831	1	Sample		
17	Vial 14	9K13037-CALE	A4F60831	1	Sample		
18	Vial 15	9K13037-CALF	A4F60831	1	Sample		
19	Vial 16	9K13037-CALG	A4F60831	1	Sample		
20	Vial 17	9K13037-CALH	A4F60831	1	Sample		
21	Vial 18	9K13037-CALI	A4F60831	1	Sample		
22	Vial 19	9K13037-CALJ	A4F60831	1	Sample		
23	Vial 99	9K13037-IBL1	A4F60831	1	Sample		
24	Vial 20	9K13037-CALK	A4F60831	1	Sample		
25	Vial 99	9K13037-IBL2	A4F60831	1	Sample		
26	Vial 21	9K13037-ICV1	A4F60831	1	Sample		
27	Vial 22	9K13037-ICV2	A4F60831	1	Sample		
28	Vial 99	DCM	A4F60831	1	Sample		
29	Vial 99	DCM	A4F60831	1	Sample		
30	Vial 99	DCM	A4F60831	1	Sample		

RL 11.14.19

Sequence Table (Back Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 100	DCM	A4F60831	1	Sample		
2	Vial 100	DCM	A4F60831	1	Sample		
3	Vial 95	9K13038-RES1	A4F60831	1	Sample		
4	Vial 100	9K13038-ICB1	A4F60831	1	Sample		
5	Vial 1	9K13038-CAL1	A4F60831	1	Sample		
6	Vial 2	9K13038-CAL2	A4F60831	1	Sample		
7	Vial 3	9K13038-CAL3	A4F60831	1	Sample		
8	Vial 4	9K13038-CAL4	A4F60831	1	Sample		
9	Vial 5	9K13038-CAL5	A4F60831	1	Sample		
10	Vial 6	9K13038-CAL6	A4F60831	1	Sample		
11	Vial 7	9K13038-CAL7	A4F60831	1	Sample		
12	Vial 8	9K13038-CAL8	A4F60831	1	Sample		
13	Vial 9	9K13038-CAL9	A4F60831	1	Sample		
14	Vial 10	9K13038-CALA	A4F60831	1	Sample		
15	Vial 11	9K13038-CALB	A4F60831	1	Sample		
16	Vial 12	9K13038-CALC	A4F60831	1	Sample		
17	Vial 13	9K13038-CALD	A4F60831	1	Sample		
18	Vial 14	9K13038-CALE	A4F60831	1	Sample		
19	Vial 15	9K13038-CALF	A4F60831	1	Sample		
20	Vial 16	9K13038-CALG	A4F60831	1	Sample		

RL 11.14.19

Sequence: C:\HPCHEM\4\SEQUENCE\9K13037.S

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
21	Vial 17	9K13038-CALH	A4F60831	1	Sample		
22	Vial 18	9K13038-CALI	A4F60831	1	Sample		
23	Vial 19	9K13038-CALJ	A4F60831	1	Sample		
24	Vial 100	9K13038-IBL1	A4F60831	1	Sample		
25	Vial 20	9K13038-CALK	A4F60831	1	Sample		
26	Vial 100	9K13038-IBL2	A4F60831	1	Sample		
27	Vial 21	9K13038-ICV1	A4F60831	1	Sample		
28	Vial 22	9K13038-ICV2	A4F60831	1	Sample		
29	Vial 100	DCM	A4F60831	1	Sample		
30	Vial 100	DCM	A4F60831	1	Sample		

BN 11.14.19

Injection Log

Directory: G:\4\DATA\2019-11\9K13038

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	100	4r111301.d	1.	DCM		13 Nov 2019 09:58
2	100	4r111302.d	1.	DCM		13 Nov 2019 10:18
3	95	4r111303.d	1.	9K13038-RES1		13 Nov 2019 10:39
4	100	4r111304.d	1.	9K13038-ICB1		13 Nov 2019 10:59
5	1	4r111305.d	1.	9K13038-CAL1		13 Nov 2019 11:21
6	2	4r111306.d	1.	9K13038-CAL2		13 Nov 2019 11:41
7	3	4r111307.d	1.	9K13038-CAL3		13 Nov 2019 12:01
8	4	4r111308.d	1.	9K13038-CAL4		13 Nov 2019 12:22
9	5	4r111309.d	1.	9K13038-CAL5		13 Nov 2019 12:43
10	6	4r111310.d	1.	9K13038-CAL6		13 Nov 2019 13:04
11	7	4r111311.d	1.	9K13038-CAL7		13 Nov 2019 13:26
12	8	4r111312.d	1.	9K13038-CAL8		13 Nov 2019 13:47
13	9	4r111313.d	1.	9K13038-CAL9		13 Nov 2019 14:09
14	10	4r111314.d	1.	9K13038-CALA		13 Nov 2019 14:30
15	11	4r111315.d	1.	9K13038-CALB		13 Nov 2019 14:52
16	12	4r111316.d	1.	9K13038-CALC		13 Nov 2019 15:12
17	13	4r111317.d	1.	9K13038-CALD		13 Nov 2019 15:34
18	14	4r111318.d	1.	9K13038-CALE		13 Nov 2019 15:54
19	15	4r111319.d	1.	9K13038-CALF		13 Nov 2019 16:16
20	16	4r111320.d	1.	9K13038-CALG		13 Nov 2019 16:37
21	17	4r111321.d	1.	9K13038-CALH		13 Nov 2019 16:59
22	18	4r111322.d	1.	9K13038-CALI		13 Nov 2019 17:21
23	19	4r111323.d	1.	9K13038-CALJ		13 Nov 2019 17:42
24	100	4r111324.d	1.	9K13038-IBL1		13 Nov 2019 18:03
25	20	4r111325.d	1.	9K13038-CALK		13 Nov 2019 18:23
26	100	4r111326.d	1.	9K13038-IBL2		13 Nov 2019 18:44
27	21	4r111327.d	1.	9K13038-ICV1		13 Nov 2019 19:05
28	22	4r111328.d	1.	9K13038-ICV2		13 Nov 2019 19:25
29	100	4r111329.d	1.	DCM		13 Nov 2019 19:46
30	100	4r111330.d	1.	DCM		13 Nov 2019 20:07

AR 11.14.19

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111303.D Vial: 95
Acq On : 13 Nov 2019 10:39 Operator: BLL
Sample : 9K13040-RES1 Inst : HP G1530A
Misc : 38 m 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:23 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:23:24 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

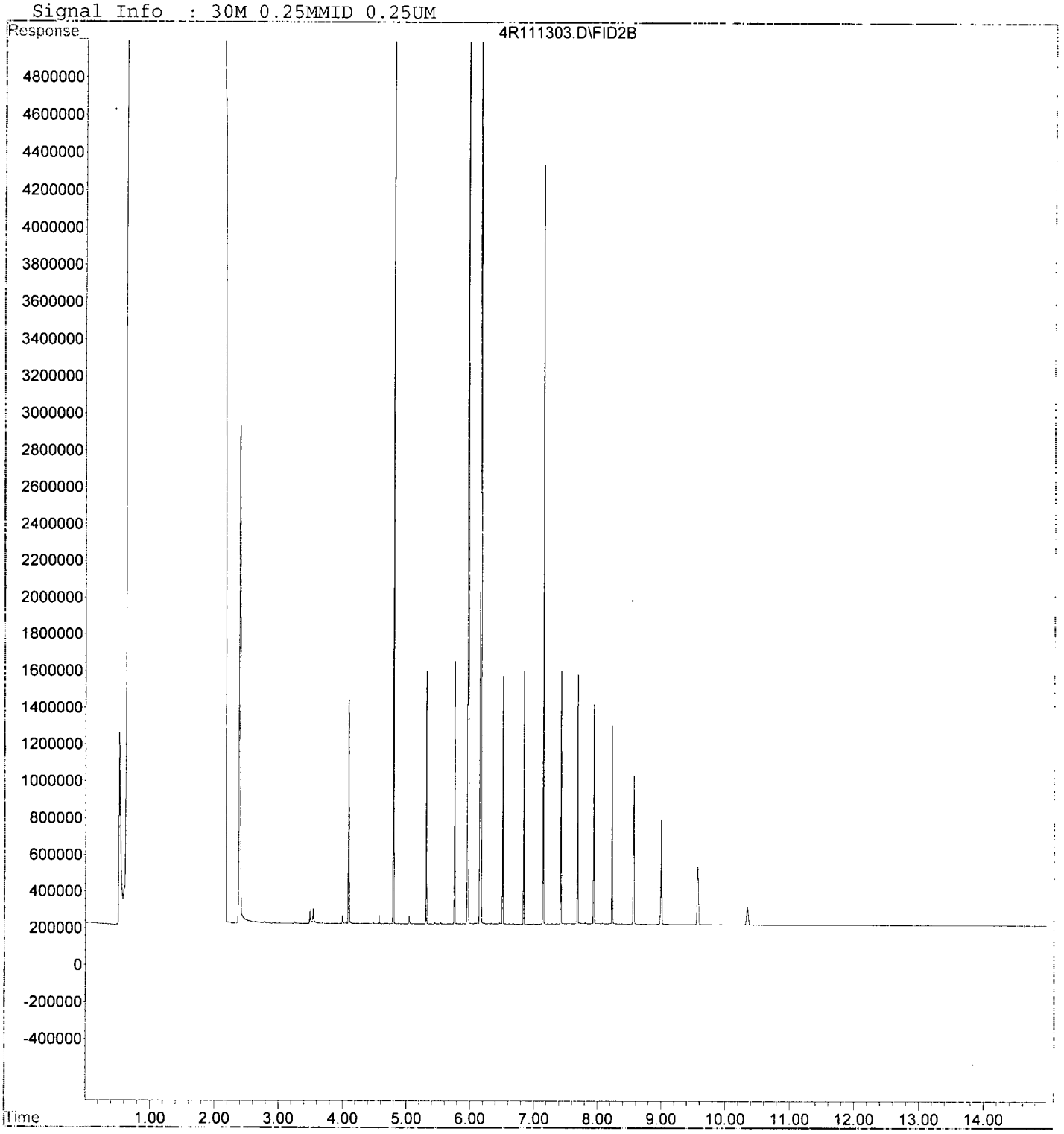
		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	288030009	231.196	ug/ml
2)	H	Diesel	6.00	288030009	231.196	ug/ml
3)	H	DRO(C12-C24)	6.00	288030009	231.196	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	211690872	223.201	ug/ml
5)	H	TPHd (C10-C25)	6.00	249383908	212.952	ug/ml
7)	H	Oil	9.00	177571961	166.479	ug/ml
8)	H	RRO (C24-C40)	9.00	177571961	166.479	ug/ml
9)	H	TPHmo (C25-C36)	8.00	52520621	77.152	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	65326923	93.537	ug/ml

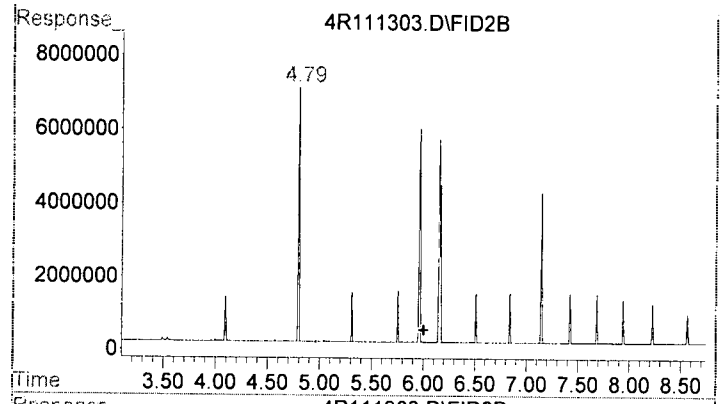
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111303.D Vial: 95
Acq On : 13 Nov 2019 10:39 Operator: BLL
Sample : 9K13040-RES1 Inst : HP G1530A
Misc : 38 AM 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:23 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:23:24 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

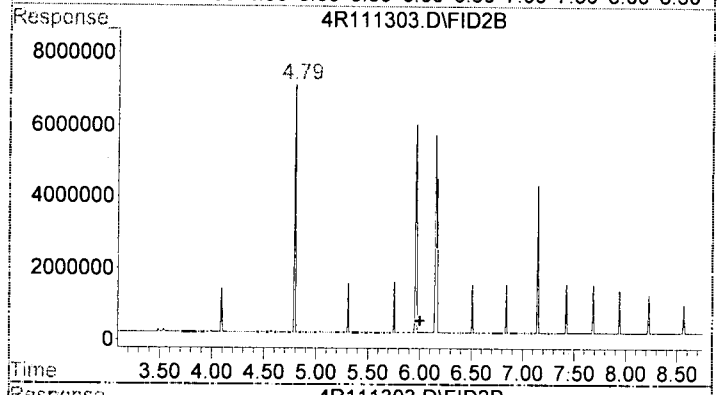
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





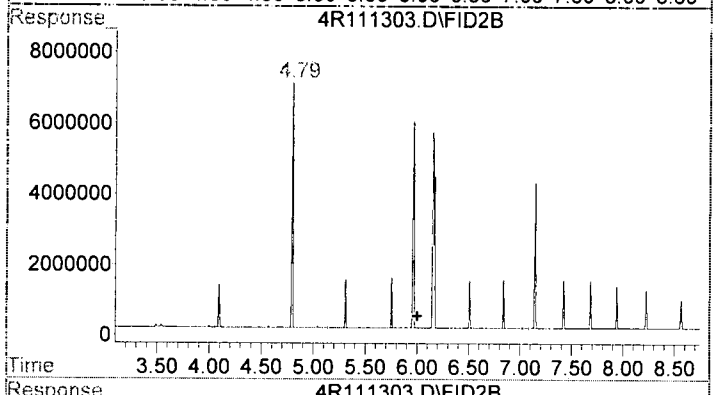
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 288030009
Conc: 231.20 ug/ml m



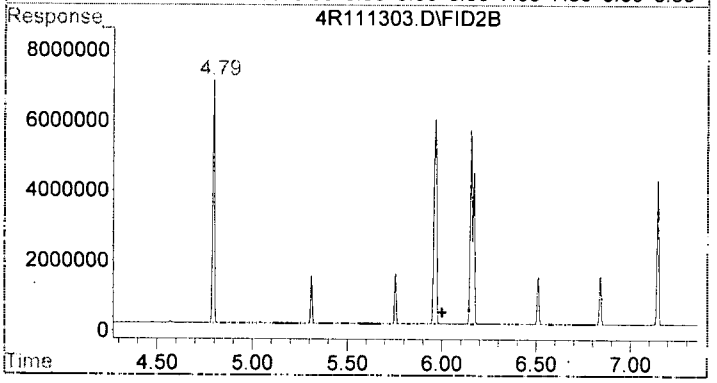
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 288030009
Conc: 231.20 ug/ml m



#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 288030009
Conc: 231.20 ug/ml m



#4 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 211690872
Conc: 223.20 ug/ml m

✓

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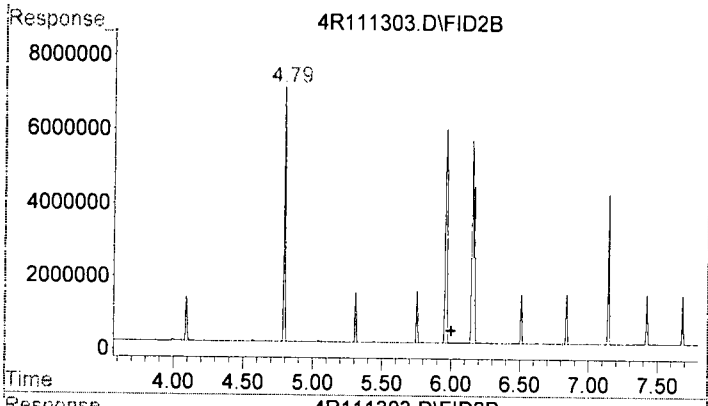
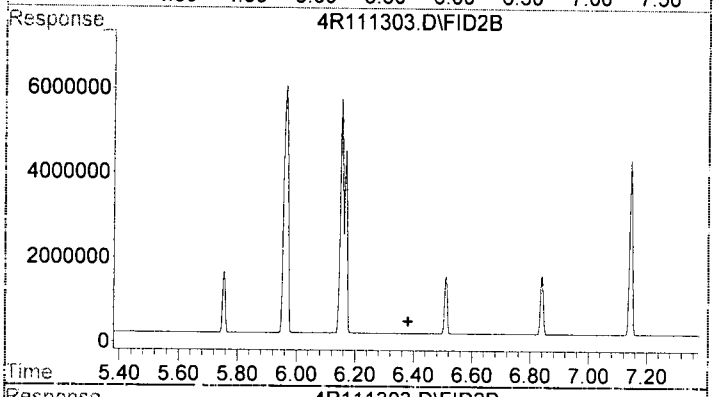
11.14.19



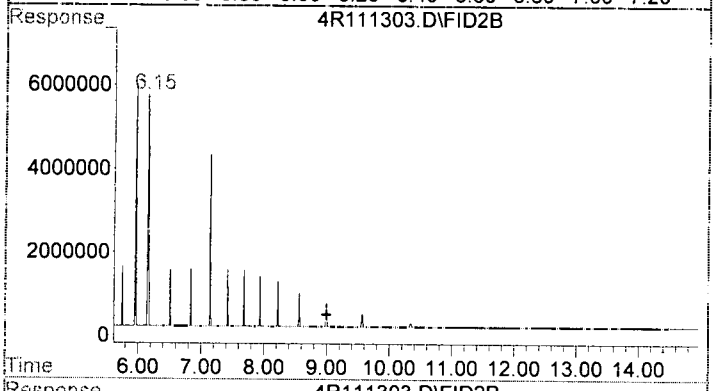
#5 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 249383908
Conc: 212.95 ug/ml m



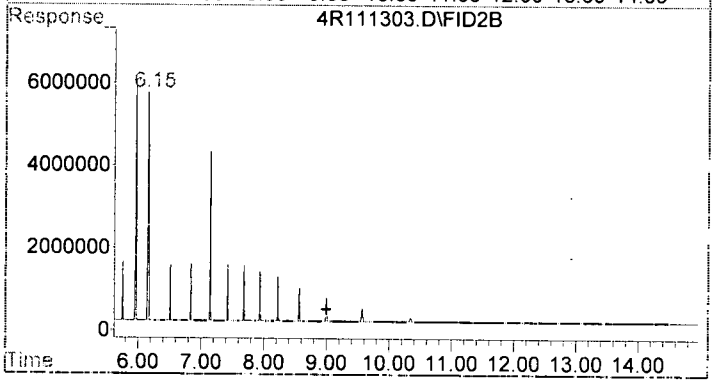
#6 o-Terphenyl

R.T.: 0.000 min
Exp R.T. : 6.380 min
Response: 0
Conc: N.D.



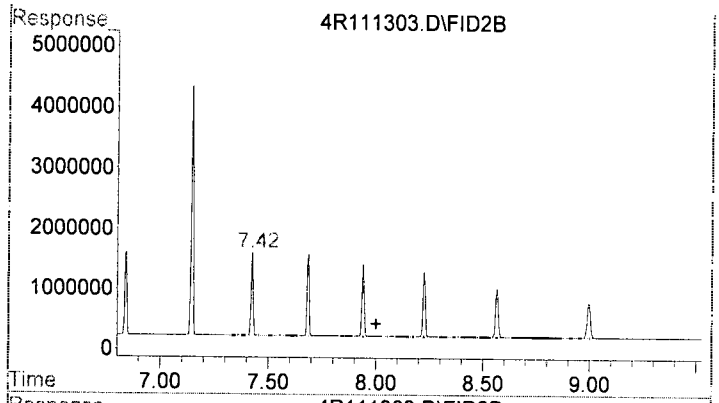
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 177571961
Conc: 166.48 ug/ml m



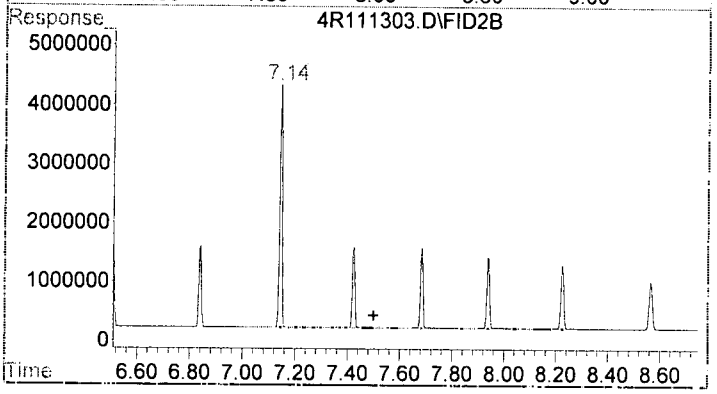
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 177571961
Conc: 166.48 ug/ml m



#9 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 52520621
Conc: 77.15 ug/ml m



#10 CA LUFT ORO (C23-C32)

R.T.: 7.500 min
Delta R.T.: 0.000 min
Response: 65326923
Conc: 93.54 ug/ml m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111304.D Vial: 100
Acq On : 13 Nov 2019 10:59 Operator: BLL
Sample : 9K13040-ICB1 Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:08 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
System Monitoring Compounds						
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
Target Compounds						
1)	H	Mineral Oil	6.00	4061887	3.260	ug/ml
2)	H	Diesel	6.00	4061887	3.260	ug/ml
3)	H	DRO(C12-C24)	6.00	4061887	3.260	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	851486	0.898	ug/ml
5)	H	TPHd (C10-C25)	6.00	1623740	1.387	ug/ml
7)	H	Oil	9.00	6387384	5.988	ug/ml
8)	H	RRO (C24-C40)	9.00	6387384	5.893	ug/ml
9)	H	TPHmo (C25-C36)	8.00	3006340	4.416	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	2296054	3.288	ug/ml

AR 11.14.19

(f)=RT Delta > 1/2 Window (m)=manual int.

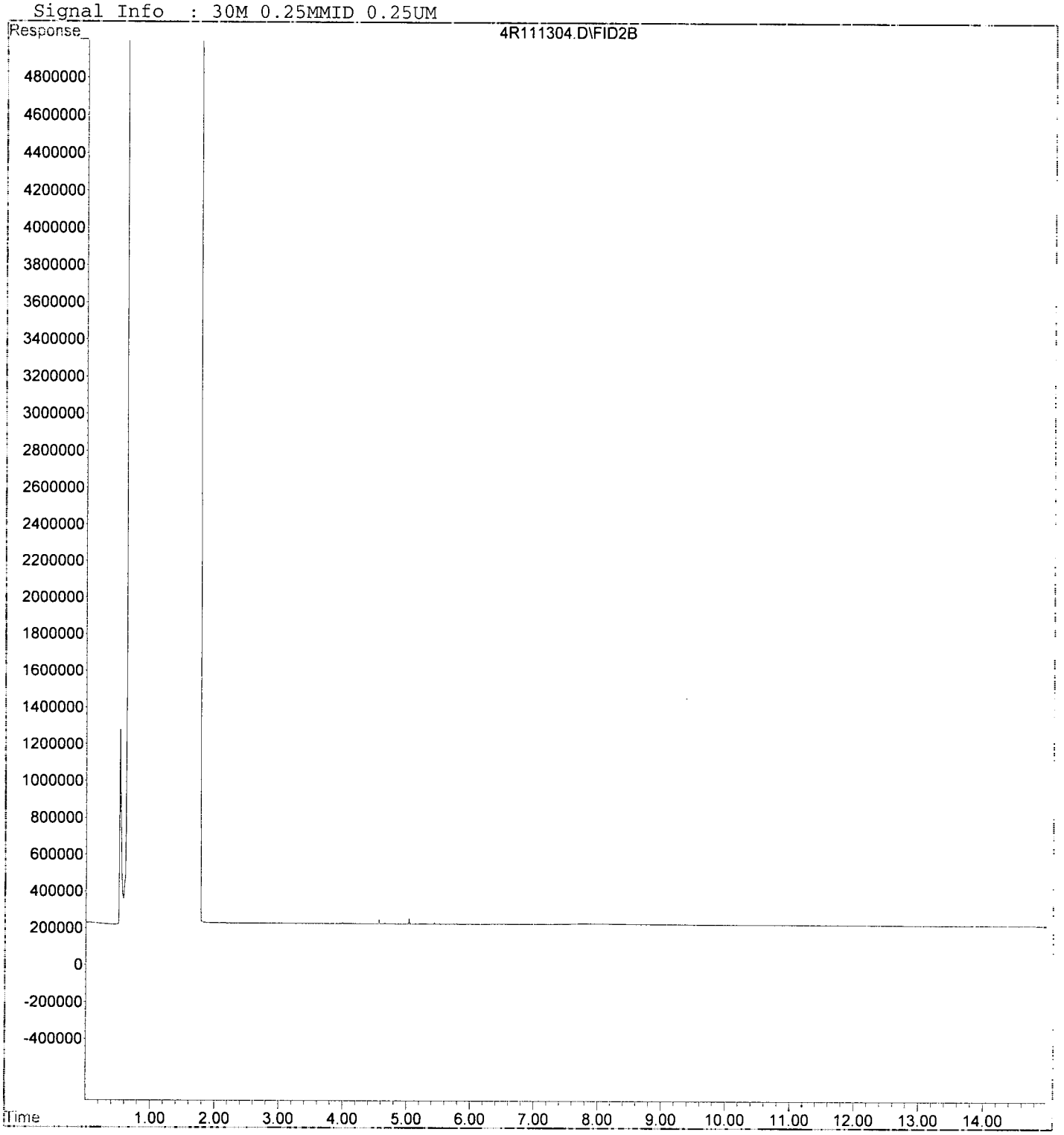
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111304.D Vial: 100
Acq On : 13 Nov 2019 10:59 Operator: BLL
Sample : 9K13038-ICB1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:08 2019 Quant Results File: 4R91113D.RES

38 AN 11.14.19

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111305.D Vial: 1
Acq On : 13 Nov 2019 11:21 Operator: BLL
Sample : 9K13040-CAL1 Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:09 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
6)	S	o-Terphenyl	0.00	0	N.D. ug/mld
		Target Compounds			
1)	H	Mineral Oil	6.00	28427651	22.818 ug/ml
2)	H	Diesel	6.00	28427651	22.818 ug/ml
3)	H	DRO(C12-C24)	6.00	28427651	22.818 ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	19899385	20.981 ug/ml
5)	H	TPHd (C10-C25)	6.00	25297673	21.602 ug/ml
7)	H	Oil	9.00	12551398	11.767 ug/ml
8)	H	RRO (C24-C40)	9.00	12551398	11.580 ug/ml
9)	H	TPHmo (C25-C36)	8.00	2412915	3.545 ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	1790293	2.563 ug/ml

AR 11.14.19

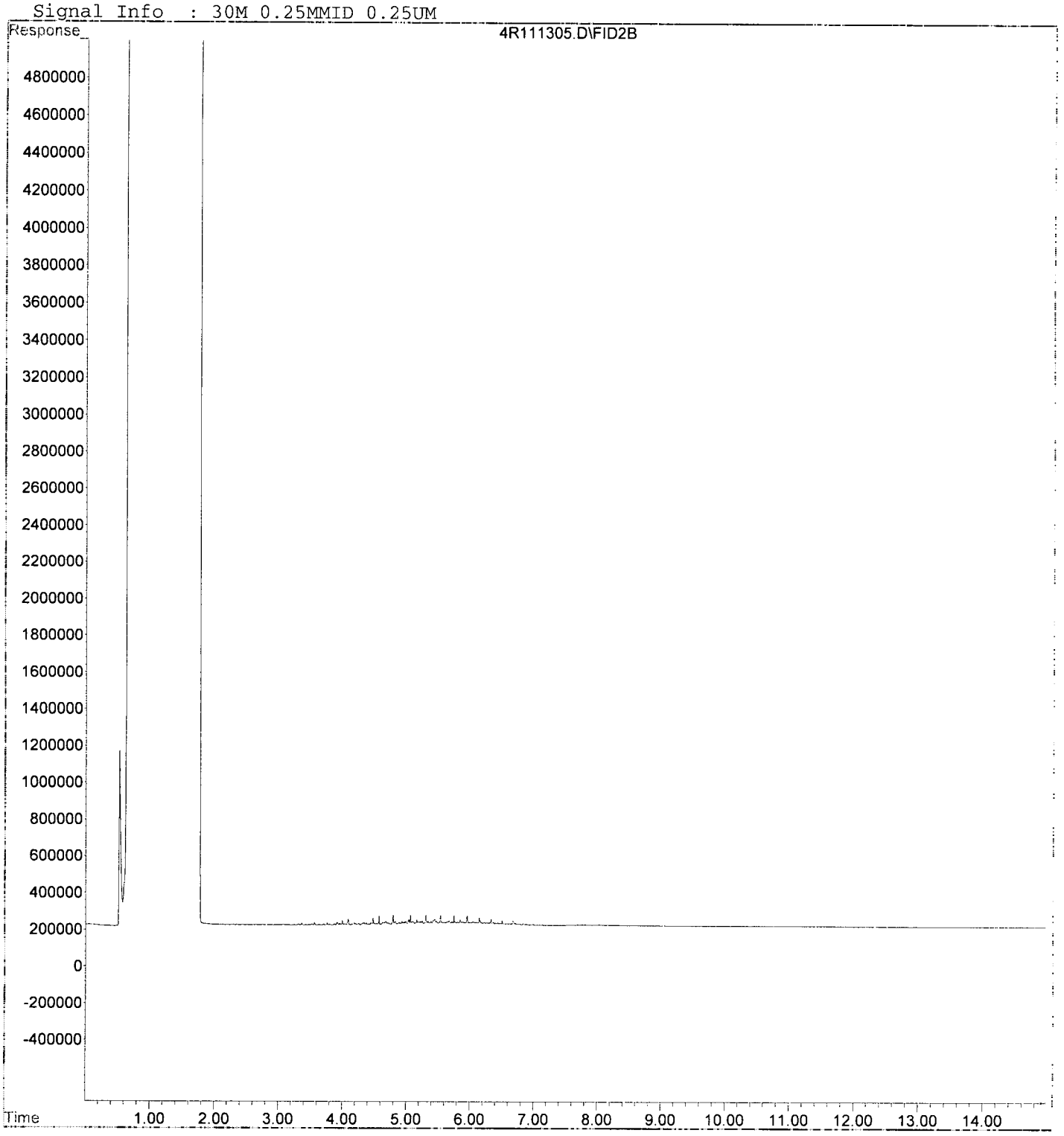
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111305.D Vial: 1
Acq On : 13 Nov 2019 11:21 Operator: BLL
Sample : 9K13040-CAL1 Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:09 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111306.D Vial: 2
Acq On : 13 Nov 2019 11:41 Operator: BLL
Sample : 9K13040-CAL2 Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:09 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	45734628	36.710	ug/ml
2)	H	Diesel	6.00	45734628	36.710	ug/ml
3)	H	DRO(C12-C24)	6.00	45734628	36.710	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	32045654	33.788	ug/ml
5)	H	TPHd (C10-C25)	6.00	41327191	35.290	ug/ml
7)	H	Oil	9.00	16818543	15.768	ug/ml
8)	H	RRO (C24-C40)	9.00	16818543	15.517	ug/ml
9)	H	TPHmo (C25-C36)	8.00	2791676	4.101	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	2266073	3.245	ug/ml

AR 11.14.19

(f)=RT Delta > 1/2 window (m)=manual int.

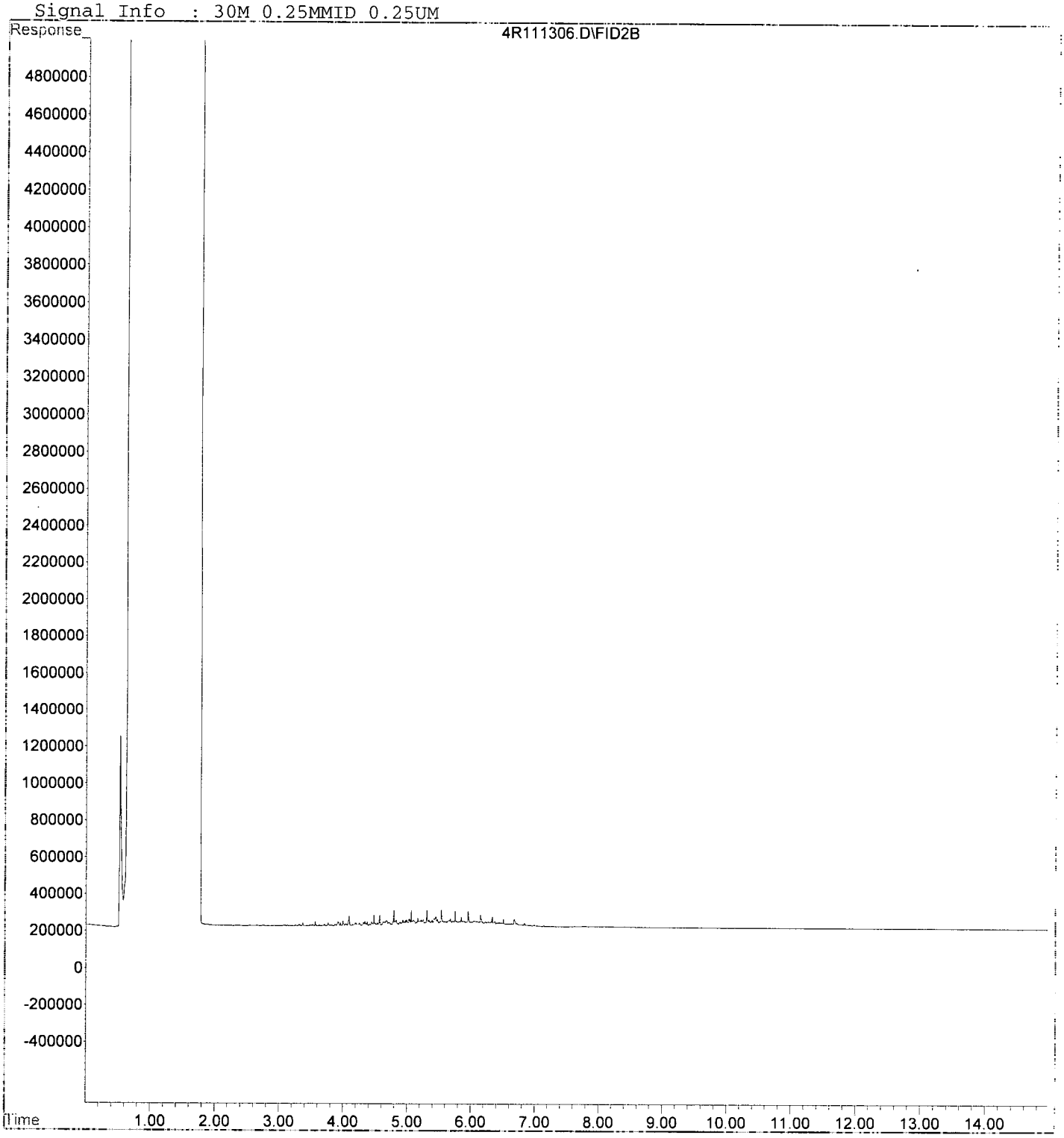
4R111306.D 4R91113D.M Thu Nov 14 07:10:16 2019 SV-GCMS3 Page 1

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111306.D Vial: 2
Acq On : 13 Nov 2019 11:41 Operator: BLL
Sample : 9K13040-CAL2 Inst : HP G1530A
Misc : 38 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:09 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111307.D Vial: 3
Acq On : 13 Nov 2019 12:01 Operator: BLL
Sample : 9K13040-CAL3 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:10 2019 Quant Results File: 4R91113D.RES

38 AR 11.14.19

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	107891133	86.602	ug/ml
2)	H	Diesel	6.00	107891133	86.602	ug/ml
3)	H	DRO(C12-C24)	6.00	107891133	86.602	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	79165260	83.469	ug/ml
5)	H	TPHd (C10-C25)	6.00	99749165	85.177	ug/ml
7)	H	Oil	9.00	33027352	30.964	ug/ml
8)	H	RRO (C24-C40)	9.00	33027352	30.471	ug/ml
9)	H	TPHmo (C25-C36)	8.00	3421854	5.027	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	3978677	5.697	ug/ml

AR 11.14.19

J

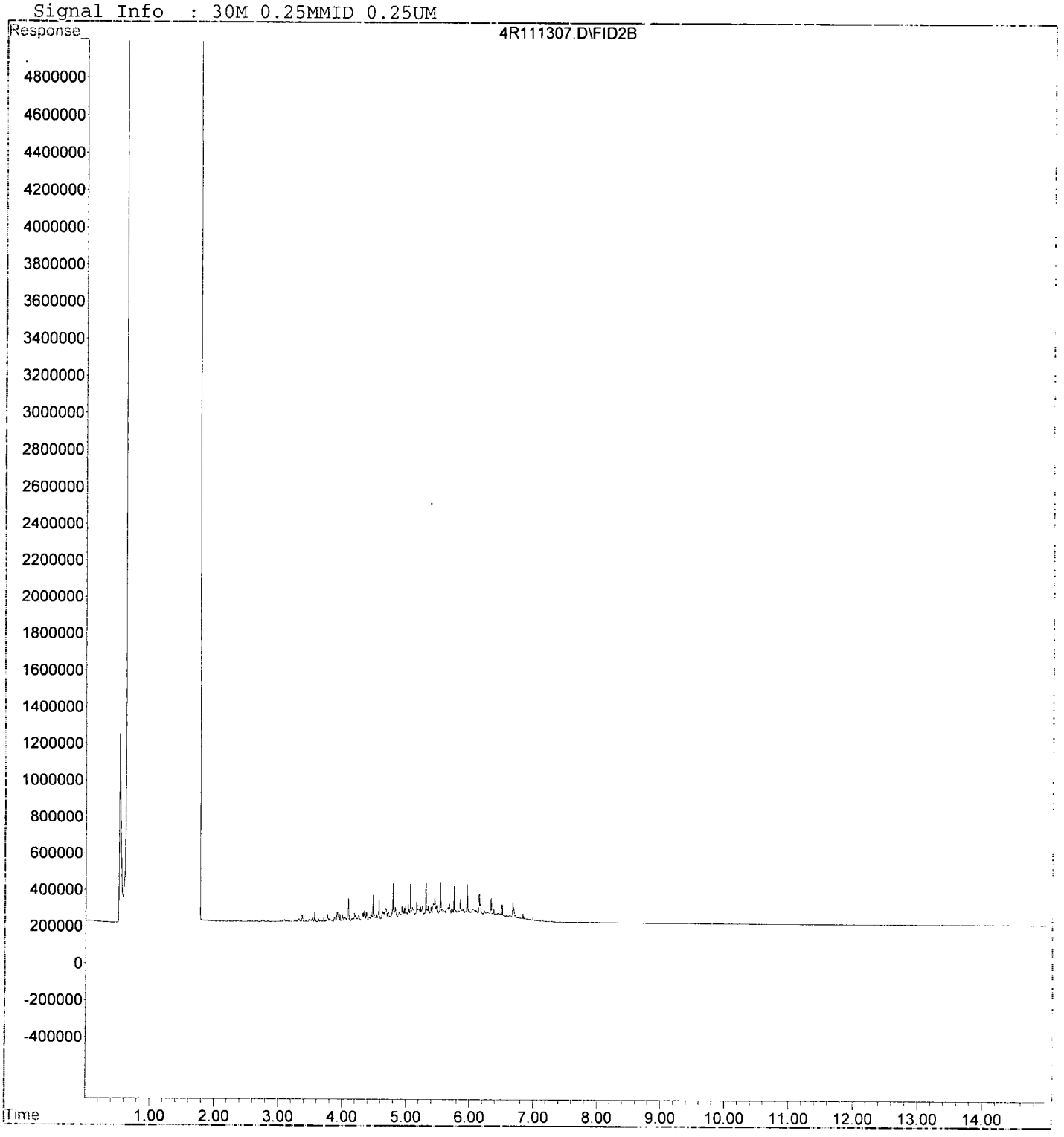
(f)=RT Delta > 1/2 window (m)=manual int.
4R111307.D 4R91113D.M Thu Nov 14 07:11:32 2019 SV-GCMS3

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111307.D Vial: 3
Acq On : 13 Nov 2019 12:01 Operator: BLL
Sample : 9K13040-CAL3 Inst : HP G1530A
Misc : 38 on 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:10 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111308.D Vial: 4
Acq On : 13 Nov 2019 12:22 Operator: BLL
Sample : 9K13038-CAL4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:11 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

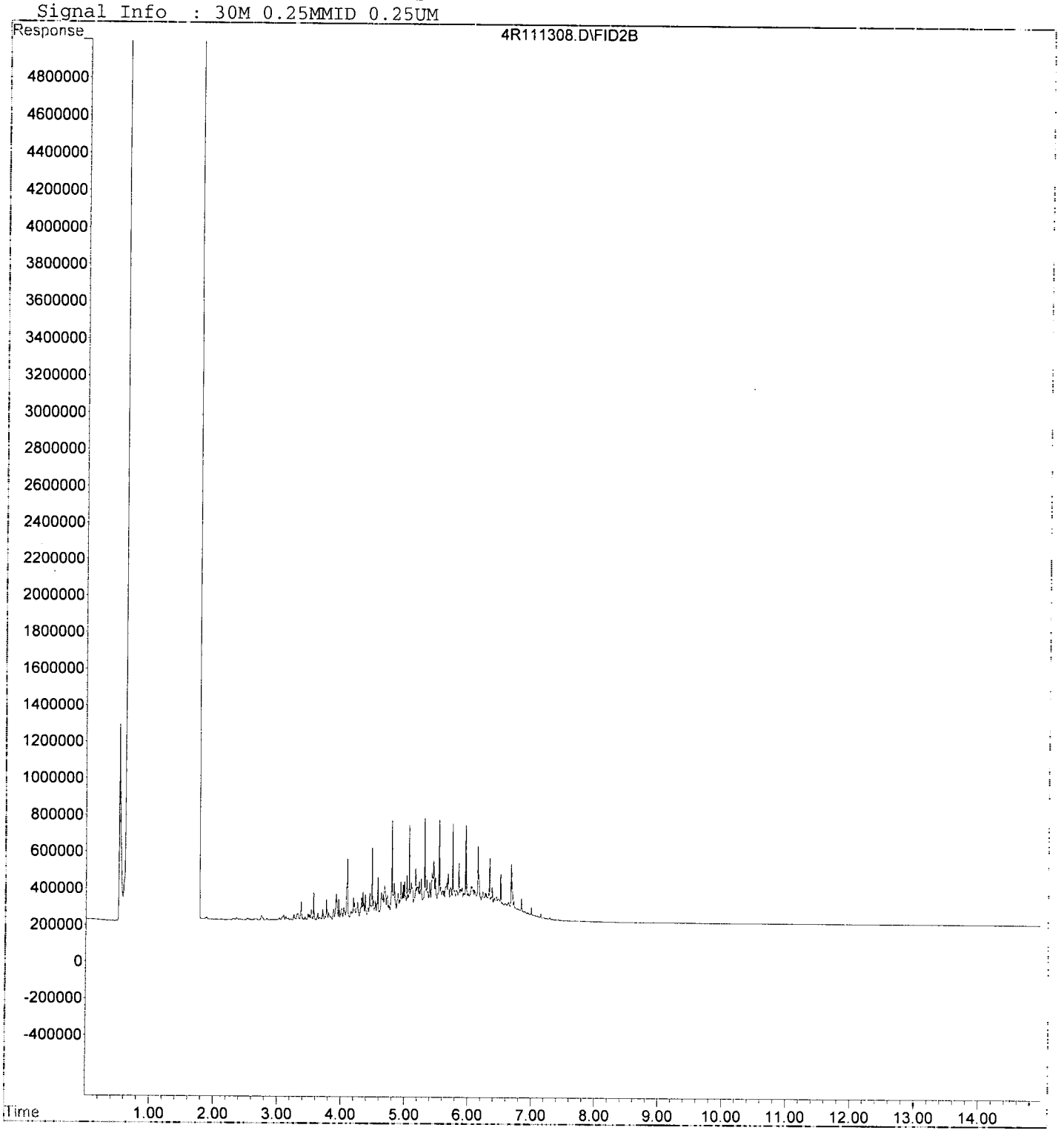
		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	270010489	216.732	ug/ml
2)	H	Diesel	6.00	270010489	216.732	ug/ml
3)	H	DRO(C12-C24)	6.00	270010489	216.732	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	199829351	210.694	ug/ml
5)	H	TPHd (C10-C25)	6.00	252031503	215.212	ug/ml
7)	H	Oil	9.00	76128634	71.373	ug/ml
8)	H	RRO (C24-C40)	9.00	76128634	70.236	ug/ml
9)	H	TPHmo (C25-C36)	8.00	5292125	7.774	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	8589475	12.299	ug/ml

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111308.D Vial: 4
Acq On : 13 Nov 2019 12:22 Operator: BLL
Sample : 9K13040-CAL4 Inst : HP G1530A
Misc : 38 M 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:11 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111309.D Vial: 5
Acq On : 13 Nov 2019 12:43 Operator: BLL
Sample : 9K13040-CAL5 Inst : HP G1530A
Misc : 38 AN 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:11 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	535990711	430.229	ug/ml
2)	H	Diesel	6.00	535990711	430.229	ug/ml
3)	H	DRO(C12-C24)	6.00	535990711	430.229	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	400710694	422.497	ug/ml
5)	H	TPHd (C10-C25)	6.00	502373927	428.982	ug/ml
7)	H	Oil	9.00	145200484	136.130	ug/ml
8)	H	RRO (C24-C40)	9.00	145200484	133.961	ug/ml
9)	H	TPHmo (C25-C36)	8.00	8054853	11.832	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	16080170	23.024	ug/ml

AN 11.14.19

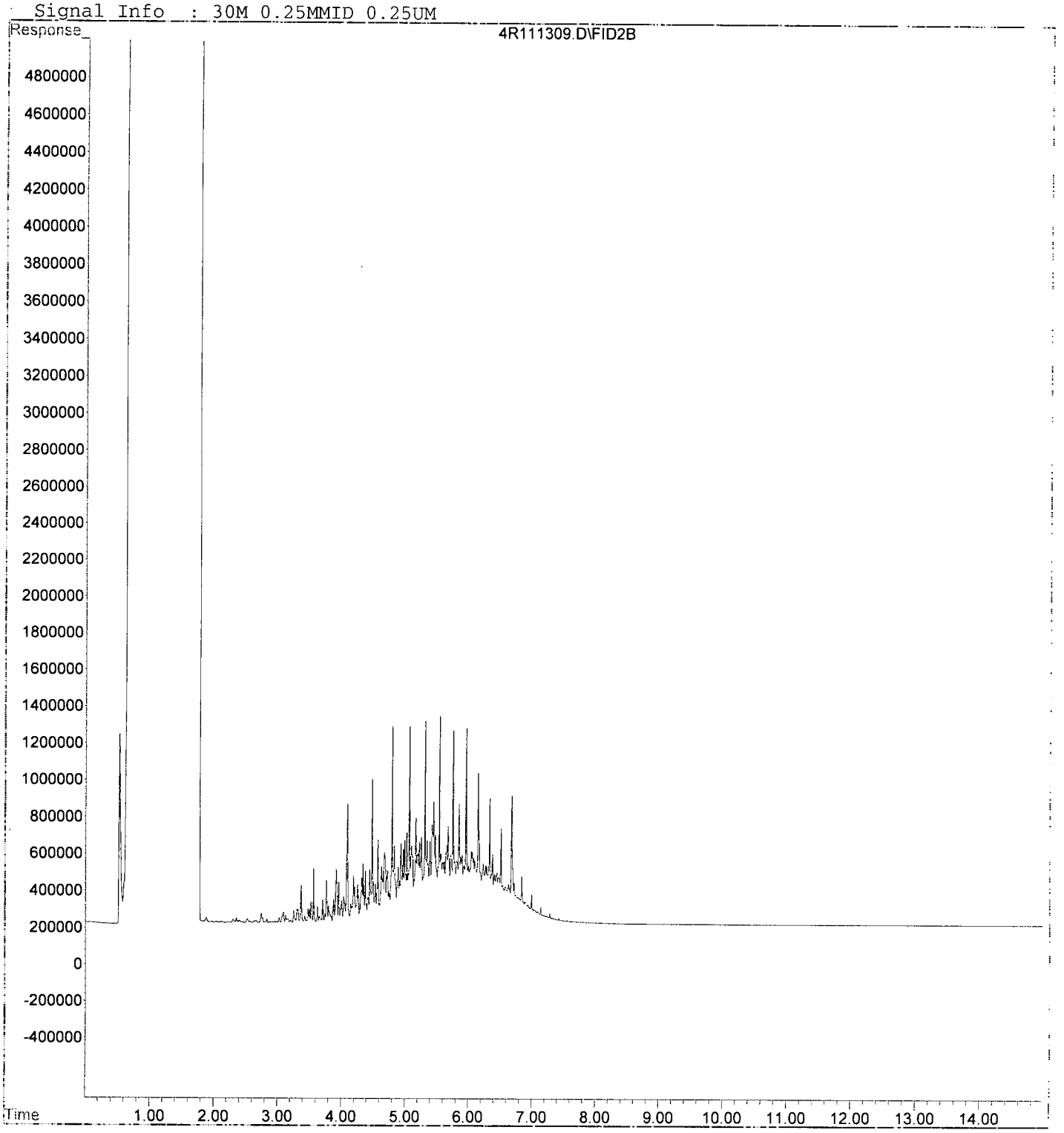
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111309.D Vial: 5
Acq On : 13 Nov 2019 12:43 Operator: BLL
Sample : 9K13040-CAL5 Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:11 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111310.D Vial: 6
Acq On : 13 Nov 2019 13:04 Operator: BLL
Sample : 9K13040-CAL6 Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	1114900524	894.909	ug/ml
2)	H	Diesel	6.00	1114900524	894.909	ug/ml
3)	H	DRO(C12-C24)	6.00	1114900524	894.909	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	841097707	886.828	ug/ml
5)	H	TPHd (C10-C25)	6.00	1048818016	895.597	ug/ml
7)	H	Oil	9.00	297854787	279.248	ug/ml
8)	H	RRO (C24-C40)	9.00	297854787	274.800	ug/ml
9)	H	TPHmo (C25-C36)	8.00	14194123	20.851	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	31894563	45.668	ug/ml

AR 11.14.19

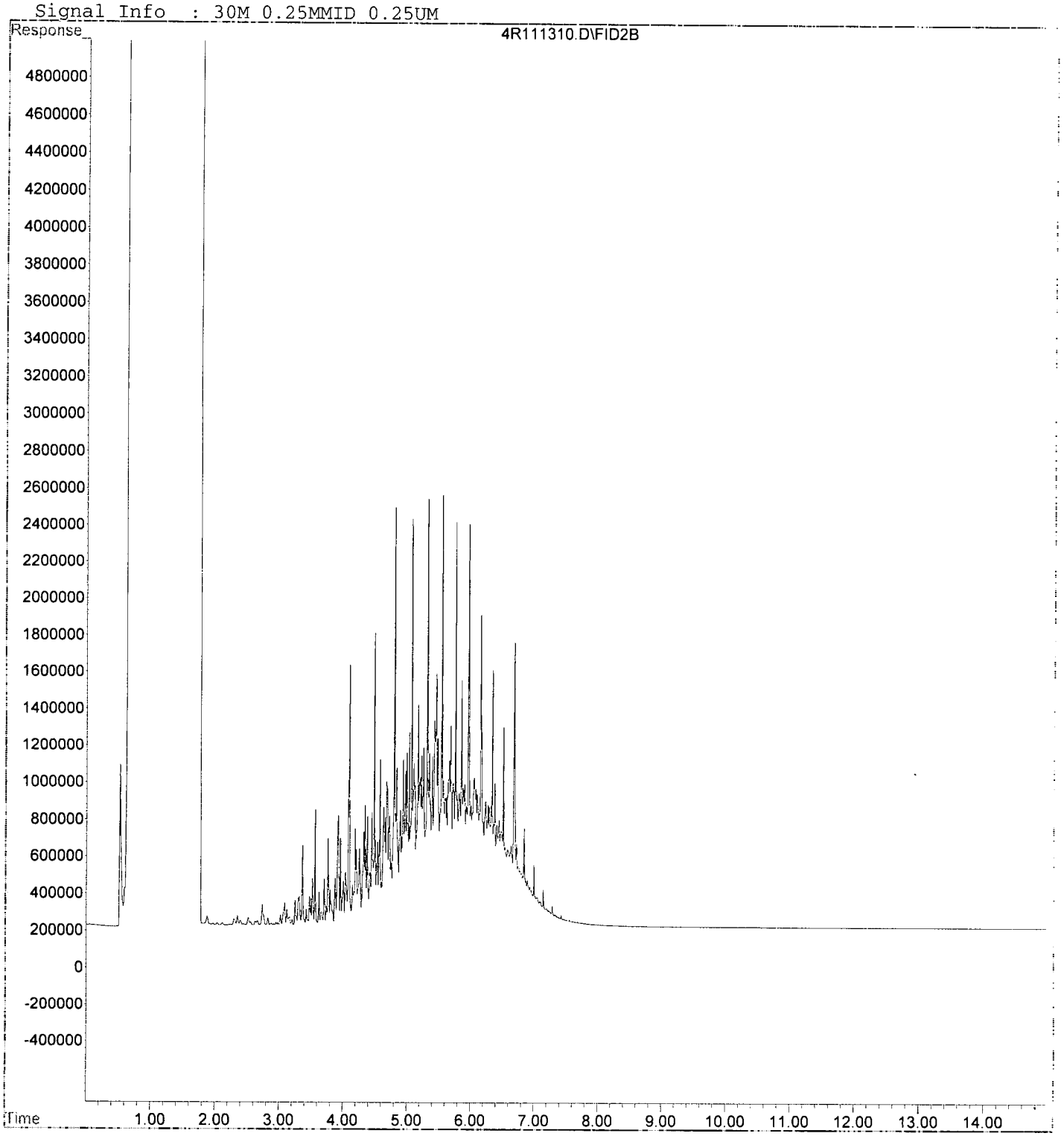
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111310.D Vial: 6
Acq On : 13 Nov 2019 13:04 Operator: BLL
Sample : 9K13040-CAL6 Inst : HP G1530A
Misc : 38 M 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111311.D Vial: 7
Acq On : 13 Nov 2019 13:26 Operator: BLL
Sample : 9K13040-CAL7 Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	2757613993	2213.484	ug/ml
2)	H	Diesel	6.00	2757613993	2213.484	ug/ml
3)	H	DRO(C12-C24)	6.00	2757613993	2213.484	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	2086707568	2200.162	ug/ml
5)	H	TPHd (C10-C25)	6.00	2601758180	2221.668	ug/ml
7)	H	Oil	9.00	723926494	678.703	ug/ml
8)	H	RRO (C24-C40)	9.00	723926494	667.892	ug/ml
9)	H	TPHmo (C25-C36)	8.00	31506957	46.283	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	77038713	110.307	ug/ml

AR 11.14.19

(f)=RT Delta > 1/2 window (m)=manual int.

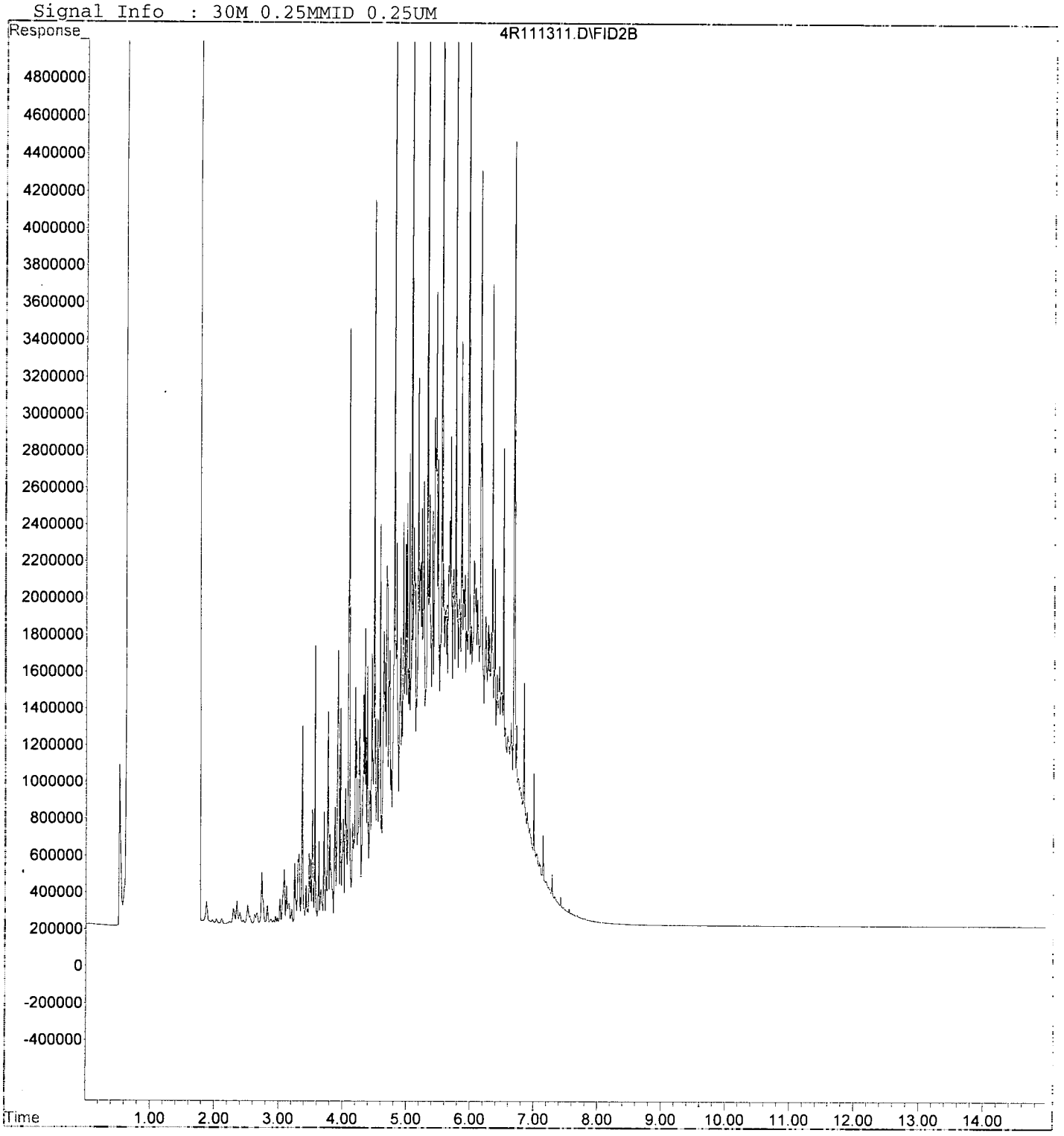
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111311.D Vial: 7
Acq On : 13 Nov 2019 13:26 Operator: BLL
Sample : 9K13038-CAL7 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

38 AR 11.14.19

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111312.D Vial: 8
Acq On : 13 Nov 2019 13:47 Operator: BLL
Sample : 9K13040-CAL8 Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	5483666087	4401.634	ug/ml
2)	H	Diesel	6.00	5483666087	4401.634	ug/ml
3)	H	DRO(C12-C24)	6.00	5483666087	4401.634	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	4155970490	4381.931	ug/ml
5)	H	TPHd (C10-C25)	6.00	5181243574	4424.318	ug/ml
7)	H	Oil	9.00	1438922833	1349.034	ug/ml
8)	H	RRO (C24-C40)	9.00	1438922833	1327.545	ug/ml
9)	H	TPHmo (C25-C36)	8.00	59513546	87.424	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	149820126	214.518	ug/ml

AR 11.14.19

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(f)=RT Delta > 1/2 window (m) =manual int.

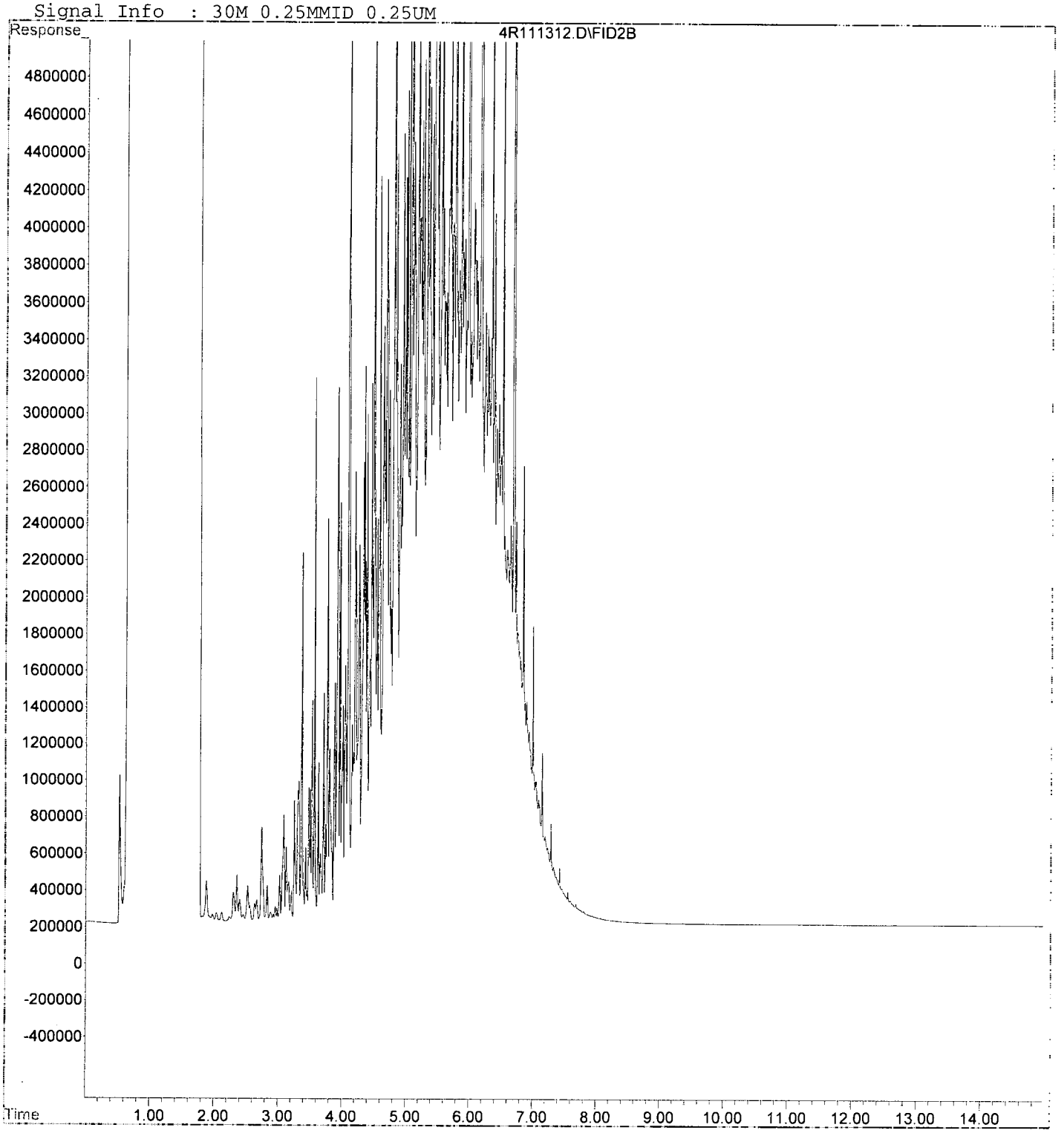
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111312.D Vial: 8
Acq On : 13 Nov 2019 13:47 Operator: BLL
Sample : 9K13038-CAL8 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

38 AR 11.14.19

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111313.D Vial: 9
Acq On : 13 Nov 2019 14:09 Operator: BLL
Sample : 9K13040-CAL9 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

38 AR 11.14.19

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
6)	S	o-Terphenyl	6.38	12143934	9.321 ug/ml
		Target Compounds			
1)	H	Mineral Oil	6.00	11319073	9.086 ug/ml
2)	H	Diesel	6.00	11319073	9.086 ug/ml
3)	H	DRO(C12-C24)	6.00	11319073	9.086 ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	6701778	7.066 ug/ml
5)	H	TPHd (C10-C25)	6.00	7873802	6.724 ug/ml
7)	H	Oil	9.00	13848856	12.984 ug/ml
8)	H	RRO (C24-C40)	9.00	13848856	12.777 ug/ml
9)	H	TPHmo (C25-C36)	8.00	3838801	5.639 ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	2203186	3.155 ug/ml

AR 11.14.19

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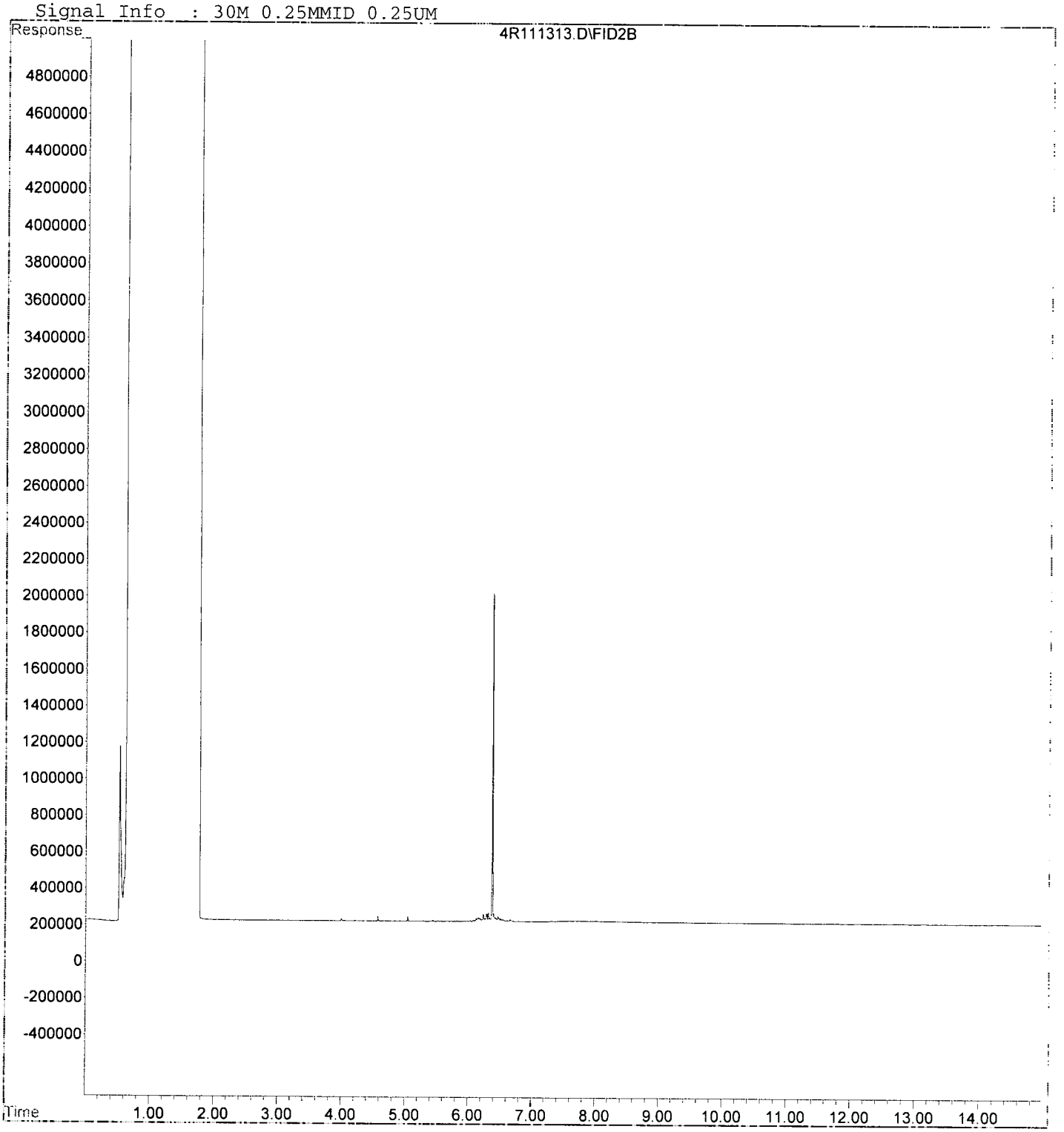
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111313.D Vial: 9
Acq On : 13 Nov 2019 14:09 Operator: BLL
Sample : 9K13040-CAL9 Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111314.D Vial: 10
Acq On : 13 Nov 2019 14:30 Operator: BLL
Sample : 9K13040-CALA Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

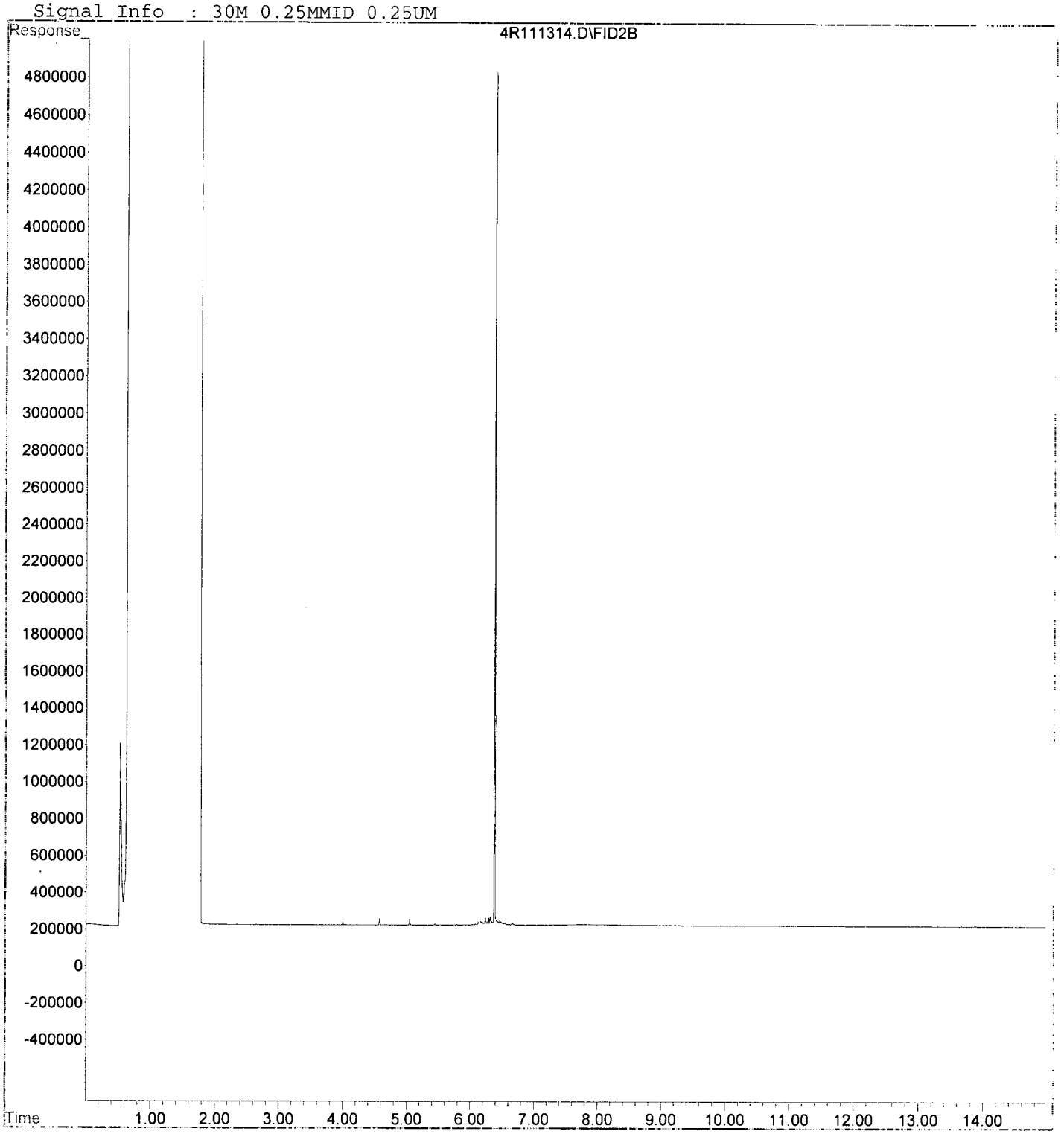
		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
6)	S	o-Terphenyl	6.38	30128887	23.126 ug/ml
		Target Compounds			
1)	H	Mineral Oil	6.00	11034851	8.857 ug/ml
2)	H	Diesel	6.00	11034851	8.857 ug/ml
3)	H	DRO(C12-C24)	6.00	11034851	8.857 ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	6542417	6.898 ug/ml
5)	H	TPHd (C10-C25)	6.00	7510228	6.413 ug/ml
7)	H	Oil	9.00	12872304	12.068 ug/ml
8)	H	RRO (C24-C40)	9.00	12872304	11.876 ug/ml
9)	H	TPHmo (C25-C36)	8.00	3227077	4.741 ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	1986542	2.844 ug/ml

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111314.D Vial: 10
Acq On : 13 Nov 2019 14:30 Operator: BLL
Sample : 9K13040-CALA Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111315.D Vial: 11
Acq On : 13 Nov 2019 14:52 Operator: BLL
Sample : 9K13038-CALB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

38 M 11.14.19

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
6)	S	o-Terphenyl	6.38	~~63652523~~	48.857 ug/ml
		Target Compounds			
1)	H	Mineral Oil	6.00	10926225	8.770 ug/ml
2)	H	Diesel	6.00	10926225	8.770 ug/ml
3)	H	DRO(C12-C24)	6.00	10926225	8.770 ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	6441792	6.792 ug/ml
5)	H	TPHd (C10-C25)	6.00	7649532	6.532 ug/ml
7)	H	Oil	9.00	14285871	13.393 ug/ml
8)	H	RRO (C24-C40)	9.00	14285871	13.180 ug/ml
9)	H	TPHmo (C25-C36)	8.00	3316127	4.871 ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	2100796	3.008 ug/ml

M 11.14.19

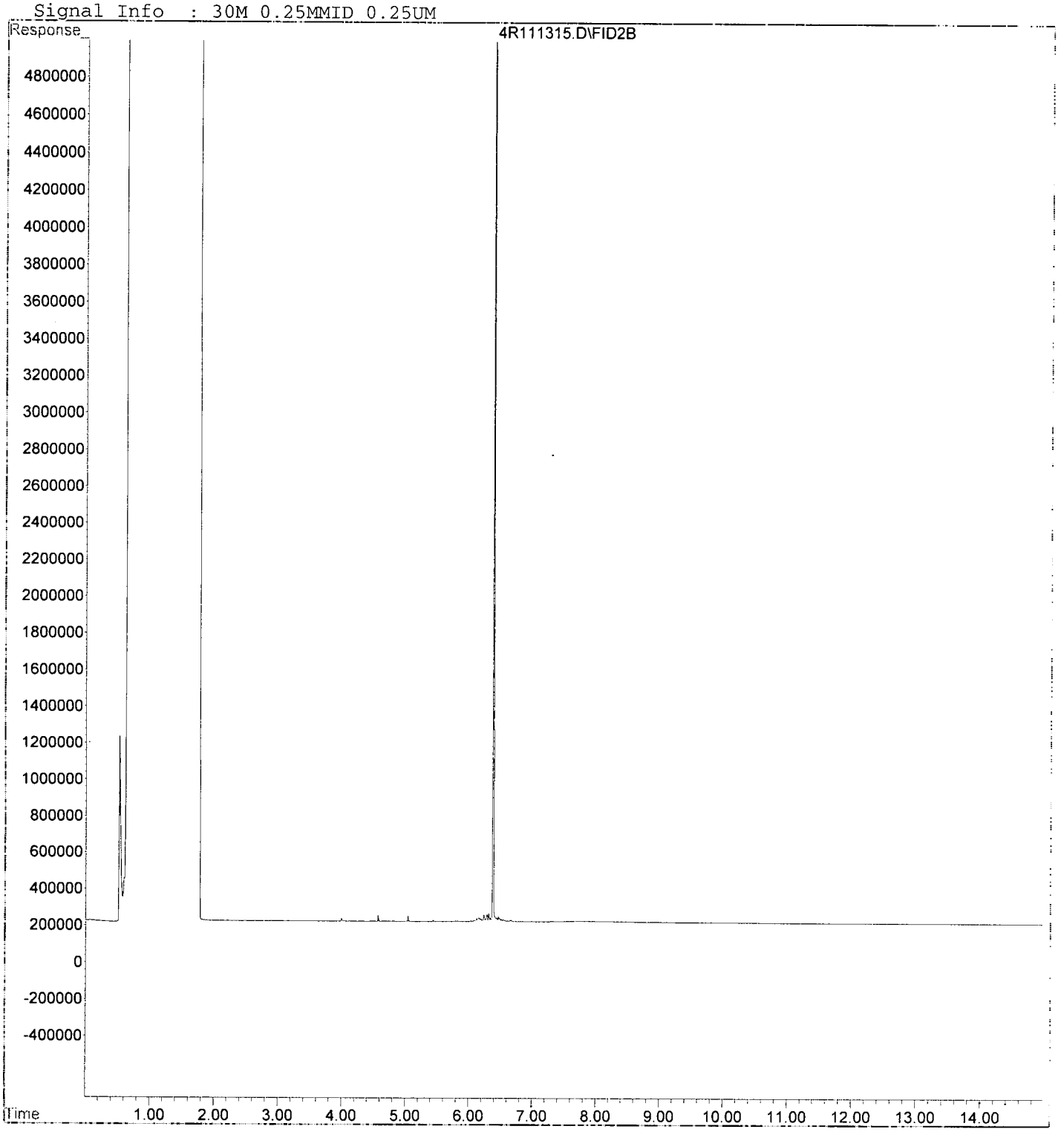
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111315.D Vial: 11
Acq On : 13 Nov 2019 14:52 Operator: BLL
Sample : 9K13040-CALB Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111316.D Vial: 12
Acq On : 13 Nov 2019 15:12 Operator: BLL
Sample : 9K13040-CALC Inst : HP G1530A
Misc : 38 AN 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
6)	S	o-Terphenyl	6.38	~~124892932~~	95.863 ug/ml
		Target Compounds			
1)	H	Mineral Oil	6.00	9103888	7.308 ug/ml
2)	H	Diesel	6.00	9103888	7.308 ug/ml
3)	H	DRO(C12-C24)	6.00	9103888	7.308 ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	5422977	5.718 ug/ml
5)	H	TPHd (C10-C25)	6.00	6405467	5.470 ug/ml
7)	H	Oil	9.00	10968903	10.284 ug/ml
8)	H	RRO (C24-C40)	9.00	10968903	10.120 ug/ml
9)	H	TPHmo (C25-C36)	8.00	2954961	4.341 ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	1986520	2.844 ug/ml

AN 11.14.19

✓

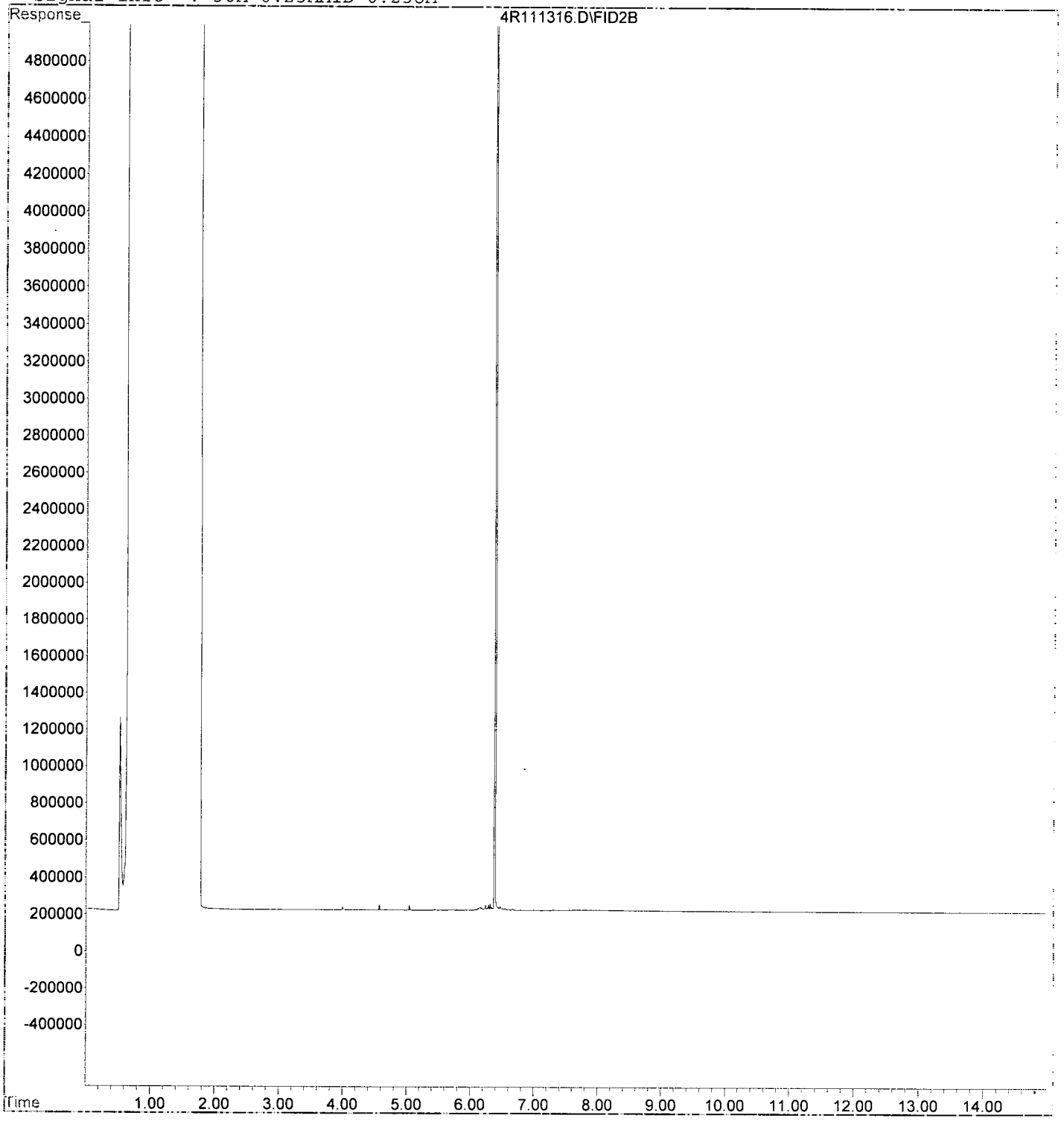
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111316.D Vial: 12
Acq On : 13 Nov 2019 15:12 Operator: BLL
Sample : 9K13038-CALC Inst : HP G1530A
Misc : 38 ER 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:12 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111317.D Vial: 13
Acq On : 13 Nov 2019 15:34 Operator: BLL
Sample : 9K13038-CALD Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:13 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

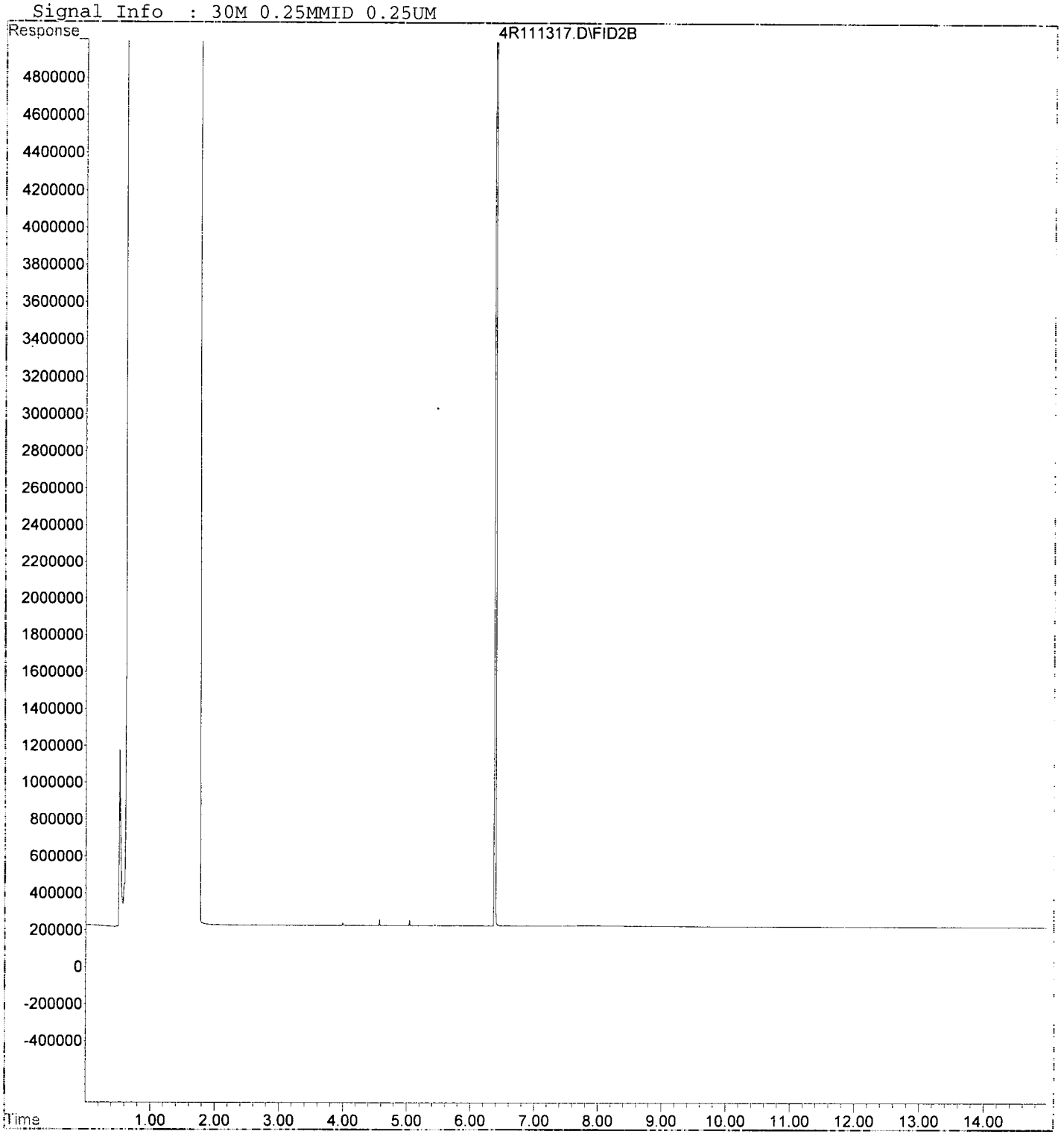
		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
6)	S	o-Terphenyl	6.39	~~238850525~~	183.333 ug/ml
		Target Compounds			
1)	H	Mineral Oil	6.00	3171893	2.546 ug/ml
2)	H	Diesel	6.00	3171893	2.546 ug/ml
3)	H	DRO(C12-C24)	6.00	3171893	2.546 ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	963990	1.016 ug/ml
5)	H	TPHd (C10-C25)	6.00	1662315	1.419 ug/ml
7)	H	Oil	9.00	6175663	5.790 ug/ml
8)	H	RRO (C24-C40)	9.00	6175663	5.698 ug/ml
9)	H	TPHmo (C25-C36)	8.00	2137978	3.141 ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	1336696	1.914 ug/ml

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111317.D Vial: 13
Acq On : 13 Nov 2019 15:34 Operator: BLL
Sample : 9K13040-CALD Inst : HP G1530A
Misc : 38 SL 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:13 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111318.D Vial: 14
Acq On : 13 Nov 2019 15:54 Operator: BLL
Sample : 9K13040-CALE Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:13 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	34306148	27.537	ug/ml
2)	H	Diesel	6.00	34306148	27.537	ug/ml
3)	H	DRO(C12-C24)	6.00	34306148	27.537	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	3412107	3.598	ug/ml
5)	H	TPHd (C10-C25)	6.00	11886740	10.150	ug/ml
7)	H	Oil	9.00	46270012	43.380	ug/ml
8)	H	RRO (C24-C40)	9.00	46270012	42.689	ug/ml
9)	H	TPHmo (C25-C36)	8.00	27583593	40.520	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	27421690	39.263	ug/ml

AR 11.14.19

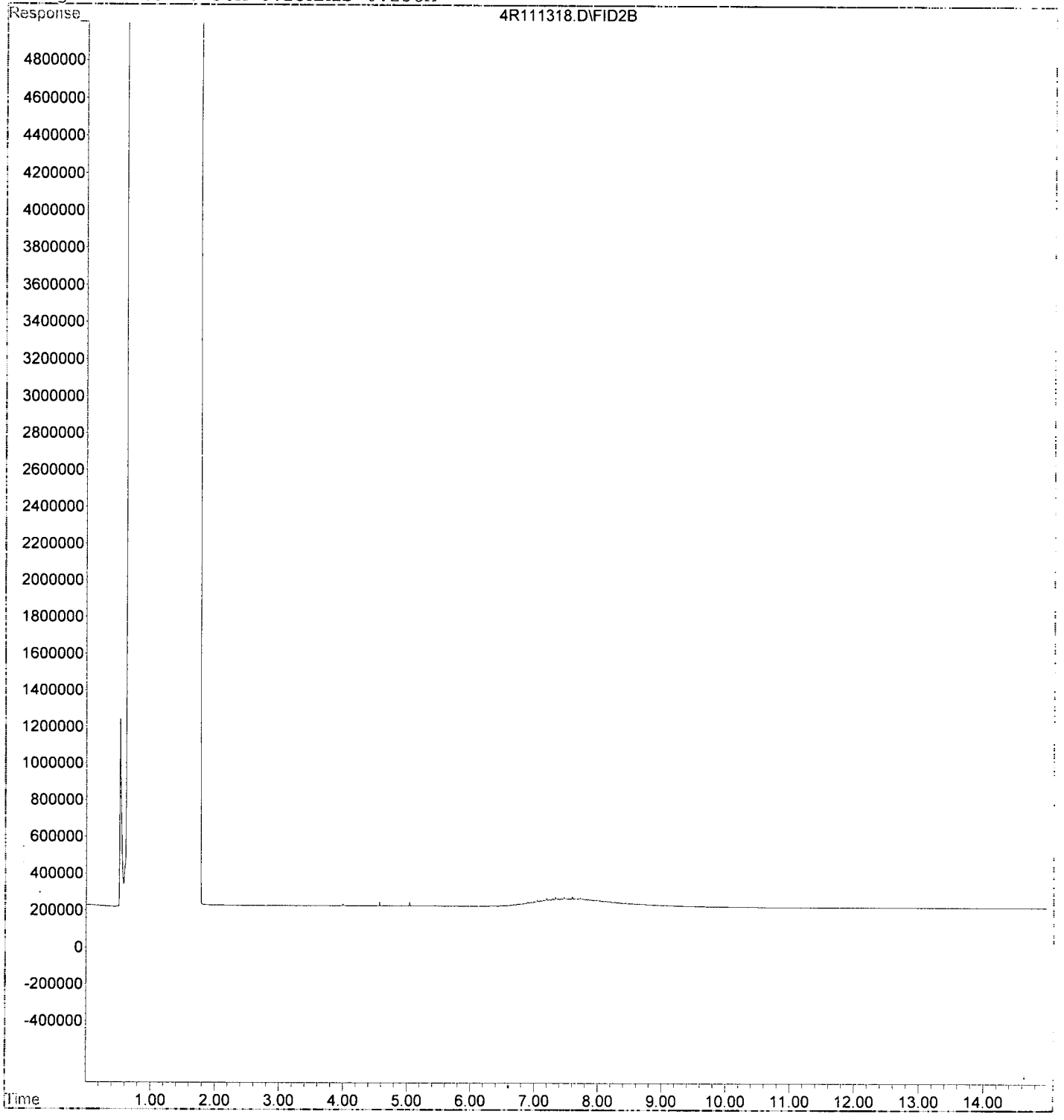
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111318.D Vial: 14
Acq On : 13 Nov 2019 15:54 Operator: BLL
Sample : 9K13040-CALE Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:13 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111319.D Vial: 15
Acq On : 13 Nov 2019 16:16 Operator: BLL
Sample : 9K13040-CALF Inst : HP G1530A
Misc : 36 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:13 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	62259092	49.974	ug/ml
2)	H	Diesel	6.00	62259092	49.974	ug/ml
3)	H	DRO(C12-C24)	6.00	62259092	49.974	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	5365473	5.657	ug/ml
5)	H	TPHd (C10-C25)	6.00	20878977	17.829	ug/ml
7)	H	Oil	9.00	84482416	79.205	ug/ml
8)	H	RRO (C24-C40)	9.00	84482416	77.943	ug/ml
9)	H	TPHmo (C25-C36)	8.00	51555108	75.733	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	51492698	73.729	ug/ml

AR 11.14.19

(f)=RT Delta > 1/2 window (m)=manual int.

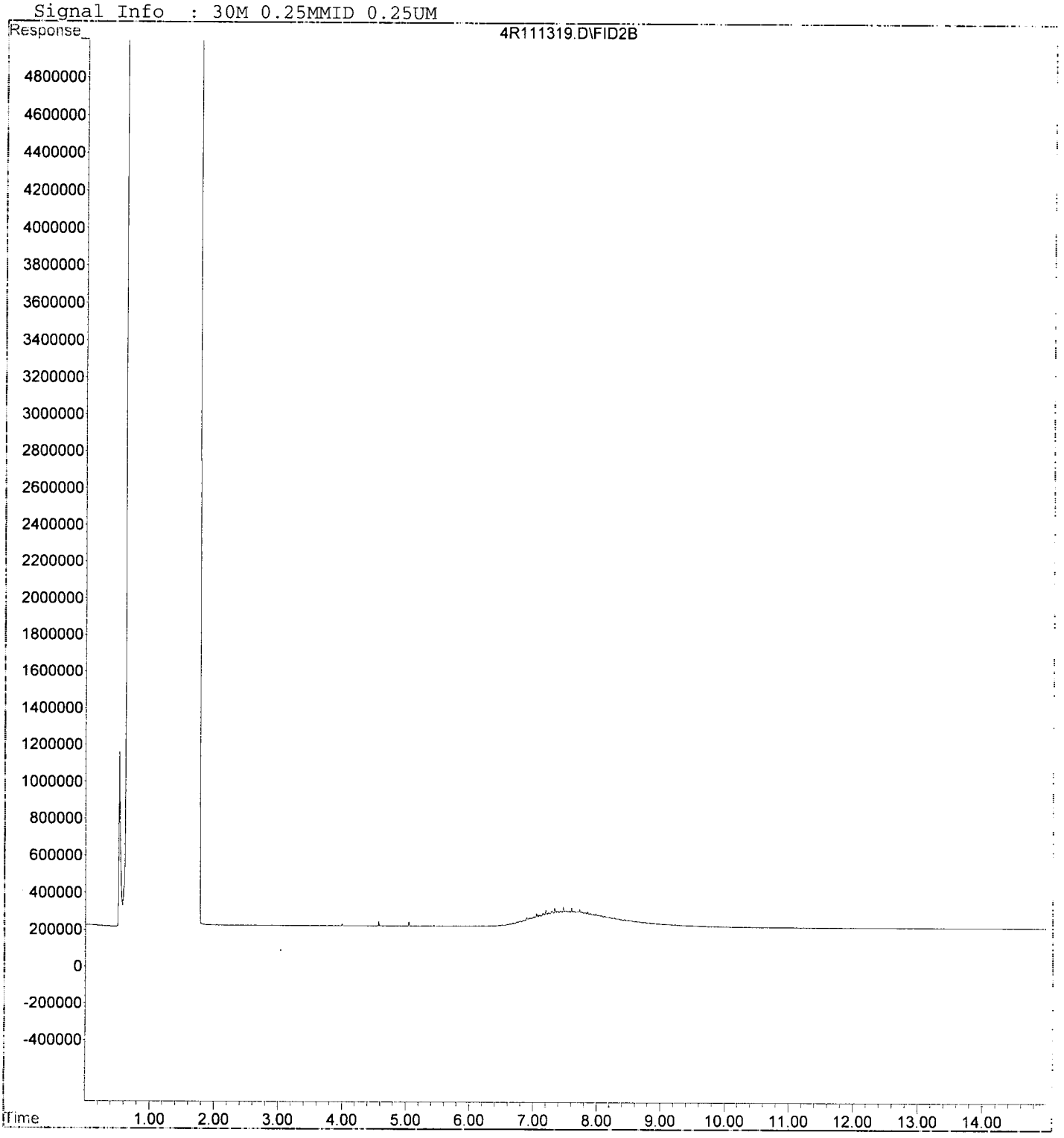
4R111319.D 4R91113D.M Thu Nov 14 07:13:38 2019 SV-GCMS3

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111319.D Vial: 15
Acq On : 13 Nov 2019 16:16 Operator: BLL
Sample : 9K13040-CALF Inst : HP G1530A
Misc : 38 RL 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:13 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111320.D Vial: 16
Acq On : 13 Nov 2019 16:37 Operator: BLL
Sample : 9K13040-CALG Inst : HP G1530A
Misc : 36 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:13 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	200721586	161.115	ug/ml
2)	H	Diesel	6.00	200721586	161.115	ug/ml
3)	H	DRO(C12-C24)	6.00	200721586	161.115	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	15758401	16.615	ug/ml
5)	H	TPHd (C10-C25)	6.00	66621330	56.889	ug/ml
7)	H	Oil	9.00	267658169	250.938	ug/ml
8)	H	RRO (C24-C40)	9.00	267658169	246.941	ug/ml
9)	H	TPHmo (C25-C36)	8.00	169830477	249.477	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	169353126	242.486	ug/ml

AR 11.14.19

(f)=RT Delta > 1/2 window (m)=manual int.

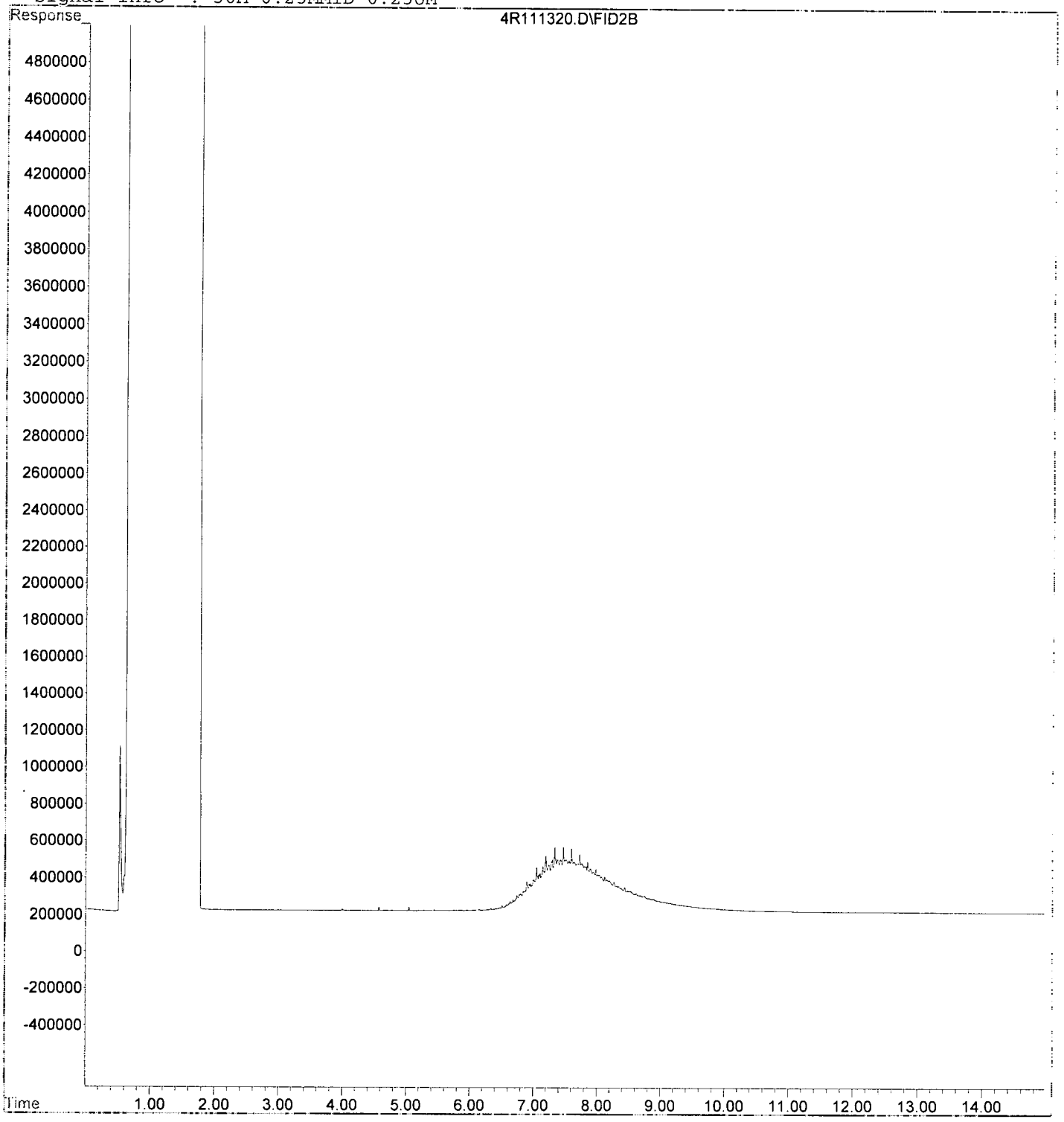
4R111320.D 4R91113D.M Thu Nov 14 07:13:55 2019 SV-GCMS3

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111320.D Vial: 16
Acq On : 13 Nov 2019 16:37 Operator: BLL
Sample : 9K13040-CALG Inst : HP G1530A
Misc : 36 RL 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:13 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111321.D Vial: 17
Acq On : 13 Nov 2019 16:59 Operator: BLL
Sample : 9K13040-CALH 38 AR 11.14.19 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:14 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	392233815	314.839	ug/ml
2)	H	Diesel	6.00	392233815	314.839	ug/ml
3)	H	DRO(C12-C24)	6.00	392233815	314.839	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	30212750	31.855	ug/ml
5)	H	TPHd (C10-C25)	6.00	129726454	110.775	ug/ml
7)	H	Oil	9.00	525120002	492.316	ug/ml
8)	H	RRO (C24-C40)	9.00	525120002	484.474	ug/ml
9)	H	TPHmo (C25-C36)	8.00	335404009	492.701	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	333500831	477.518	ug/ml

AR 11.14.19

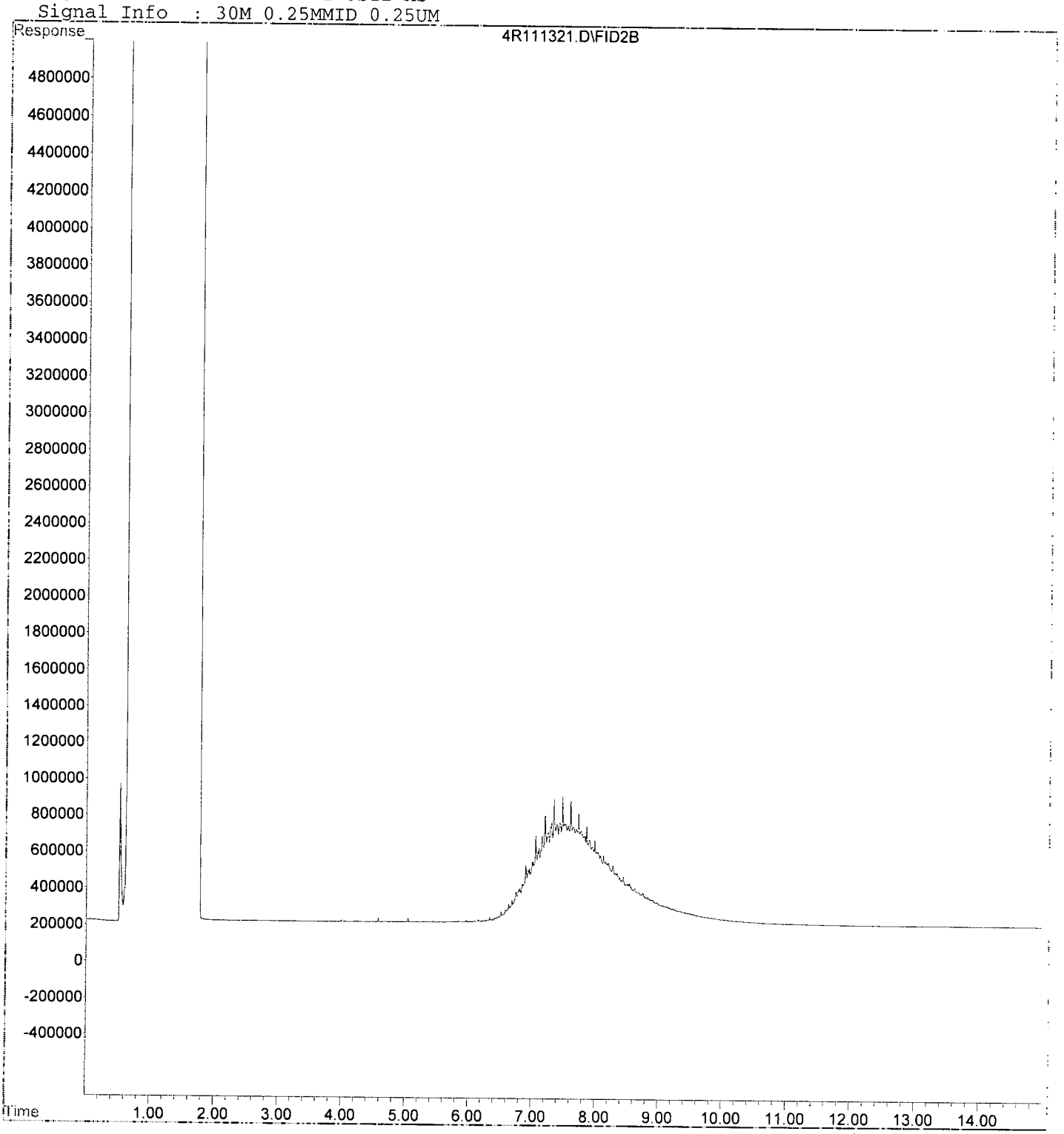
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111321.D Vial: 17
Acq On : 13 Nov 2019 16:59 Operator: BLL
Sample : 9K13040-CALH Inst : HP G1530A
Misc : 38 AM 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:14 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111322.D Vial: 18
Acq On : 13 Nov 2019 17:21 Operator: BLL
Sample : 9K13038-CALI Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:14 2019 Quant Results File: 4R91113D.RES

38 AR 11.14.19

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	777315289	623.936	ug/ml
2)	H	Diesel	6.00	777315289	623.936	ug/ml
3)	H	DRO(C12-C24)	6.00	777315289	623.936	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	60321750	63.601	ug/ml
5)	H	TPHd (C10-C25)	6.00	258925319	221.099	ug/ml
7)	H	Oil	9.00	1040680554	975.669	ug/ml
8)	H	RRO (C24-C40)	9.00	1040680554	960.128	ug/ml
9)	H	TPHmo (C25-C36)	8.00	662618764	973.372	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	659749537	944.652	ug/ml

AR 11.14.19

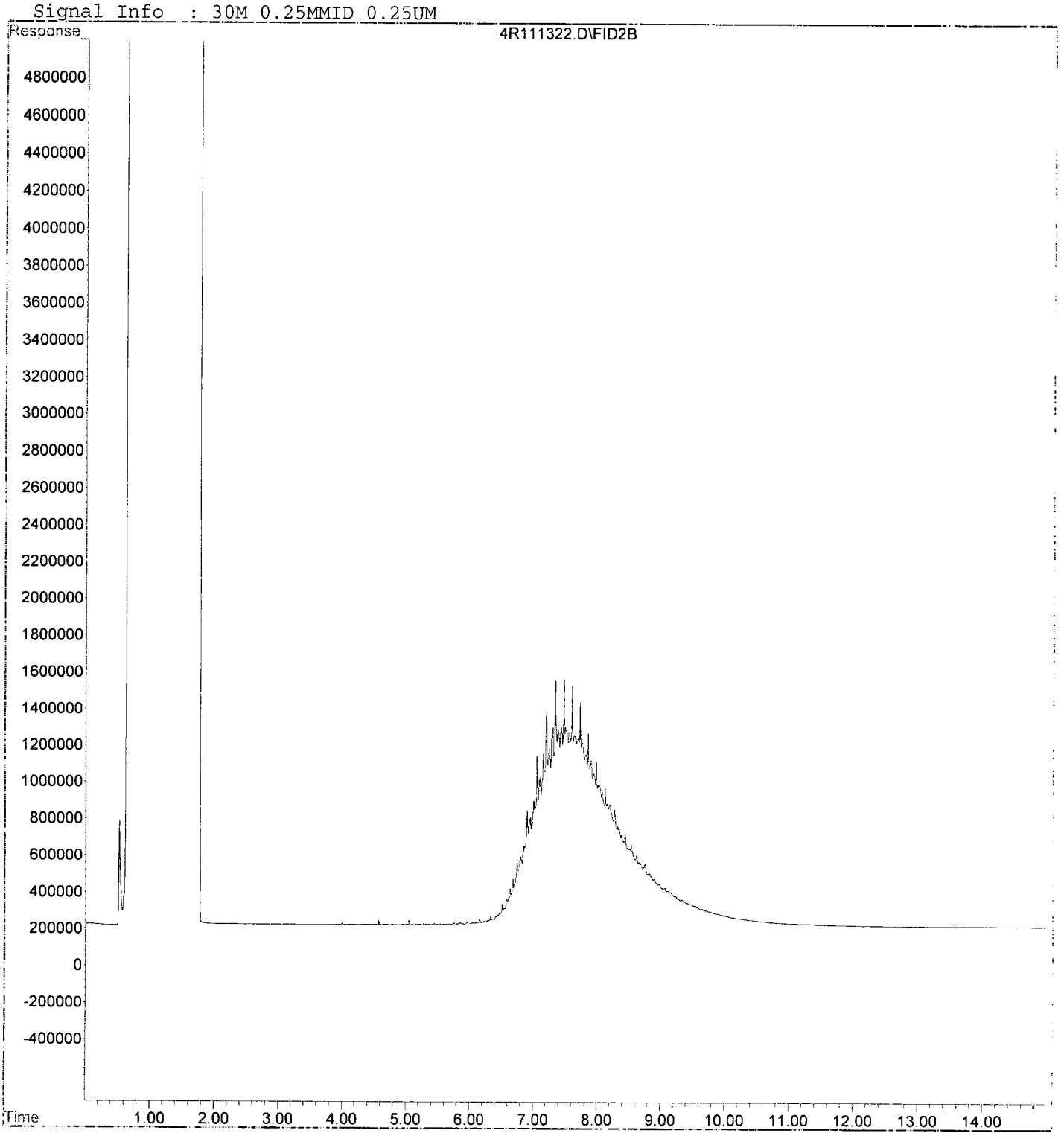
(f)=RT Delta > 1/2 Window (m)=Manual Int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111322.D Vial: 18
Acq On : 13 Nov 2019 17:21 Operator: BLL
Sample : 9K13040-CALI Inst : HP G1530A
Misc : 36 AM 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:14 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111323.D Vial: 19
Acq On : 13 Nov 2019 17:42 Operator: BLL
Sample : 9K13040-CALJ Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E

38 AR 11.14.19

Quant Time: Nov 14 7:14 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml d
		Target Compounds				
1)	H	Mineral Oil	6.00	1920265480	1541.360	ug/ml
2)	H	Diesel	6.00	1920265480	1541.360	ug/ml
3)	H	DRO(C12-C24)	6.00	1920265480	1541.360	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	150797427	158.996	ug/ml
5)	H	TPHd (C10-C25)	6.00	636245870	543.297	ug/ml
7)	H	Oil	9.00	2592788472	2430.817	ug/ml
8)	H	RRO (C24-C40)	9.00	2592788472	2392.098	ug/ml
9)	H	TPHmo (C25-C36)	8.00	1649978983	2423.782	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	1632345333	2337.248	ug/ml

AR 11.14.19

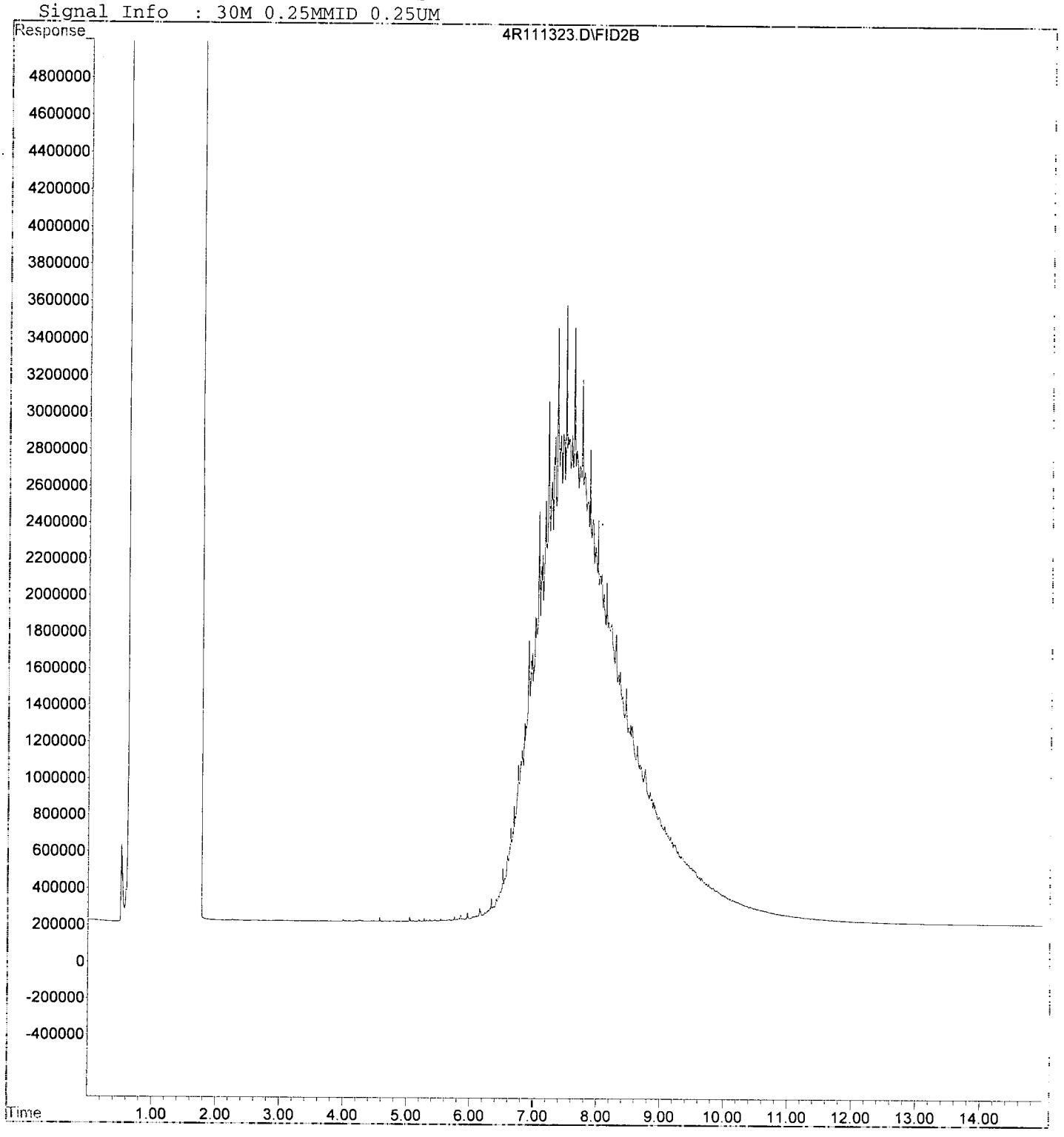
(f)=RT Delta > 1/2 Window (m)=manual int.
4R111323.D 4R91113D.M Thu Nov 14 07:14:47 2019 SV-GCMS3

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111323.D Vial: 19
Acq On : 13 Nov 2019 17:42 Operator: BLL
Sample : 9K13040-CALJ Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:14 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111324.D Vial: 100
Acq On : 13 Nov 2019 18:03 Operator: BLL
Sample : 9K13040-IBL1 Inst : HP G1530A
Misc : 38 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:14 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	3775925	3.031	ug/ml
2)	H	Diesel	6.00	3775925	3.031	ug/ml
3)	H	DRO(C12-C24)	6.00	3775925	3.031	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	1242705	1.310	ug/ml
5)	H	TPHd (C10-C25)	6.00	2041217	1.743	ug/ml
7)	H	Oil	9.00	6936676	6.503	ug/ml
8)	H	RRO (C24-C40)	9.00	6936676	6.400	ug/ml
9)	H	TPHmo (C25-C36)	8.00	2354058	3.458	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	1657352	2.373	ug/ml

11.14.19

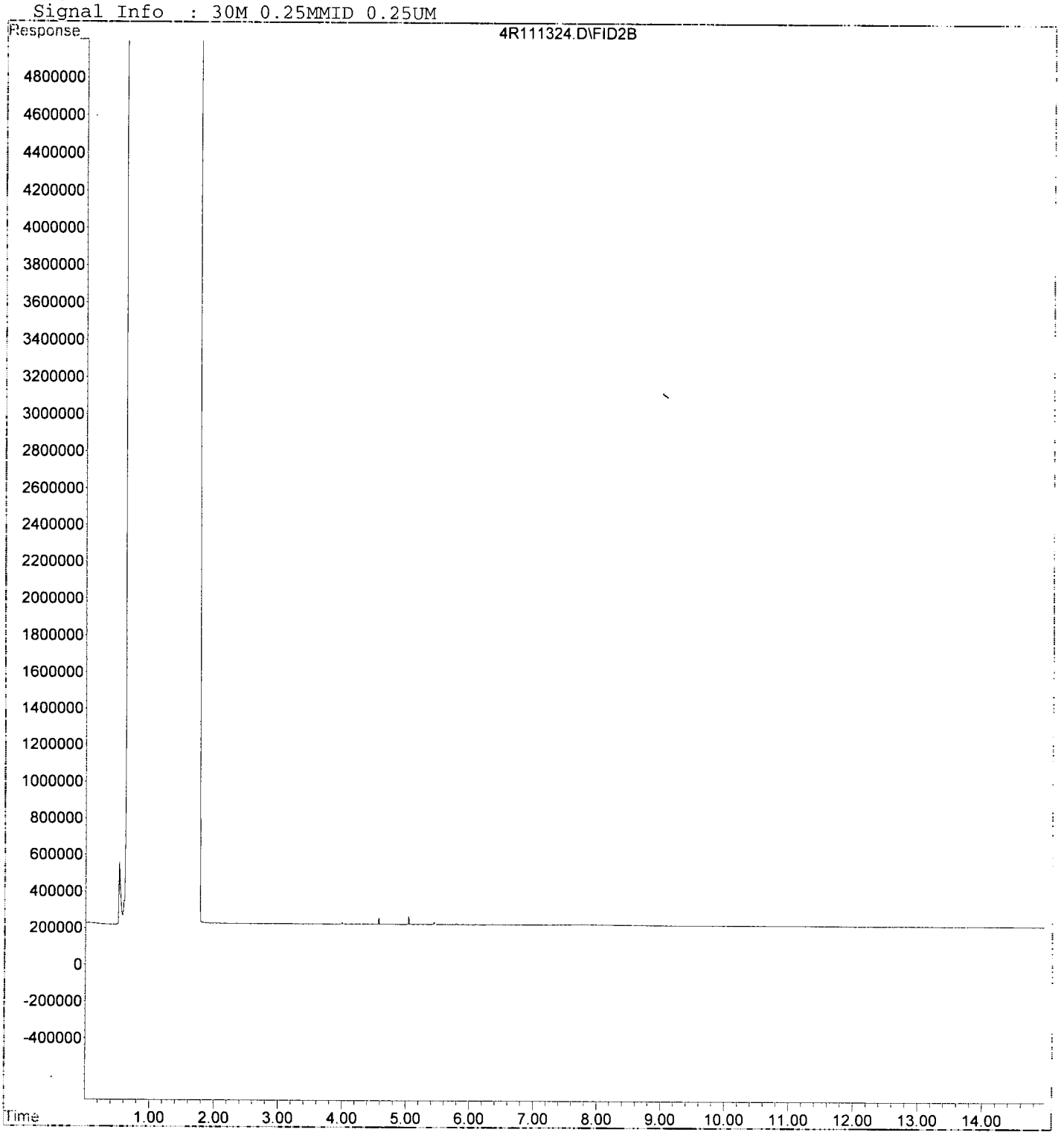
(f)=RT Delta > 1/2 window (m)=manual int.
4R111324.D 4R91113D.M Thu Nov 14 07:14:53 2019 SV-GCMS3

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111324.D Vial: 100
Acq On : 13 Nov 2019 18:03 Operator: BLL
Sample : 9K13040-IBL1 Inst : HP G1530A
Misc : 38 RL 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:14 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111325.D Vial: 20
Acq On : 13 Nov 2019 18:23 Operator: BLL
Sample : 9K13040-CALK Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:15 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

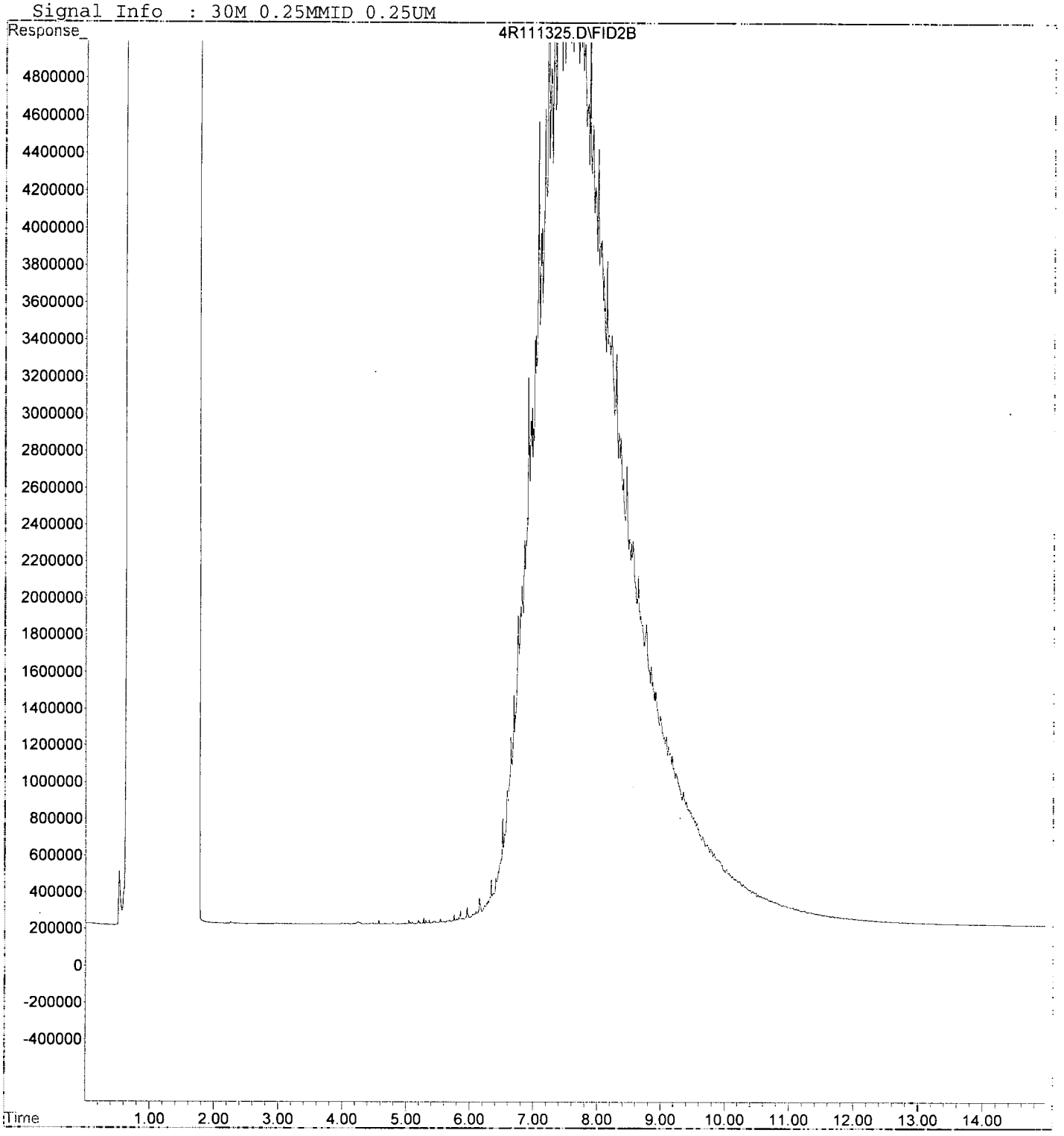
		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	3729525050	2993.618	ug/ml
2)	H	Diesel	6.00	3729525050	2993.618	ug/ml
3)	H	DRO(C12-C24)	6.00	3729525050	2993.618	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	302192382	318.623	ug/ml
5)	H	TPHd (C10-C25)	6.00	1238469624	1057.542	ug/ml
7)	H	Oil	9.00	5065612033	4749.164	ug/ml
8)	H	RRO (C24-C40)	9.00	5065612033	4673.517	ug/ml
9)	H	TPHmo (C25-C36)	8.00	3212504371	4719.097	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	3165882642	4533.020	ug/ml

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111325.D Vial: 20
Acq On : 13 Nov 2019 18:23 Operator: BLL
Sample : 9K13040-CALK Inst : HP G1530A
Misc : 38 AN 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:15 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111326.D Vial: 100
Acq On : 13 Nov 2019 18:44 Operator: BLL
Sample : 9K13040-IBL2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:15 2019 Quant Results File: 4R91113D.RES

38 M 11.14.19

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	4868877	3.908	ug/ml
2)	H	Diesel	6.00	4868877	3.908	ug/ml
3)	H	DRO(C12-C24)	6.00	4868877	3.908	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	1398578	1.475	ug/ml
5)	H	TPHd (C10-C25)	6.00	2659226	2.271	ug/ml
7)	H	Oil	9.00	8566954	8.032	ug/ml
8)	H	RRO (C24-C40)	9.00	8566954	7.904	ug/ml
9)	H	TPHmo (C25-C36)	8.00	3030772	4.452	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	2175844	3.115	ug/ml

M 11.14.19

✓

(f)=RT Delta > 1/2 window (m)=manual int.

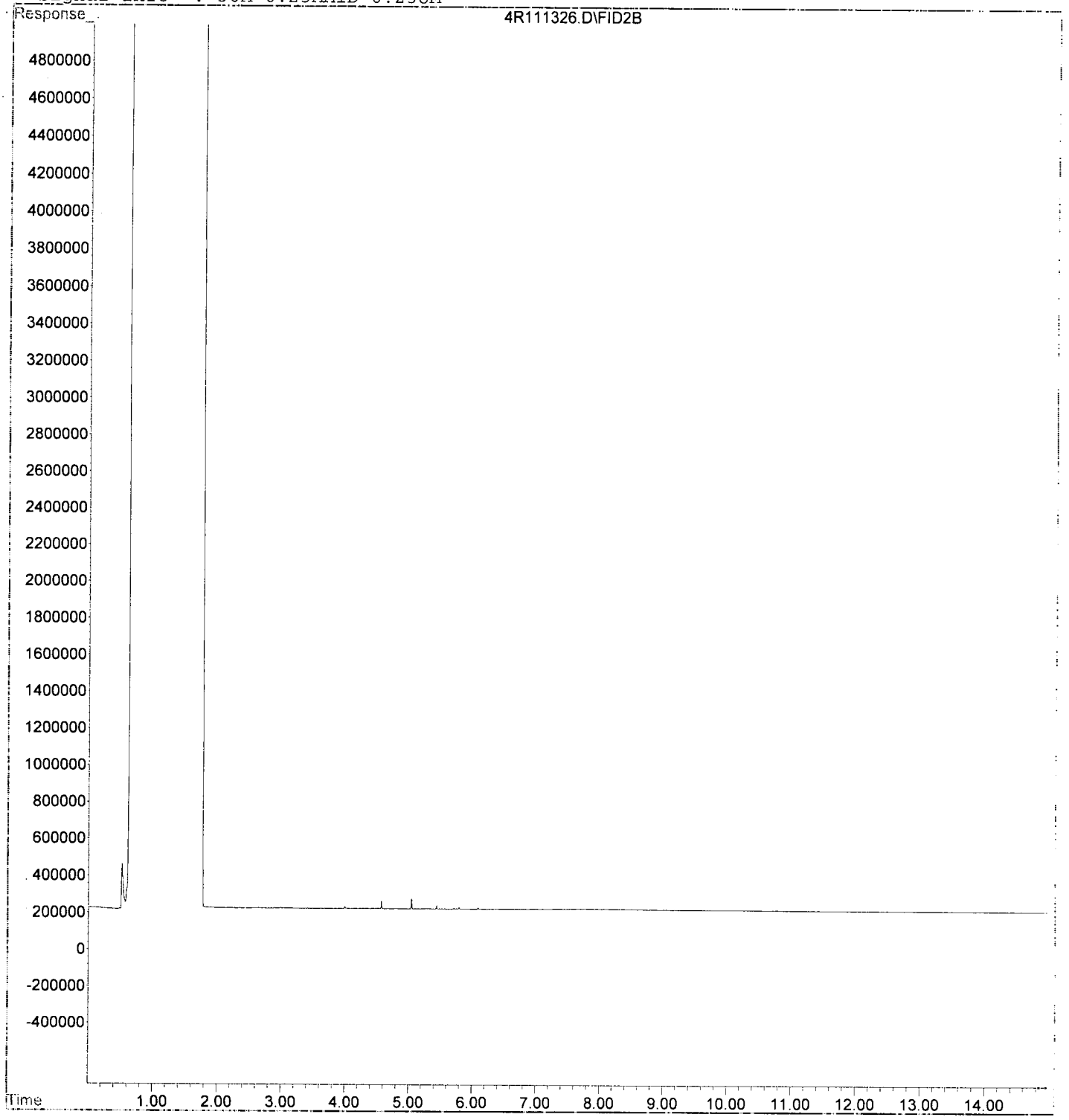
4R111326.D 4R91113D.M Thu Nov 14 07:15:16 2019 SV-GCMS3

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111326.D Vial: 100
Acq On : 13 Nov 2019 18:44 Operator: BLL
Sample : 9K13040-IBL2 Inst : HP G1530A
Misc : 38 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:15 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111327.D Vial: 21
Acq On : 13 Nov 2019 19:05 Operator: BLL
Sample : 9K13040-ICV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:15 2019 Quant Results File: 4R91113D.RES

38 AM 11.14.19

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/mld
		Target Compounds				
1)	H	Mineral Oil	6.00	1062938432	853.200	ug/ml
2)	H	Diesel	6.00	1062938432	853.200	ug/ml
3)	H	DRO(C12-C24)	6.00	1062938432	853.200	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	800743497	844.280	ug/ml
5)	H	TPHd (C10-C25)	6.00	997357903	851.654	ug/ml
7)	H	Oil	9.00	286636287	268.730	ug/ml
8)	H	RRO (C24-C40)	9.00	286636287	264.450	ug/ml
9)	H	TPHmo (C25-C36)	8.00	14738423	21.650	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	31263124	44.764	ug/ml

AM 11.14.19

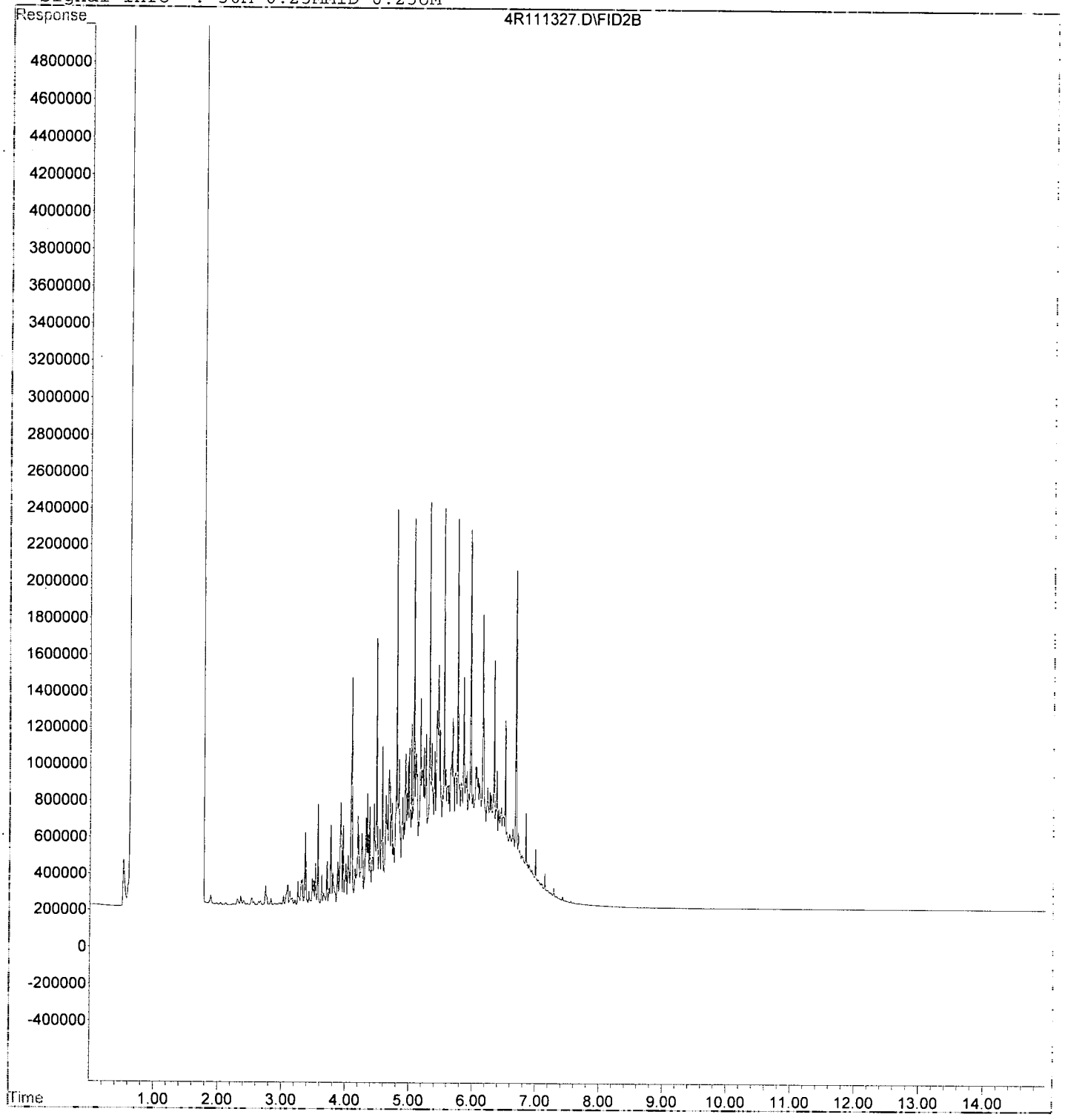
(f)=RT Delta > 1/2 Window (m)=manual int.
4R111327.D 4R91113D.M Thu Nov 14 07:15:33 2019 SV-GCMS3

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111327.D Vial: 21
Acq On : 13 Nov 2019 19:05 Operator: BLL
Sample : 9K13038-ICV1 Inst : HP G1530A
Misc : 36 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:15 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111328.D Vial: 22
Acq On : 13 Nov 2019 19:25 Operator: BLL
Sample : 9K13040-ICV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:15 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Initial Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	0.00	0	N.D.	ug/ml
		Target Compounds				
1)	H	Mineral Oil	6.00	704135954	565.196	ug/ml
2)	H	Diesel	6.00	704135954	565.196	ug/ml
3)	H	DRO(C12-C24)	6.00	704135954	565.196	ug/ml
4)	H	CA LUFT DRO (C12-C22)	6.00	55296143	58.303	ug/ml
5)	H	TPHd (C10-C25)	6.00	236888957	202.282	ug/ml
7)	H	Oil	9.00	946751217	887.608	ug/ml
8)	H	RRO (C24-C40)	9.00	946751217	873.470	ug/ml
9)	H	TPHmo (C25-C36)	8.00	595702224	875.073	ug/ml
10)	H	CA LUFT ORO (C23-C32)	7.50	597022423	854.837	ug/ml

AR 11.14.19

AR 11.14.19

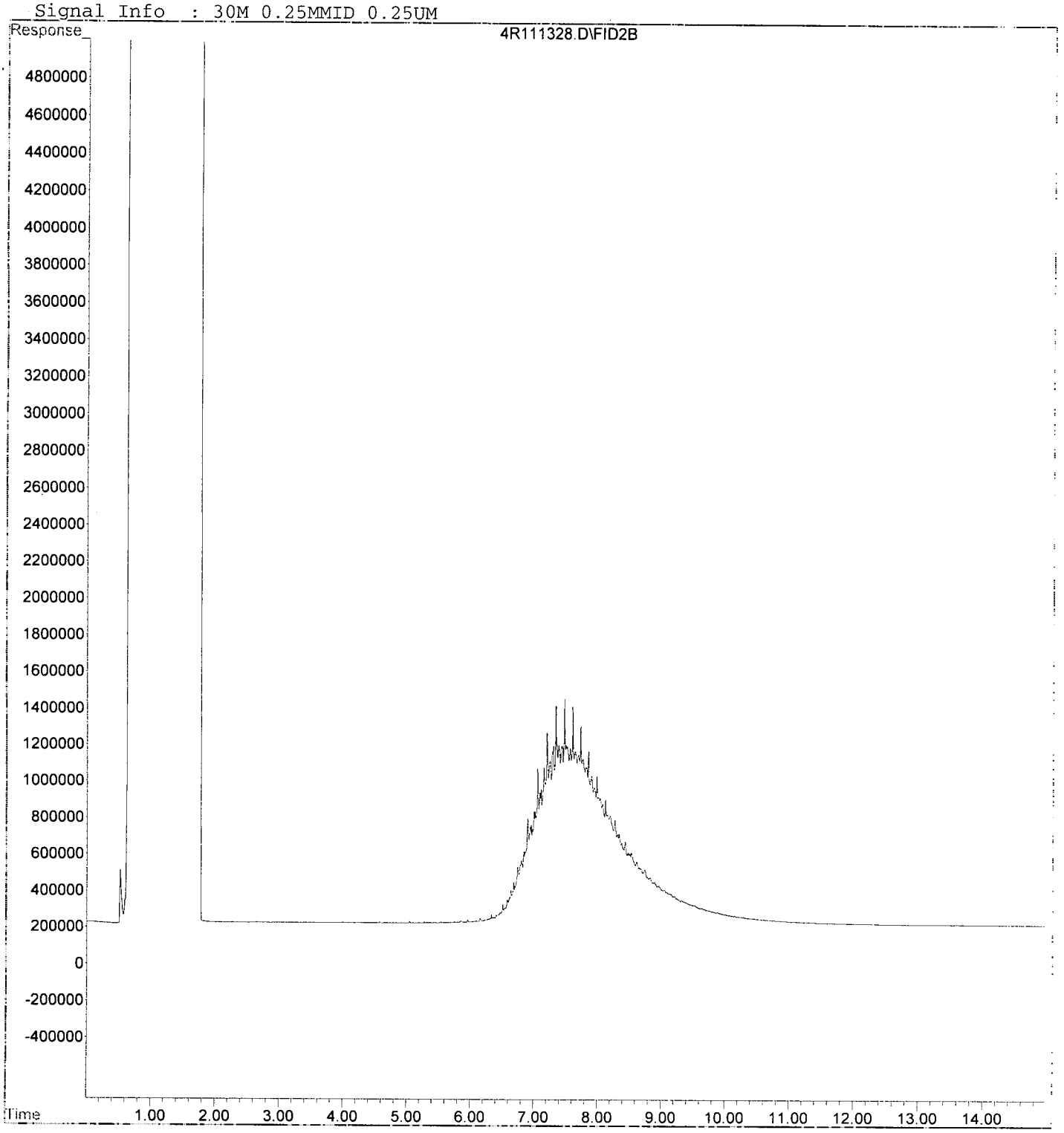
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13038\4R111328.D Vial: 22
Acq On : 13 Nov 2019 19:25 Operator: BLL
Sample : 9K13040-ICV2 Inst : HP G1530A
Misc : 36 AR 11.14.19 Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 7:15 2019 Quant Results File: 4R91113D.RES

Quant Method : G:\4\METHODS\4R91113D.M (Chemstation Integrator)
Title : DUALFID4R, NWTPH-Dx
Last Update : Thu Nov 14 07:08:10 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM



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

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx
Benchsheet & Analysis Sequence Data

Batch 0010530
Sequence 0A17017 (A0A0539-01,02)

PREPARATION BENCH SHEET

BATCH #: 0010530 (Soil)

Apex Laboratories

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*
0010530-BLK1		QC	01/16/20 09:00	7.5	5							
0010530-BS1		QC	01/16/20 09:00	5	5	A19L349		250				
0010530-BS2		QC	01/16/20 09:00	5	5	A20A132		250				
A0A0436-03	B	8260C BTEX	(Date Sampled)	6.28	5					HC03-14	FP	
A0A0436-03	B	NWTPH-Gx	(Date Sampled)	6.28	5					HC03-14	FP	
A0A0507-03	B	8260C BTEX+N	(Date Sampled)	6.37	5					SPW@7' BGS	FP	
A0A0538-01	D	8260C Full List	(Date Sampled)	6.33	5					PDI-WC-011420-01	FP	
A0A0538-01	D	8260C BTEX	(Date Sampled)	6.33	5					PDI-WC-011420-01	FP Added for BatchQC in: 0010530	
A0A0538-01	D	8260C BTEX+N	(Date Sampled)	6.33	5					PDI-WC-011420-01	FP Added for BatchQC in: 0010530	
A0A0538-01	D	NWTPH-Gx	(Date Sampled)	6.33	5					PDI-WC-011420-01	FP	
0010530-MS1		QC	01/14/20 09:00	6.33	5	A19L349	A0A0538-01	278			91.1@50X	
A0A0538-02	D	8260C Full List	(Date Sampled)	6.54	5					PDI-WC-011420-03	FP	
A0A0538-02	D	NWTPH-Gx	(Date Sampled)	6.54	5					PDI-WC-011420-03	FP	
A0A0539-01	D	8260C Full List	(Date Sampled)	5.66	5					PDI-WC-011420-02	FP	
A0A0539-01	D	8260C BTEX	(Date Sampled)	5.66	5					PDI-WC-011420-02	FP Added for BatchQC in: 0010530	
A0A0539-01	D	8260C BTEX+N	(Date Sampled)	5.66	5					PDI-WC-011420-02	FP Added for BatchQC in: 0010530	
A0A0539-01	D	NWTPH-Gx	(Date Sampled)	5.66	5					PDI-WC-011420-02	FP	
0010530-DUP1		QC	01/14/20 09:30	5.42	5		A0A0539-01					
A0A0539-02	D	8260C Full List	(Date Sampled)	5.45	5					PDI-WC-011420-04	FP	
A0A0539-02	D	NWTPH-Gx	(Date Sampled)	5.45	5					PDI-WC-011420-04	FP	
A0A0547-01	B	8260C Full List	(Date Sampled)	6.21	5					F-18	FP	
A0A0547-01	B	NWTPH-Gx	(Date Sampled)	6.21	5					F-18	FP	

IMA 1/20/20

Prepared By: Date

Reviewed By: 1/20/20

Date

PREPARATION BENCH SHEET

BATCH #: 0010530 (Soil)

Apex Laboratories

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*

*pH <2 verified _____

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18J327	11/30/23	Balance s/n 593312
A19J076	10/04/20	Methanol - Fisher (P/T) #191722
A19J148	10/09/20	Methanol - B&J (P/T) #DX212-US

Analyte Spike(s)

Std ID	Exp. Date	Description
A19L349	05/04/20	8260 Cal. Std. B VOC+OXY Spike (20-40ug/mL
A20A132	06/15/20	Prim NWTPH-Gx Spike (500 ug/mL)

Surrogate(s)

Std ID	Exp. Date	Description

SOIL MS10

Prepared By: _____ Date _____

Reviewed By: _____ Date _____

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: 10530

Matrix Spike

Sample Weight	Final Volume	Dilution	Dry Weight
g	mL		%
6.330	5	50	91.1
			0.911

Final Spike Level	**Spike Amount**
ug/kg	**ul**
964.75	**278**

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

A0A0538-01

IMA
1/20/20

Worksheet

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

Sample ID	Container	Container Weight (g)	Tare Weight (g)	Net Sample Weight (g)	Formula Check
A0A0436-03	B	40.16	33.88	6.28	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	

IMA
1/20/20

Worksheet

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

Sample ID	Container	Container Weight (g)	Tare Weight (g)	Net Sample Weight (g)	Formula Check
A0A0507-03	B	39.74	33.37	6.37	
A0A0538-01	D	40.1	33.77	6.33	
2	D	40.3	33.76	6.54	
A0A0539-01	D	39.07	33.41	5.66	
1	E	38.89	33.47	5.42	
2	D	38.89	33.44	5.45	
A0A0547-01	B	40.04	33.83	6.21	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	

IMA
1/17/20

A0A0436

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0A0436-01 HC01-14 Sampled: 01/14/20 12:50

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.84	33.98	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.63	33.60	5 10 15 Other	

Due: TAT:

A0A0436-02 HC02-14 Sampled: 01/14/20 11:55

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.85	33.62	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.54	33.32	5 10 15 Other	

Due: TAT:

A0A0436-03 HC03-14 Sampled: 01/14/20 10:50

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	40.16	33.88	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	40.28	33.89	5 10 15 Other	100X ~~50X~~

GX BTEX Due: TAT:

A0A0436-04 HC04-14 Sampled: 01/14/20 10:25

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.90	33.81	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.90	33.76	5 10 15 Other	

Due: TAT:

A0A0436-05 HC05-14 Sampled: 01/14/20 09:40

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.30	33.64	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	38.90	33.51	5 10 15 Other	

Due: TAT:

Weighed by: KS @ 1/14/20 16:58

Methanol Reagent ID: A19J076 Balance ID: A183327

Print Date: 1/14/2020 4:42:01PM

A0A0507

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0A0507-01 SPB@9'BGS Sampled: 01/15/20 14:37

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA 5035 (MeOH)	37.29	32.96	5 10 15 Other	

Due: TAT:

A0A0507-02 NPB@9'BGS Sampled: 01/15/20 14:37

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA 5035 (MeOH)	39.26	33.70	5 10 15 Other	

Due: TAT:

A0A0507-03 SPW@7'BGS Sampled: 01/15/20 14:40

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA 5035 (MeOH)	34.74	33.37	5 10 15 Other	Dx@8240

BTEX + N

Due: TAT:

Weighed by: MS @ 1/15/20 17:55

Methanol Reagent ID: A19J076~ Balance ID: A18J327~

Print Date: 1/15/2020 5:47:26PM

A0A0538

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0A0538-01 | **PDI-WC-011420-01** | Sampled: **01/14/20 09:00**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	40.10	33.77	(5) 10 15 Other	MS
E Sediment	40 mL VOA - 5035 (MeOH)	37.79	33.31	(5) 10 15 Other	

GX/8260 Due: TAT:

A0A0538-02 | **PDI-WC-011420-03** | Sampled: **01/14/20 10:10**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	40.30	33.76	(5) 10 15 Other	
E Sediment	40 mL VOA - 5035 (MeOH)	41.11	33.62	(5) 10 15 Other	

Due: TAT:

Weighed by: [illegible] @ 1/16/20 1641

Methanol Reagent ID: A19J076 Balance ID: A18J327

A0A0539

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0A0539-01 | **PDI-WC-011420-02** | Sampled: **01/14/20 09:30**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	39.07	33.41	(5) 10 15 Other	
E Sediment	40 mL VOA - 5035 (MeOH)	38.89	33.47	(5) 10 15 Other	DUP

GX/8260

Due: TAT:

A0A0539-02 | **PDI-WC-011420-04** | Sampled: **01/14/20 10:35**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	38.89	33.44	(5) 10 15 Other	
E Sediment	40 mL VOA - 5035 (MeOH)	38.83	33.28	(5) 10 15 Other	

Due: TAT:

Weighed by: (8) @ 1/16/20 1642

Methanol Reagent ID: A19J076 Balance ID: A18J327

A0A0547

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0A0547-01	F-18	Sampled: 01/16/20 13:55

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	40.04	33.83	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	40.21	33.93	5 10 15 Other	

Gx/8260 Due: TAT:

Weighed by: AKK @ 1714 1/16/20

Methanol Reagent ID: A190076 Balance ID: A189327

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**0A17017**	Instrument:	**VOA-GCMS10**
Date:	**01/17/20 09:11**	Calibration:	**A0A0801**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A17017-IBL1	Soil	QC	QC			A19L200	
2	0A17017-TUN1	Soil	QC	QC			A19L200	
3	0A17017-CCV1	Soil	QC	QC			A19L200	
4	0010530-BS1	Soil	QC	QC		0010530	A19L200	
5	0A17017-CCV2	Soil	QC	QC			A19L200	
6	0010530-BS2	Soil	QC	QC		0010530	A19L200	
7	0010530-BLK1	Soil	QC	QC		0010530	A19L200	
8	A0A0547-01	Soil	8260C Full List		01/17/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/17/20	0010530	A19L200	
9	A0A0539-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
10	0010530-DUP1	Soil	QC	QC		0010530	A19L200	
11	A0A0538-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
12	0010530-MS1	Soil	QC	QC		0010530	A19L200	
13	0A17017-IBL2	Soil	QC	QC			A19L200	
14	A0A0539-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
15	A0A0507-03	Soil	8260C BTEX+N		01/20/20	0010530	A19L200	
16	A0A0538-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
17	0A17017-IBL3	Soil	QC	QC			A19L200	
18	0A17017-IBL4	Soil	QC	QC			A19L200	
19	A0A0436-03	Soil	8260C BTEX		01/20/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/20/20	0010530	A19L200	
20	0A17017-IBL5	Soil	QC	QC			A19L200	
21	0010544-BS1	Soil	QC	QC		0010544	A19L200	
22	0010544-BLK1	Soil	QC	QC		0010544	A19L200	
23	0010544-BS2	Soil	QC	QC		0010544	A19L200	
24	0010544-BS3	Soil	QC	QC		0010544	A19L200	
25	0010544-BS4	Soil	QC	QC		0010544	A19L200	
26	0010545-BLK1	Soil	QC	QC		0010545	A19L200	
27	0010545-BS1	Soil	QC	QC		0010545	A19L200	
28	0010545-BS3	Soil	QC	QC		0010545	A19L200	
29	0010545-BS2	Soil	QC	QC		0010545	A19L200	
30	0010545-BS4	Soil	QC	QC		0010545	A19L200	
31	0A17017-IBL6	Soil	QC	QC			A19L200	

Data Entered By: IMA 1/20/20

Data Reviewed By: [signature] 1/21/20

Comments:

↑12DCPA to 1/2 ppb

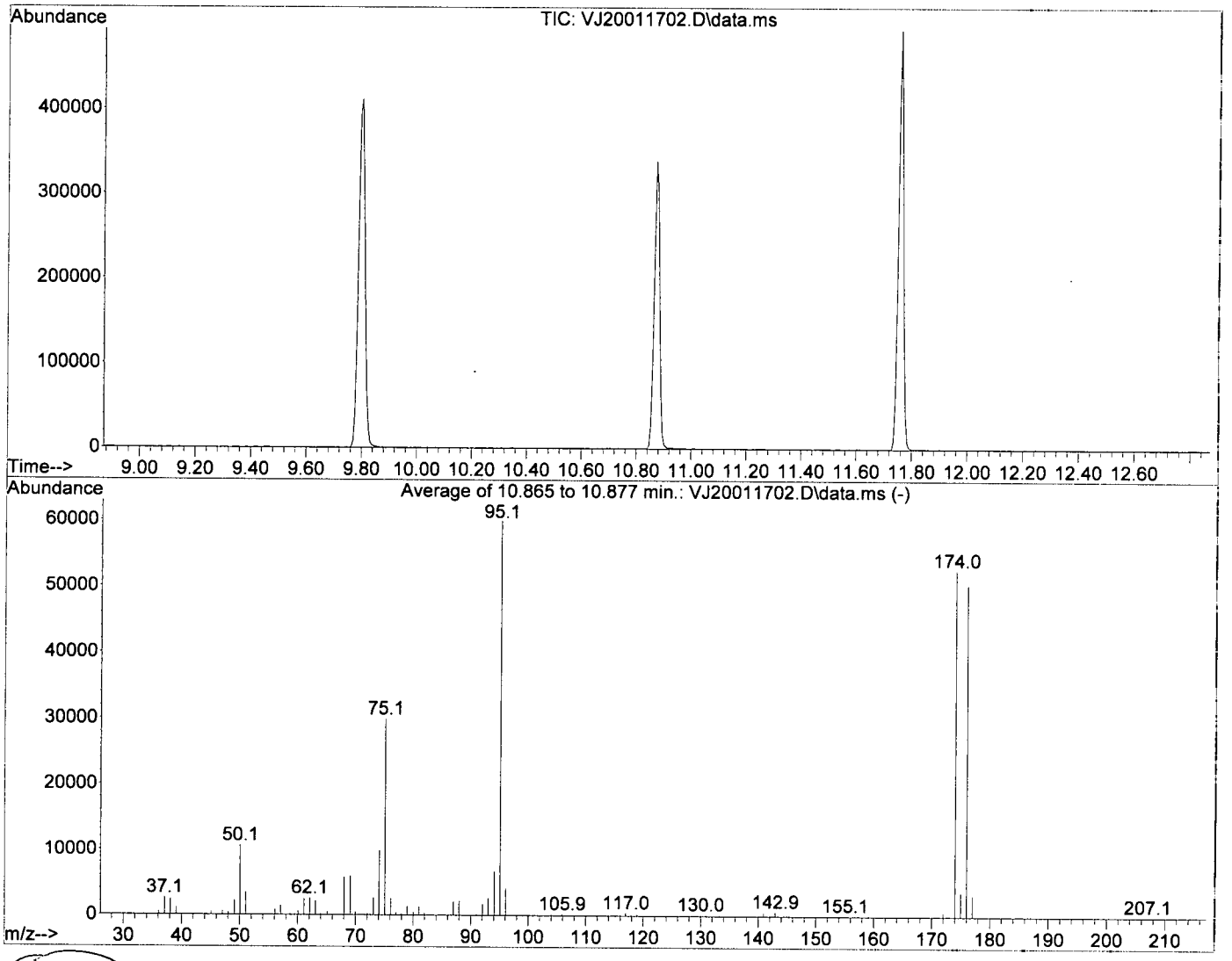
BFB

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011702.D
Acq On : 17 Jan 2020 9:57 am
Operator : IMA
Sample : 0A17017-TUN1
Misc : 1X 5mL A19L200 IS/SURR
ALS Vial : 2 Sample Multiplier: 1

IMA
1/17/20

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Tue Jan 07 15:08:13 2020



AutoFind: Scans 1526, 1527, 1528; Background Corrected with Scan 1519

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	113.9	59984	PASS
96	95	5	9	6.9	4128	PASS
173	174	0.00	2	0.2	107	PASS
174	95	50	200	87.8	52680	PASS
175	174	5	9	7.0	3708	PASS
176	174	95	105	95.8	50488	PASS
177	176	5	10	6.5	3270	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011702.D
Acq On : 17 Jan 2020 9:57 am
Operator : IMA
Sample : 0A17017-TUN1
Misc : 1X 5mL A19L200 IS/SURR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 12:00:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

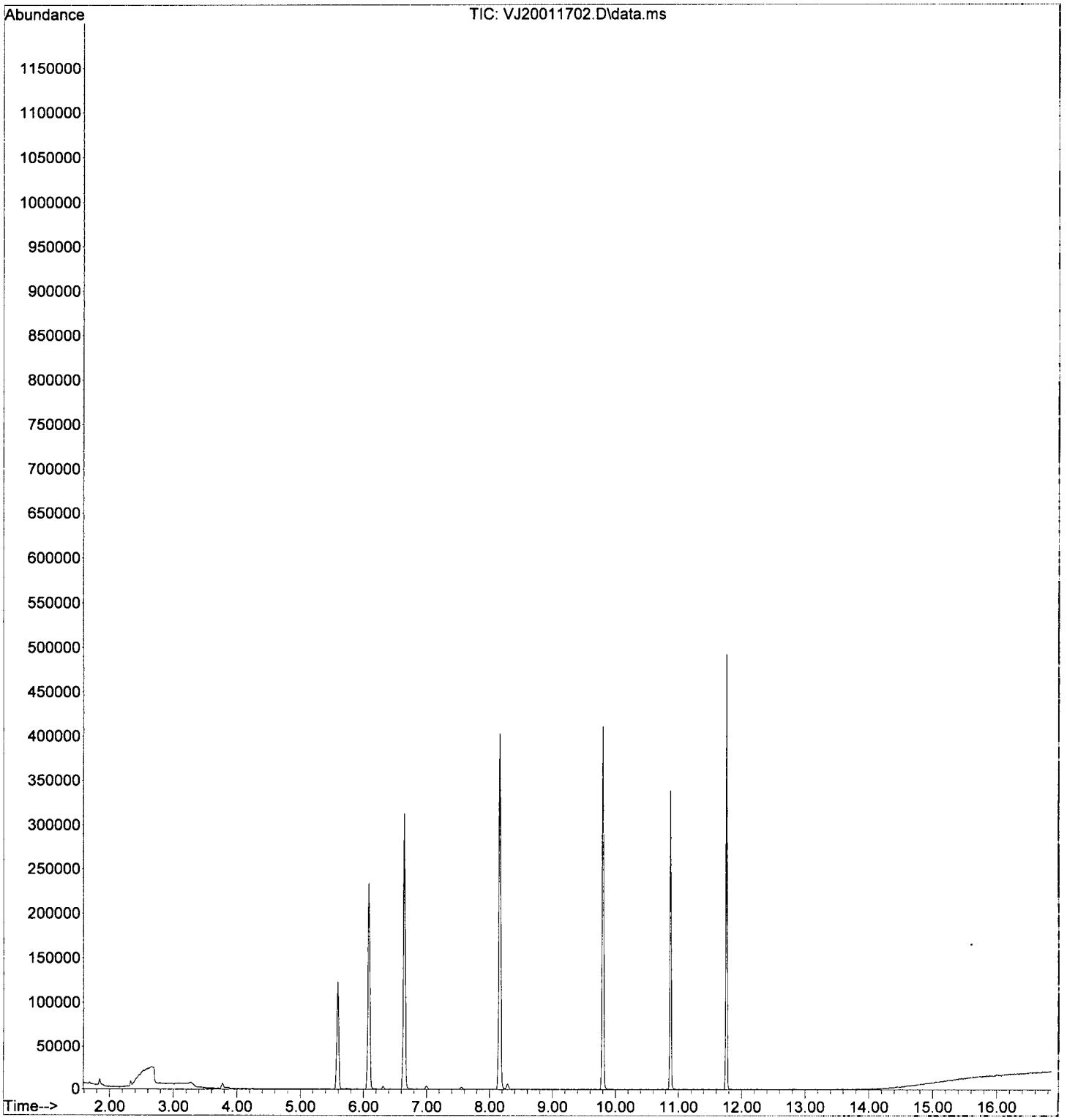
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	93728	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	234848	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	109043	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	81128	53.58	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	278813	50.99	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	316613	48.63	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	86831	51.58	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.885	50	1226	0.46	ug/L		94
5) Bromomethane	2.330	96	2817	Below Cal			98
6) Chloroethane	2.530	64	58	0.12	ug/L	#	1
8) Ethanol	3.266	45	2914	0.15	ug/L		95
12) Iodomethane	3.285	142	777	2.36	ug/L		78
13) Methylene Chloride	3.771	84	3243	0.75	ug/L		92
14) Acetone	3.850	43	1840	1.55	ug/L		90
18) tert-Butanol (TBA)	4.258	59	187	0.35	ug/L	#	46
32) 2-Butanone (MEK)	5.730	43	1841	0.99	ug/L		89
36) iso-Butyl Alcohol	6.314	43	1231	6.13	ug/L	#	59
84) Naphthalene	13.505	128	113	0.12	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011702.D
Acq On : 17 Jan 2020 9:57 am
Operator : IMA
Sample : 0A17017-TUN1
Misc : 1X 5mL A19L200 IS/SURR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 12:00:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 12:01:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	91	0.00
2		Dichlorodifluoromethane	20.000	18.326	8.4	92	-0.01
3	P	Chloromethane	20.000	17.114	14.4	84	-0.01
4	C	Vinyl Chloride	20.000	18.941	5.3	87	0.00
5		Bromomethane	20.000	19.352	3.2	90	0.00
6		Chloroethane	20.000	18.753	6.2	95	0.00
7		Trichlorofluoromethane	20.000	21.715	-8.6	102	-0.01
8		Ethanol	1250.000	1043.647	16.5	80	-0.01
9	C	1,1-Dichloroethene	20.000	19.918	0.4	94	-0.01
10		Carbon Disulfide	20.000	19.552	2.2	95	-0.01
11		Freon 113	20.000	21.348	-6.7	96	-0.01
12		Iodomethane	20.000	22.777	-13.9	115	-0.01
13		Methylene Chloride	20.000	19.964	0.2	94	-0.01
14		Acetone	40.000	36.213	9.5	90	-0.01
15		t-1,2-Dichloroethene	20.000	19.819	0.9	92	0.00
16		n-Hexane	20.000	21.179	-5.9	93	0.00
17		Methyl-tert-butyl-ether	20.000	20.118	-0.6	92	0.00
18		tert-Butanol (TBA)	1250.000	1251.513	-0.1	87	-0.01
19		Diisopropyl ether (DIPE)	5.000	4.876	2.5	84	0.00
20	P	1,1-Dichloroethane	20.000	20.508	-2.5	93	0.00
21		Acrylonitrile	20.000	16.205	19.0	71	-0.01
22		Ethyl-tert-butyl ether (ETB	5.000	4.790	4.2	80	0.00
23		c-1,2-Dichloroethene	20.000	20.460	-2.3	90	0.00
24		2,2-Dichloropropane	20.000	22.363	-11.8	102	0.00
25		Bromochloromethane	20.000	19.223	3.9	87	0.00
26	C	Chloroform	20.000	21.031	-5.2	96	0.00
27		Carbon Tetrachloride	20.000	22.247	-11.2	101	0.00
28		Tetrahydrofuran	20.000	17.814	10.9	81	0.00
29		1,1,1-Trichloroethane	20.000	21.854	-9.3	97	0.00
30	S	Dibromofluoromethane (S)	50.000	50.570	-1.1	95	0.00
31		1,1-Dichloropropene	20.000	20.595	-3.0	90	0.00
32		2-Butanone (MEK)	40.000	34.820	13.0	85	0.00
33		Benzene	20.000	20.638	-3.2	94	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.762	4.8	90	0.00
35		1,2-Dichloroethane (EDC)	20.000	20.651	-3.3	93	0.00
36		iso-Butyl Alcohol	500.000	422.950	15.4	81	0.00
37	S	1,4-Difluorobenzene (S)	50.000	50.956	-1.9	94	0.00
38		Trichloroethene (TCE)	20.000	22.951	-14.8	101	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	4.915	1.7	88	0.00
40		Dibromomethane	20.000	21.540	-7.7	96	0.00
41	C	1,2-Dichloropropane	20.000	19.695	1.5	90	0.00
42		Bromodichloromethane	20.000	21.493	-7.5	95	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	97	0.00
44		c-1,3-Dichloropropene	20.000	19.270	3.7	87	-0.01
45	S	Toluene-d8 (S)	50.000	47.051	5.9	90	0.00
46	C	Toluene	20.000	19.678	1.6	95	0.00
47		Tetrachloroethene (PCE)	20.000	22.387	-11.9	103	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	33.646	15.9	82	0.00
49		t-1,3-Dichloropropene	20.000	21.765	-8.8	95	0.00
50		1,1,2-Trichloroethane	20.000	20.052	-0.3	96	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	21.355	-6.8	103	0.00
52		1,3-Dichloropropane	20.000	20.191	-1.0	95	0.00
53		1,2-Dibromoethane (EDB)	20.000	20.848	-4.2	99	0.00
54		2-Hexanone	40.000	31.946	20.1	82	0.00
55	P	Chlorobenzene	20.000	20.593	-3.0	99	0.00
56	C	Ethylbenzene	20.000	20.658	-3.3	96	0.00
57		1,1,1,2-Tetrachloroethane	20.000	21.890	-9.5	105	0.00
58		m,p-Xylenes (2)	40.000	44.193	-10.5	97	0.00
59		o-Xylene	20.000	21.793	-9.0	95	0.00
60		Styrene	20.000	19.368	3.2	100	0.00
61	P	Bromoform	20.000	22.236	-11.2	105	0.00
62		Isopropylbenzene	20.000	21.488	-7.4	97	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	102	0.00
64	S	4-Bromofluorobenzene (S)	50.000	49.960	0.1	102	0.00
65		Bromobenzene	20.000	21.393	-7.0	106	0.00
66		n-Propylbenzene	20.000	19.884	0.6	95	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	19.262	3.7	91	0.00
68		2-Chlorotoluene	20.000	21.335	-6.7	100	0.00
69		1,3,5-Trimethylbenzene	20.000	22.194	-11.0	100	0.00
70		1,2,3-Trichloropropane	20.000	20.482	-2.4	99	0.00
71		t-1,4-Dichloro-2-butene	20.000	19.613	1.9	100	0.00
72		4-Chlorotoluene	20.000	20.659	-3.3	97	0.00
73		tert-Butylbenzene	20.000	20.646	-3.2	97	0.00
74		1,2,4-Trimethylbenzene	20.000	22.369	-11.8	100	0.00
75		sec-Butylbenzene	20.000	21.448	-7.2	97	0.00
76		4-Isopropyltoluene	20.000	22.466	-12.3	100	0.00
77		1,3-Dichlorobenzene	20.000	21.518	-7.6	102	0.00
78		1,4-Dichlorobenzene	20.000	20.039	-0.2	104	0.00
79		n-Butylbenzene	20.000	19.833	0.8	96	0.00
80		1,2-Dichlorobenzene	20.000	21.572	-7.9	102	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	18.826	5.9	100	0.00
82		Hexachlorobutadiene	20.000	21.754	-8.8	104	0.00
83		1,2,4-Trichlorobenzene	20.000	21.454	-7.3	103	0.00
84		Naphthalene	20.000	18.279	8.6	96	0.00
85		1,2,3-Trichlorobenzene	20.000	22.244	-11.2	103	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene (I)	6.083	99	99045	50.00	ug/L		0.00	
43) Chlorobenzene-d5 (I)	9.800	117	249894	50.00	ug/L		0.00	
63) 1,4-Dichlorobenzene-d4...	11.759	152	123313	50.00	ug/L		0.00	
System Monitoring Compounds								
30) Dibromofluoromethane (S)	5.590	111	80912	50.57	ug/L		0.00	
37) 1,4-Difluorobenzene (S)	6.643	114	294409	50.96	ug/L		0.00	
45) Toluene-d8 (S)	8.158	98	325943	47.05	ug/L		0.00	
64) 4-Bromofluorobenzene (S)	10.871	174	95101	49.96	ug/L		0.00	
Target Compounds							Qvalue	
2) Dichlorodifluoromethane	1.685	85	35329	18.33	ug/L		97	
3) Chloromethane	1.886	50	48630	17.11	ug/L		99	
4) Vinyl Chloride	1.995	62	40599	18.94	ug/L		93	
5) Bromomethane	2.336	96	22244	19.35	ug/L		99	
6) Chloroethane	2.457	64	9654	18.75	ug/L		94	
7) Trichlorofluoromethane	2.585	101	16510	21.72	ug/L		99	
8) Ethanol	~~3.254~~	~~45~~	~~36901~~	~~555.24~~	~~ug/L~~		~~88~~	M.I.
9) 1,1-Dichloroethene	3.139	61	47926	19.92	ug/L		94	
10) Carbon Disulfide	3.151	76	84519	19.55	ug/L		97	
11) Freon 113	3.194	101	38167	21.35	ug/L		97	
12) Iodomethane	3.291	142	9166	22.78	ug/L		90	
13) Methylene Chloride	3.771	84	40646	19.96	ug/L		96	
14) Acetone	~~3.857~~	~~43~~	~~36287~~	~~28.97~~	~~ug/L~~		~~98~~	M.I.
15) t-1,2-Dichloroethene	3.942	61	58411	19.82	ug/L		93	
16) n-Hexane	4.039	86	9555	21.18	ug/L	#	94	
17) Methyl-tert-butyl-ether	4.100	73	146025	20.12	ug/L		61	
18) tert-Butanol (TBA)	~~4.246~~	~~59~~	~~400642~~	~~714.87~~	~~ug/L~~	#	~~91~~	M.I.
19) Diisopropyl ether (DIPE)	4.495	45	31525	4.88	ug/L		97	
20) 1,1-Dichloroethane	4.575	63	69678	20.51	ug/L		99	
21) Acrylonitrile	4.623	53	20677	16.21	ug/L		97	
22) Ethyl-tert-butyl ether...	4.867	59	29455	4.79	ug/L		94	
23) c-1,2-Dichloroethene	5.122	61	56117	20.46	ug/L		94	
24) 2,2-Dichloropropane	5.232	77	70011	22.36	ug/L		97	
25) Bromochloromethane	5.323	49	32605	19.22	ug/L		91	
26) Chloroform	5.408	83	78516	21.03	ug/L		96	
27) Carbon Tetrachloride	5.548	117	59688	22.25	ug/L		94	
28) Tetrahydrofuran	5.578	42	21629	17.81	ug/L		88	
29) 1,1,1-Trichloroethane	5.615	97	75163	21.85	ug/L		96	
31) 1,1-Dichloropropene	5.743	75	58415	20.59	ug/L		97	
32) 2-Butanone (MEK)	5.724	43	68427	34.82	ug/L		95	
33) Benzene	5.992	78	187250	20.64	ug/L		98	
34) tert-Amyl methyl ether...	6.144	73	28068	4.76	ug/L		95	
35) 1,2-Dichloroethane (EDC)	6.199	62	66400	20.65	ug/L		100	
36) iso-Butyl Alcohol	~~6.266~~	~~43~~	~~53795~~	~~253.59~~	~~ug/L~~		~~86~~	M.I.
38) Trichloroethene (TCE)	6.613	130	48970	22.95	ug/L		98	
39) tert-Amyl ethyl ether ...	6.892	59	20058	4.91	ug/L		92	
40) Dibromomethane	7.051	93	27460	21.54	ug/L		99	
41) 1,2-Dichloropropane	7.160	63	42034	19.69	ug/L		87	
42) Bromodichloromethane	7.239	83	54292	21.49	ug/L		95	
44) c-1,3-Dichloropropene	7.939	75	60146	19.27	ug/L		97	
46) Toluene	8.219	91	192638	19.68	ug/L		97	
47) Tetrachloroethene (PCE)	8.669	166	50817	22.39	ug/L		98	
48) 4-Methyl-2-Pentanone (...	8.663	43	98375	33.65	ug/L		97	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

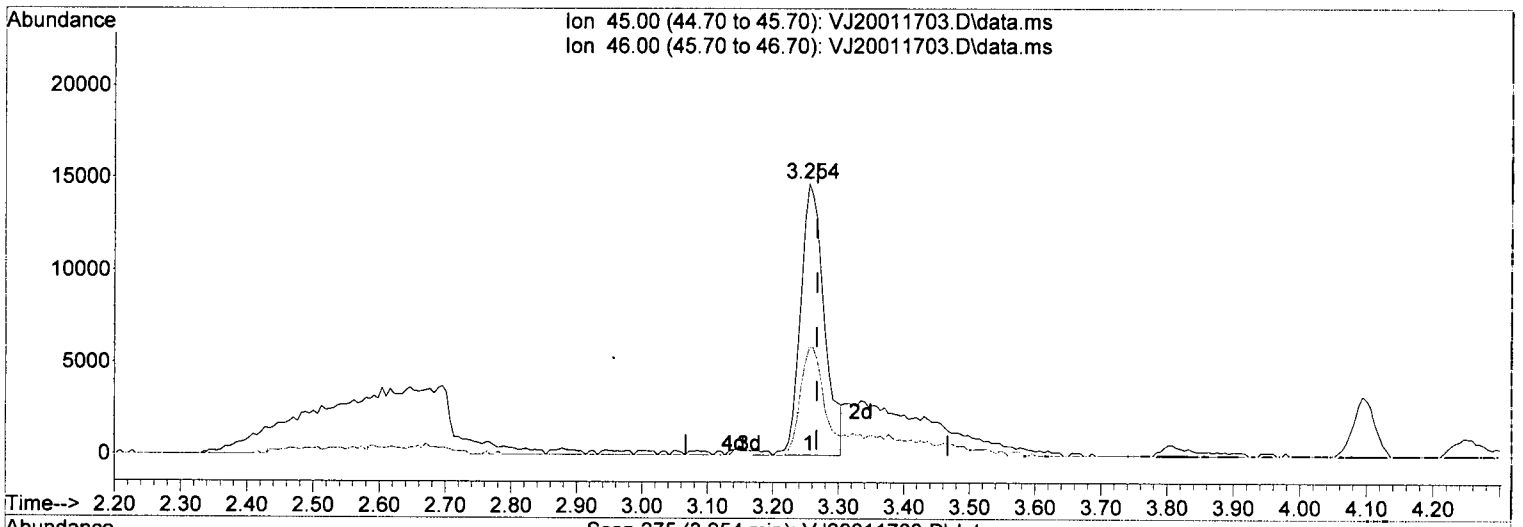
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	64804	21.76	ug/L		100
50) 1,1,2-Trichloroethane	8.870	97	40456	20.05	ug/L		99
51) Dibromochloromethane	9.058	129	39892	21.36	ug/L		96
52) 1,3-Dichloropropane	9.149	76	69649	20.19	ug/L		99
53) 1,2-Dibromoethane (EDB)	9.295	107	41911	20.85	ug/L		99
54) 2-Hexanone	9.539	43	71377	31.95	ug/L		97
55) Chlorobenzene	9.812	112	122093	20.59	ug/L		100
56) Ethylbenzene	9.849	91	204329	20.66	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.879	131	43449	21.89	ug/L		98
58) m,p-Xylenes (2)	9.989	91	307002	44.19	ug/L		98
59) o-Xylene	10.372	91	140612	21.79	ug/L		98
60) Styrene	10.415	104	105254	19.37	ug/L		96
61) Bromoform	10.433	173	28996	22.24	ug/L		97
62) Isopropylbenzene	10.646	105	182599	21.49	ug/L		100
65) Bromobenzene	10.956	156	49740	21.39	ug/L		95
66) n-Propylbenzene	10.987	91	213941	19.88	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	52530	19.26	ug/L		97
68) 2-Chlorotoluene	11.108	126	43097	21.34	ug/L		98
69) 1,3,5-Trimethylbenzene	11.145	105	160598	22.19	ug/L		95
70) 1,2,3-Trichloropropane	11.145	110	21094	20.48	ug/L	#	85
71) t-1,4-Dichloro-2-butene	11.181	88	8696	19.61	ug/L	#	80
72) 4-Chlorotoluene	11.242	91	127842	20.66	ug/L		98
73) tert-Butylbenzene	11.400	91	82958	20.65	ug/L		97
74) 1,2,4-Trimethylbenzene	11.455	105	161082	22.37	ug/L		98
75) sec-Butylbenzene	11.540	105	186089	21.45	ug/L		99
76) 4-Isopropyltoluene	11.650	119	159475	22.47	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	89447	21.52	ug/L		99
78) 1,4-Dichlorobenzene	11.771	146	90139	20.04	ug/L		99
79) n-Butylbenzene	11.966	91	131542	19.83	ug/L		97
80) 1,2-Dichlorobenzene	12.088	146	81807	21.57	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	14211	18.83	ug/L		90
82) Hexachlorobutadiene	13.213	223	13356	21.75	ug/L		94
83) 1,2,4-Trichlorobenzene	13.238	180	50294	21.45	ug/L		98
84) Naphthalene	13.505	128	162604	18.28	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	52907	22.24	ug/L		98

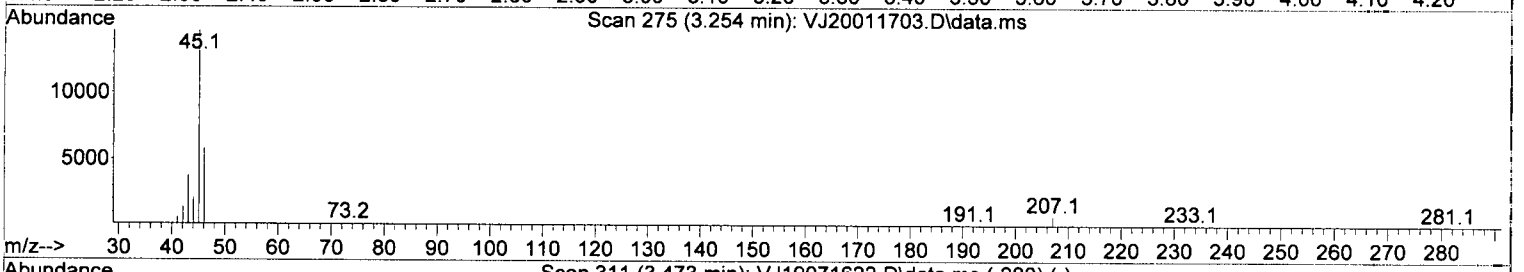
(#) = qualifier out of range (m) = manual integration (+) = signals summed

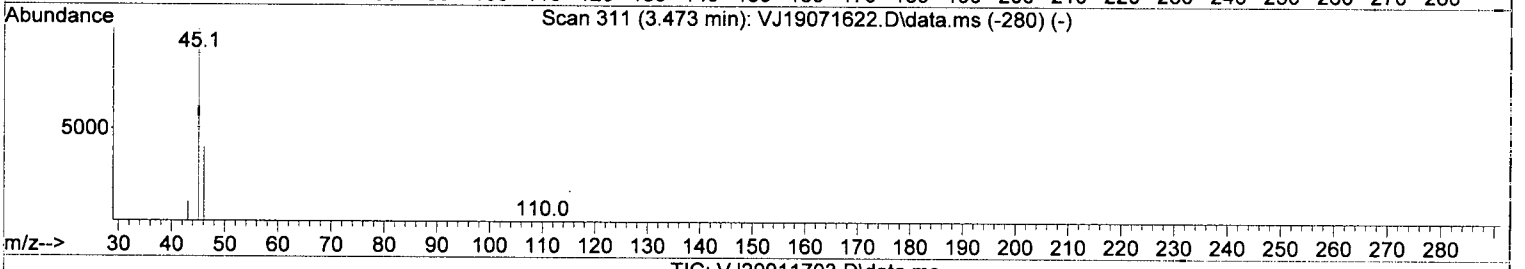
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(8) Ethanol

3.254min (-0.012) 555.24 ug/L

response 36901

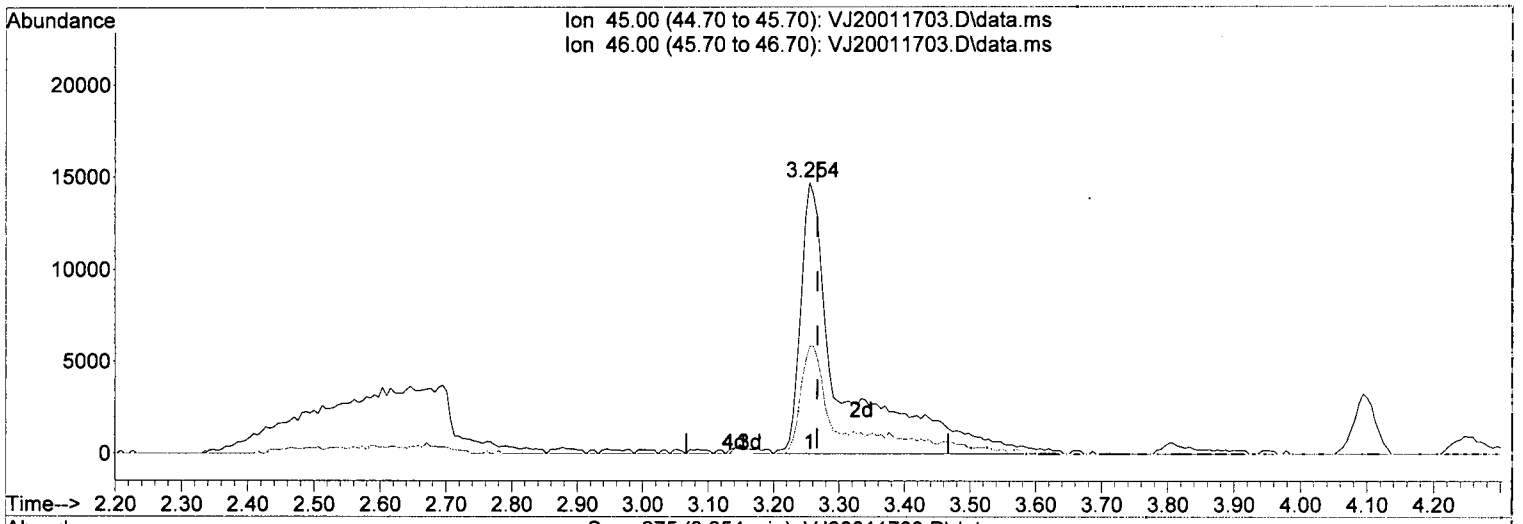
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.54
0.00	0.00	0.00
0.00	0.00	0.00

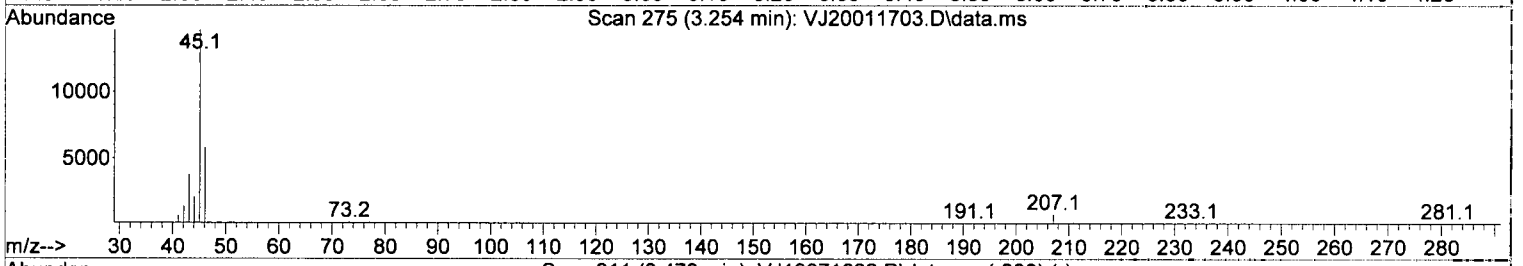
M.I.

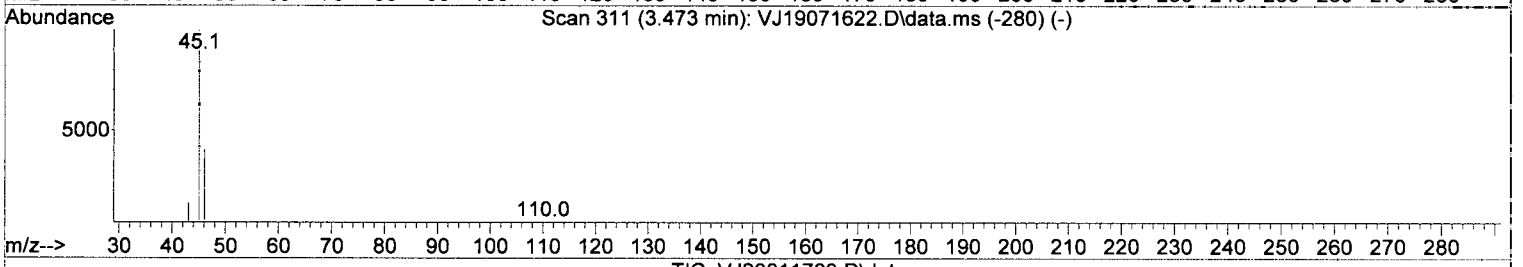
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(8) Ethanol

3.254min (-0.012) 1043.65 ug/L (m)

IMA 1/17/20

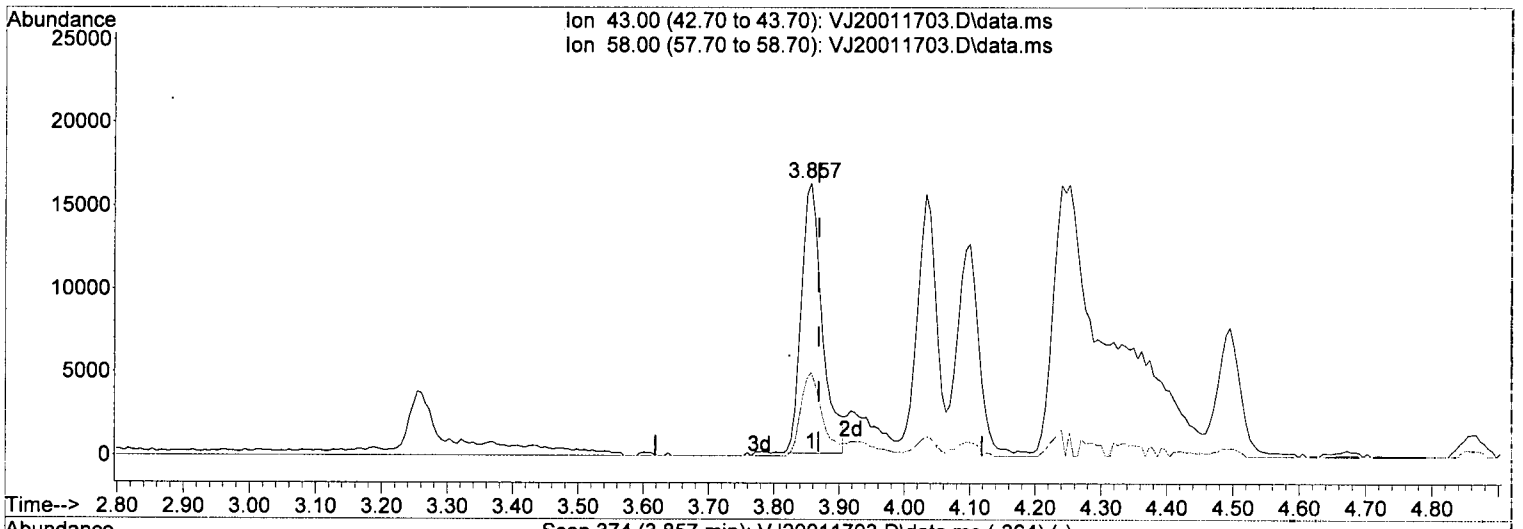
response 65613

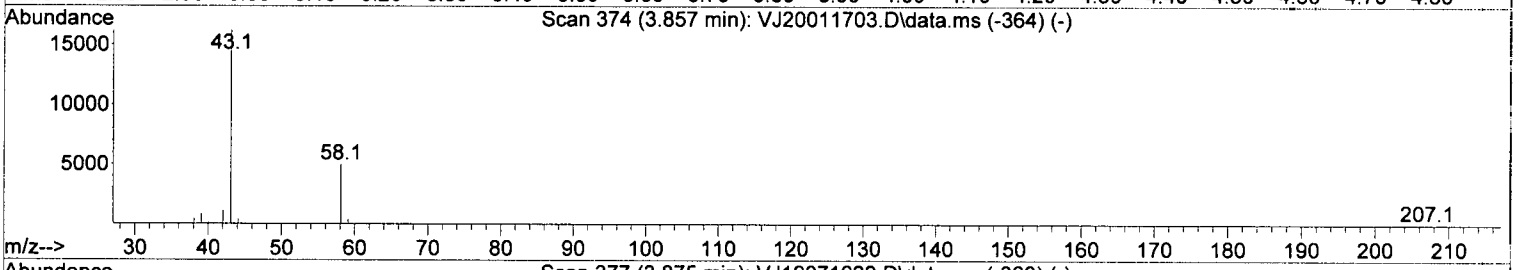
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.54
0.00	0.00	0.00
0.00	0.00	0.00

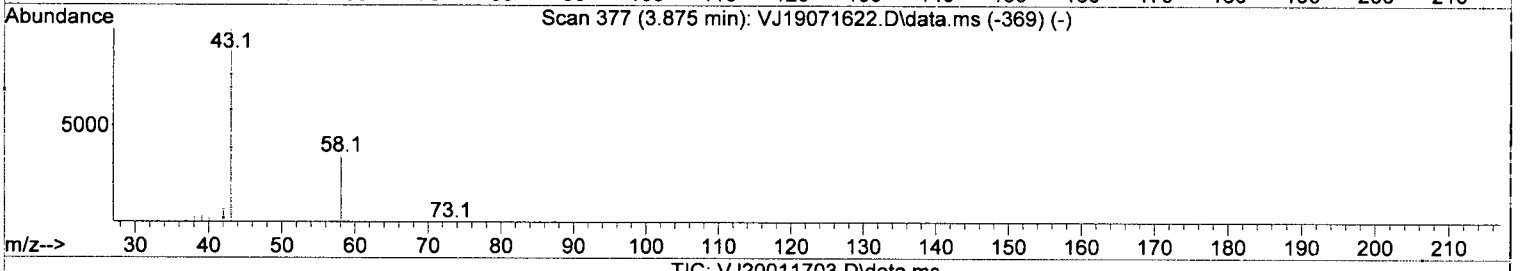
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(14) Acetone

3.857min (-0.011) 28.97 ug/L

response 36287

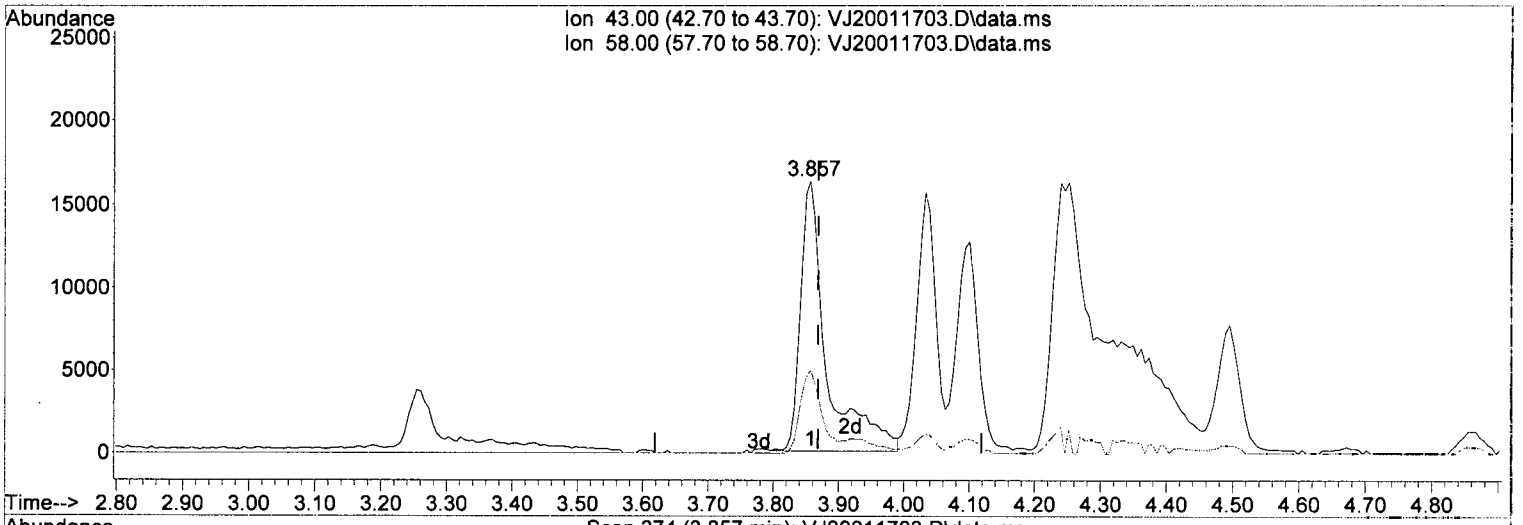
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.85
0.00	0.00	0.00
0.00	0.00	0.00

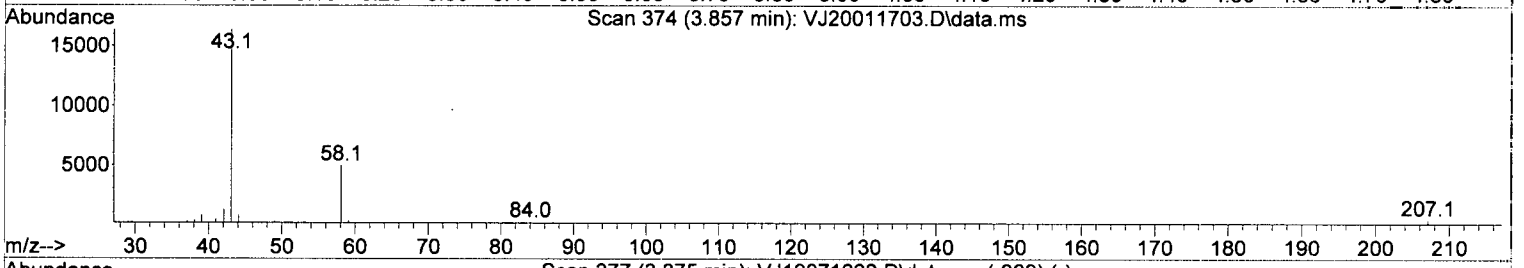
M.I.

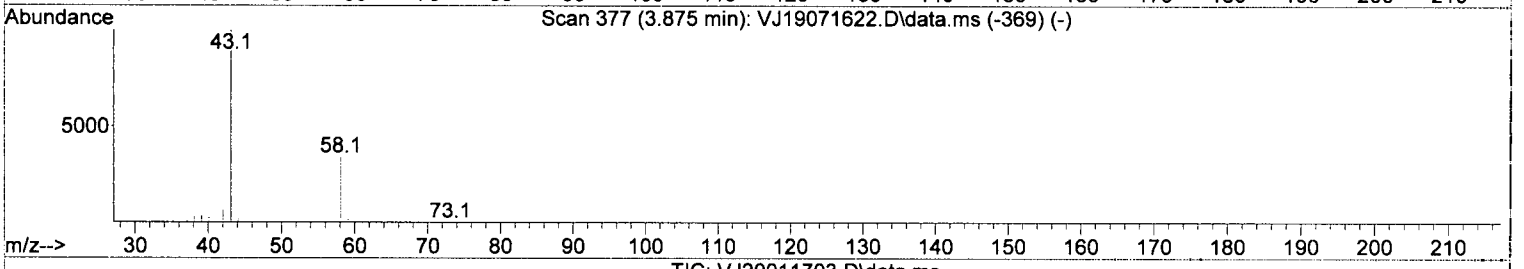
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(14) Acetone

3.857min (-0.011) 36.21 ug/L (m)

IMA 1/17/20

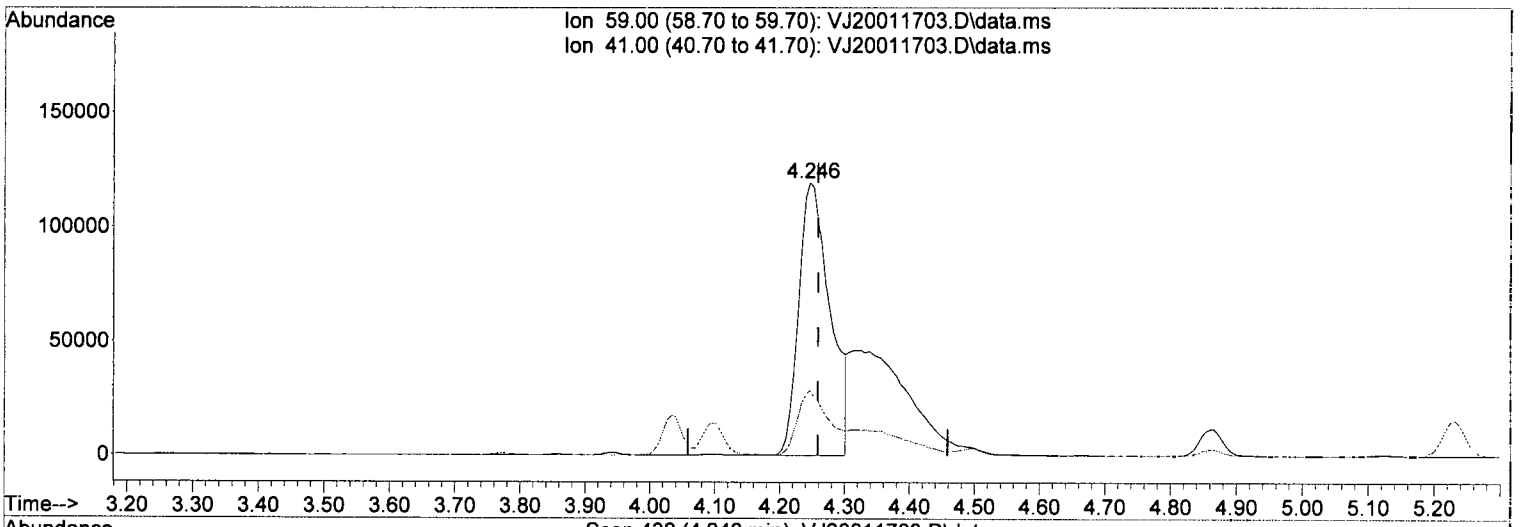
response 45357

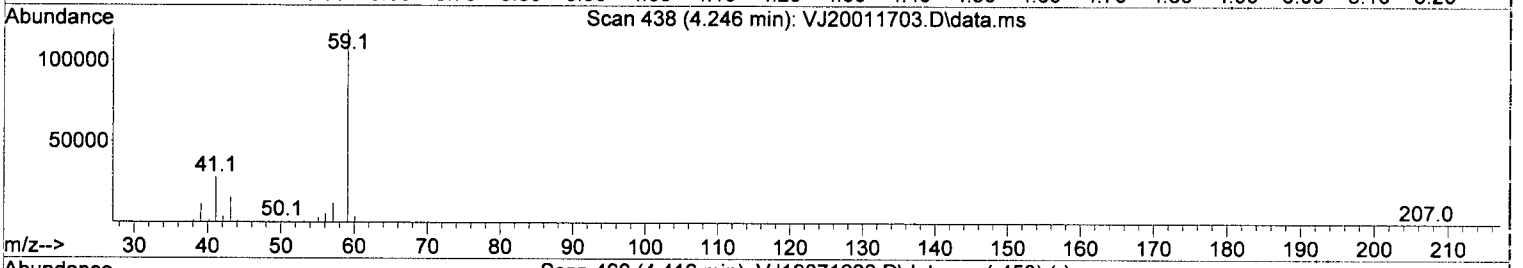
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.54
0.00	0.00	0.00
0.00	0.00	0.00

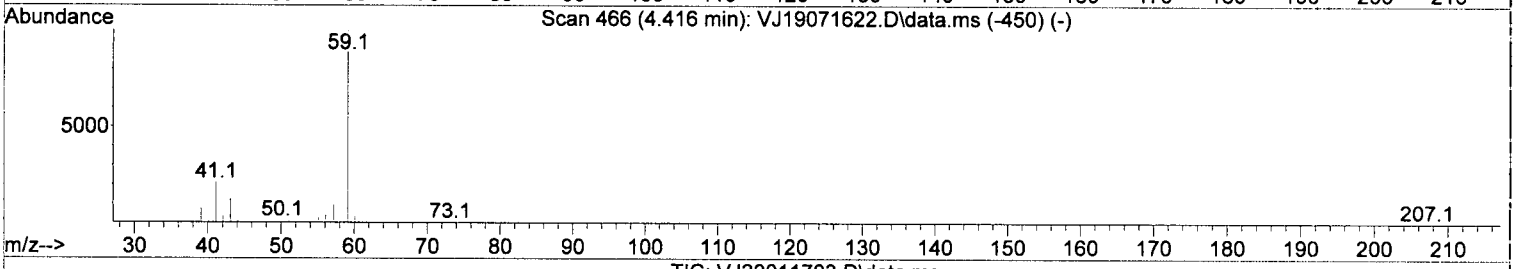
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(18) tert-Butanol (TBA)

4.246min (-0.012) 714.87 ug/L

response 400642

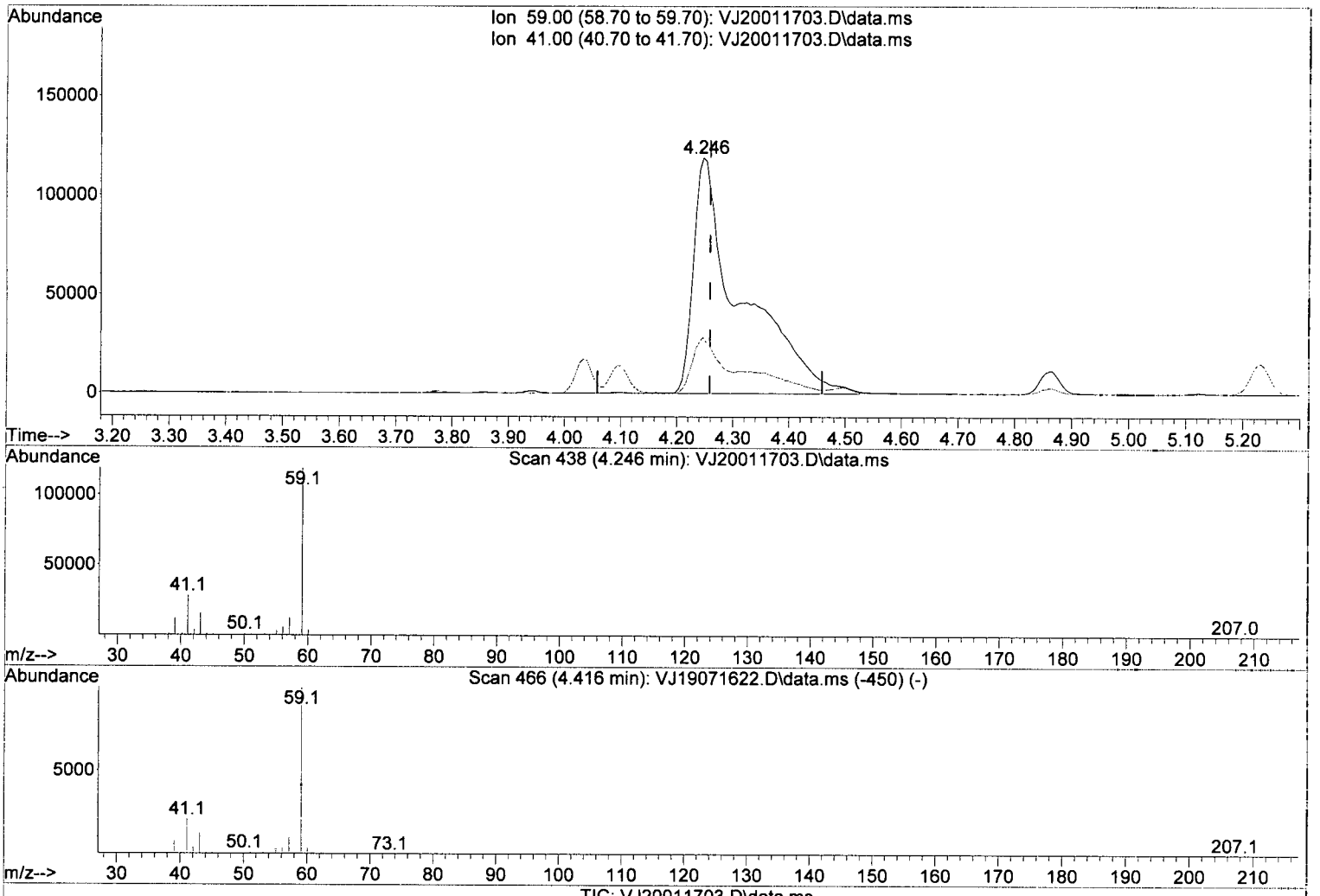
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	23.94#
0.00	0.00	0.00
0.00	0.00	0.00

MI

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20011703.D\data.ms

(18) tert-Butanol (TBA)

4.246min (-0.012) 1251.51 ug/L (m)

response 701396

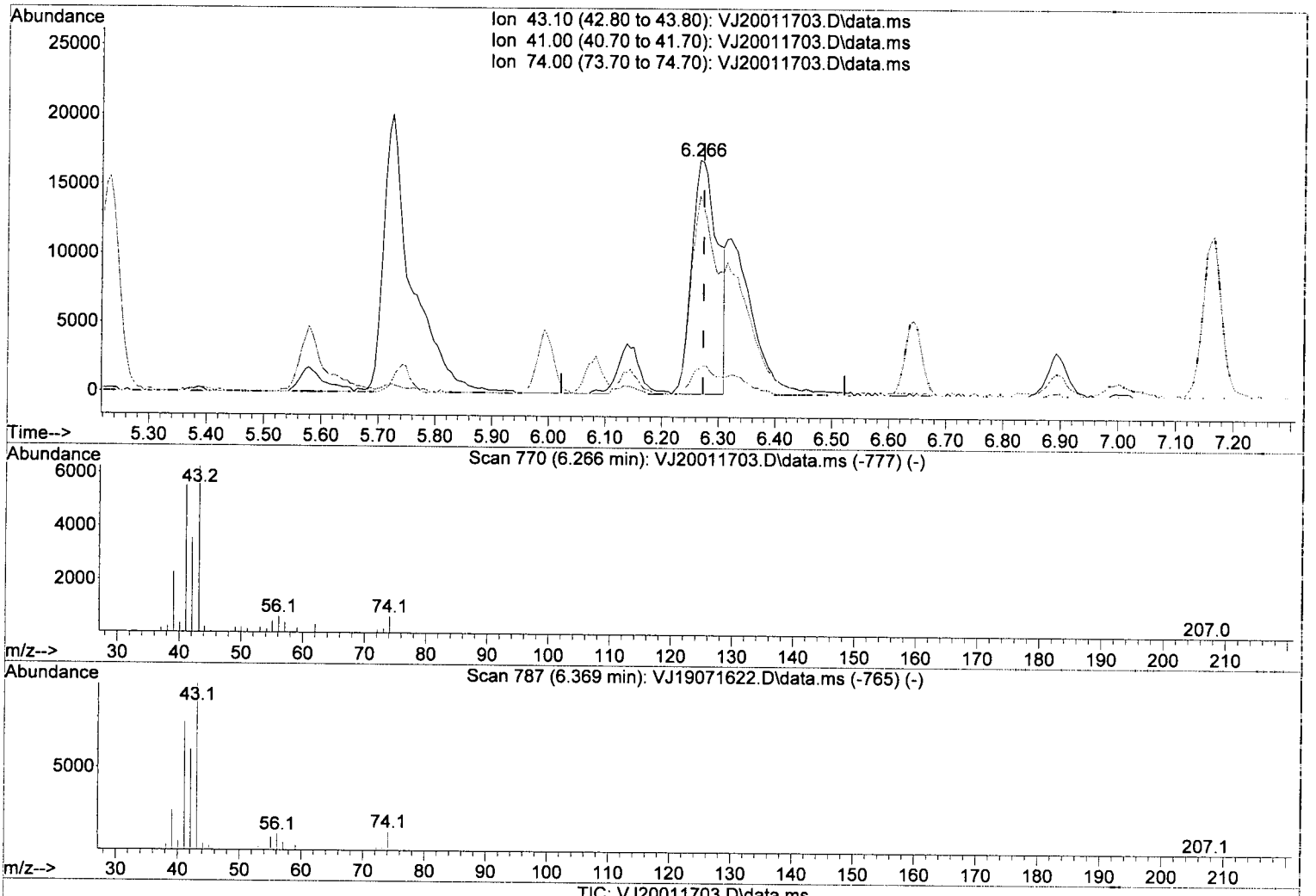
IMA 1/17/20

Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	23.94#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20011703.D\data.ms

(36) iso-Butyl Alcohol

6.266min (-0.006) 253.59 ug/L

response 53795

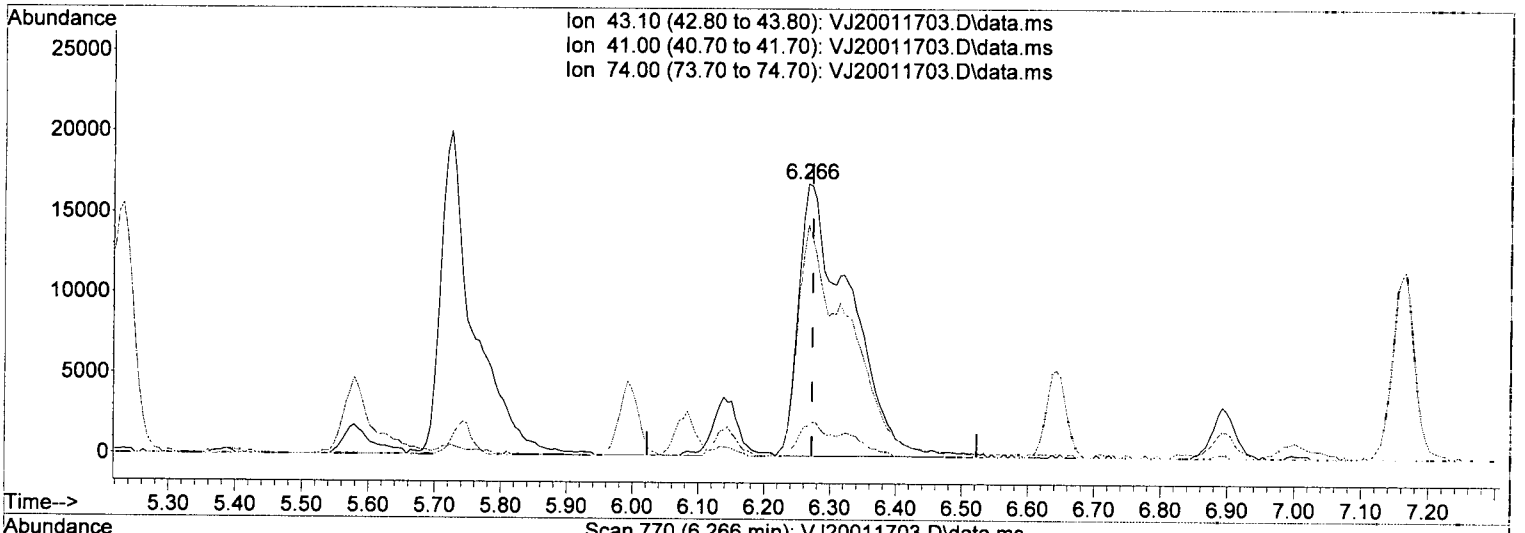
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	84.91
74.00	11.60	11.13
0.00	0.00	0.00

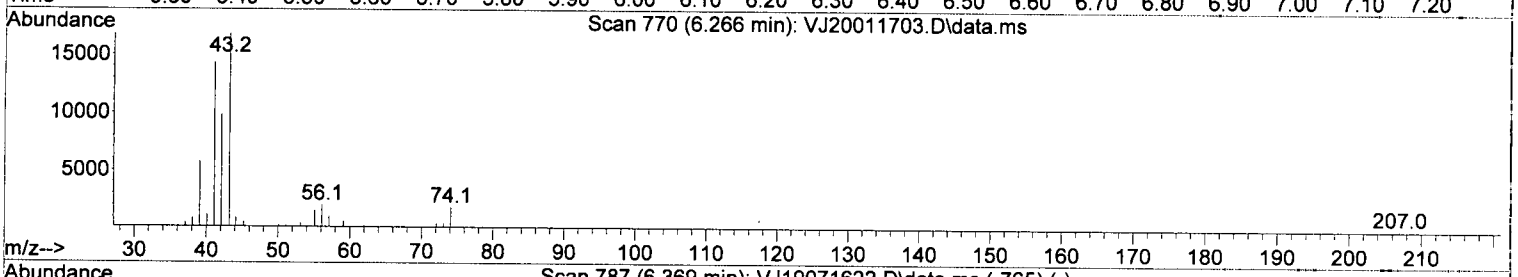
M.I.

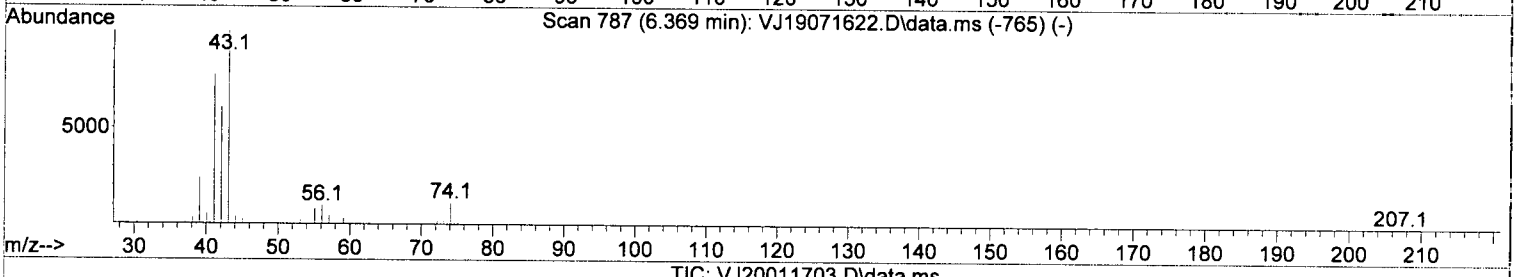
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(36) iso-Butyl Alcohol

6.266min (-0.006) 422.95 ug/L (m)

response 89721

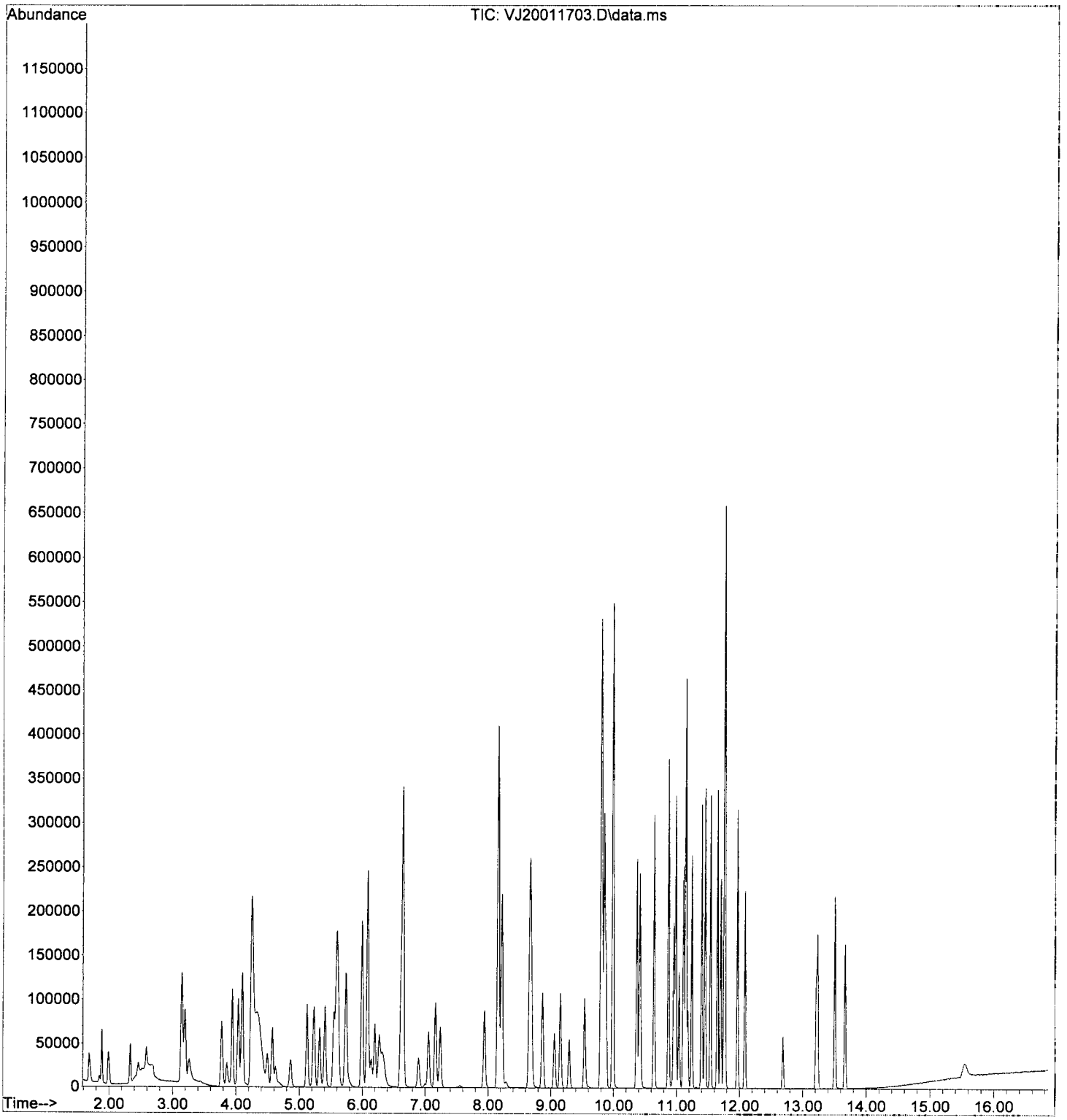
IMA
1/17/20

Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	84.91
74.00	11.60	11.13
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011704.D
Acq On : 17 Jan 2020 10:51 am
Operator : IMA
Sample : 0010530-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 12:02:13 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

IMA
1/17/20

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 (IS)	50.000	50.000	0.0	104	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	47.776	4.4	99	-0.01
3	S	4-Bromofluorobenzene (Sur)	50.000	50.508	-1.0	106	-0.01
4	H	NWTPH-Gx (TPH)	500.000	431.412	13.7	95	0.00
5	H	TPHg (C5-C9)	500.000	408.406	18.3	92	0.00
6	H	TPHg (C6-C10)	500.000	429.533	14.1	93	0.00
7	H	CA-LUFT (C5-C12)	500.000	410.587	17.9	92	0.00
8		Benzene (NR)	-1.000	0.000	0.0	99	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	96	0.00
10		Toluene (NR)	-1.000	0.000	0.0	97	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	100	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	106	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	112	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011704.D
Acq On : 17 Jan 2020 10:51 am
Operator : IMA
Sample : 0010530-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 4 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 12:02:13 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

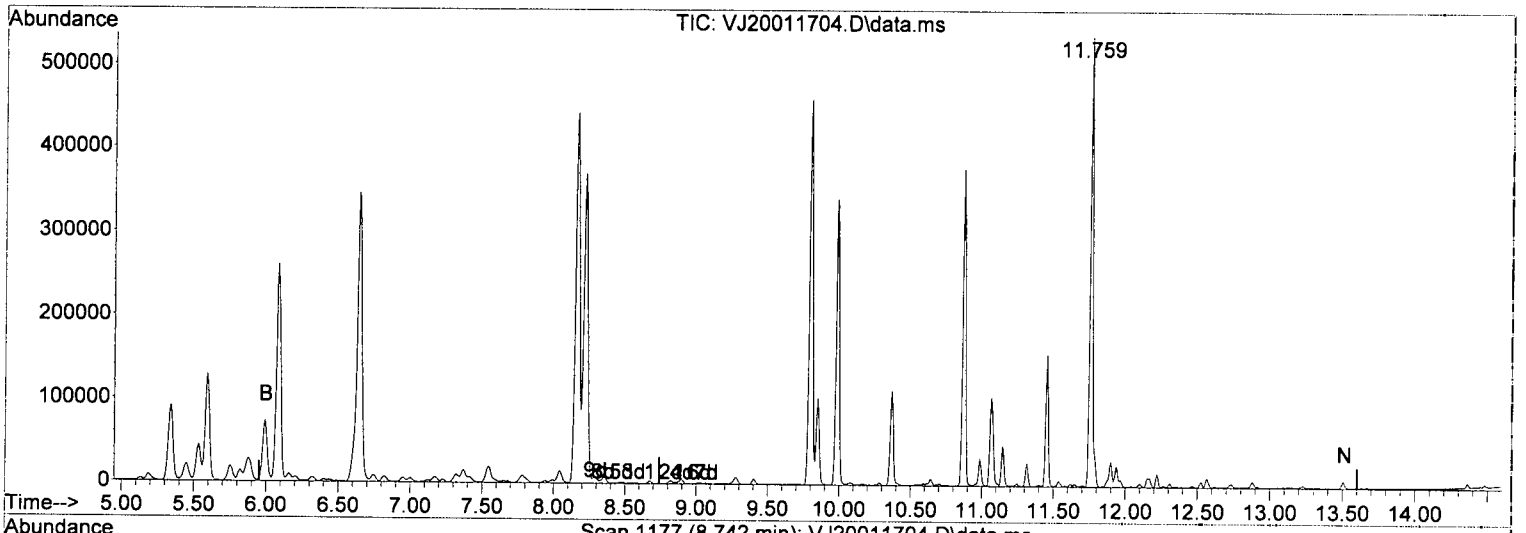
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	200193	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.643	114	308369	47.78	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.871	174	95762	50.51	ug/L	-0.01
9) Toluene-d8 (NR)	8.164	98	343723	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	255334	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	188145	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3122602m	431.41	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4234548m	408.41	ug/L	
6) TPHg (C6-C10)	9.239	TIC	3647439m	429.53	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5000978m	410.59	ug/L	

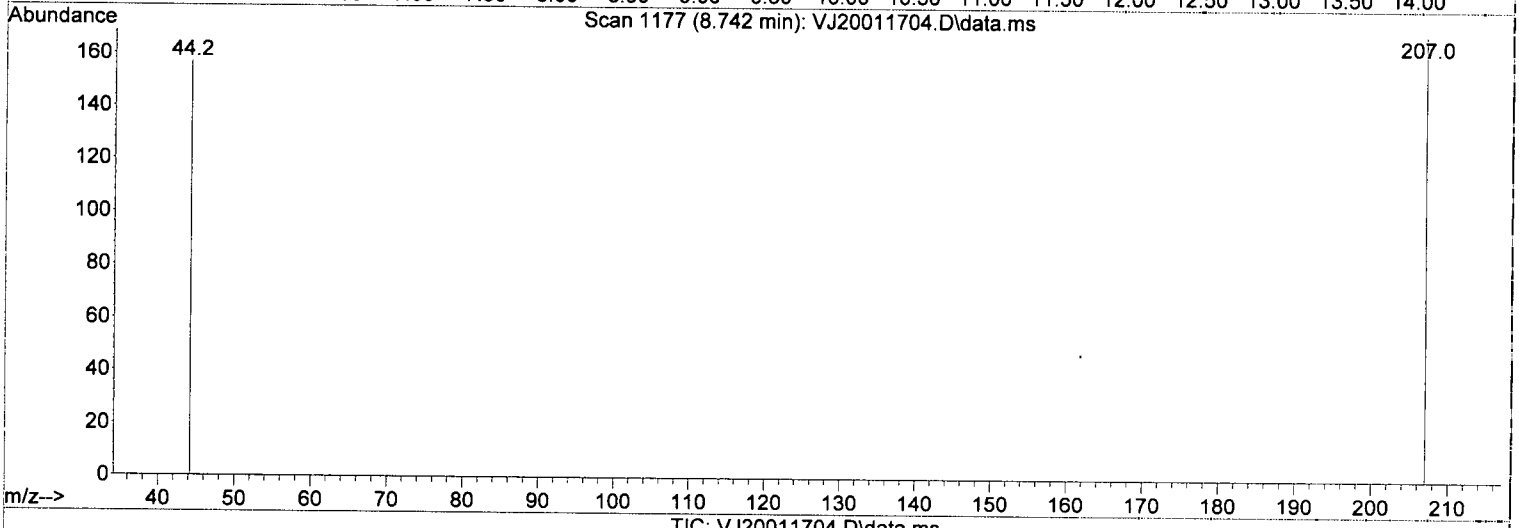
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011704.D
Acq On : 17 Jan 2020 10:51 am
Operator : IMA
Sample : 0010530-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 12:02:13 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011704.D\data.ms

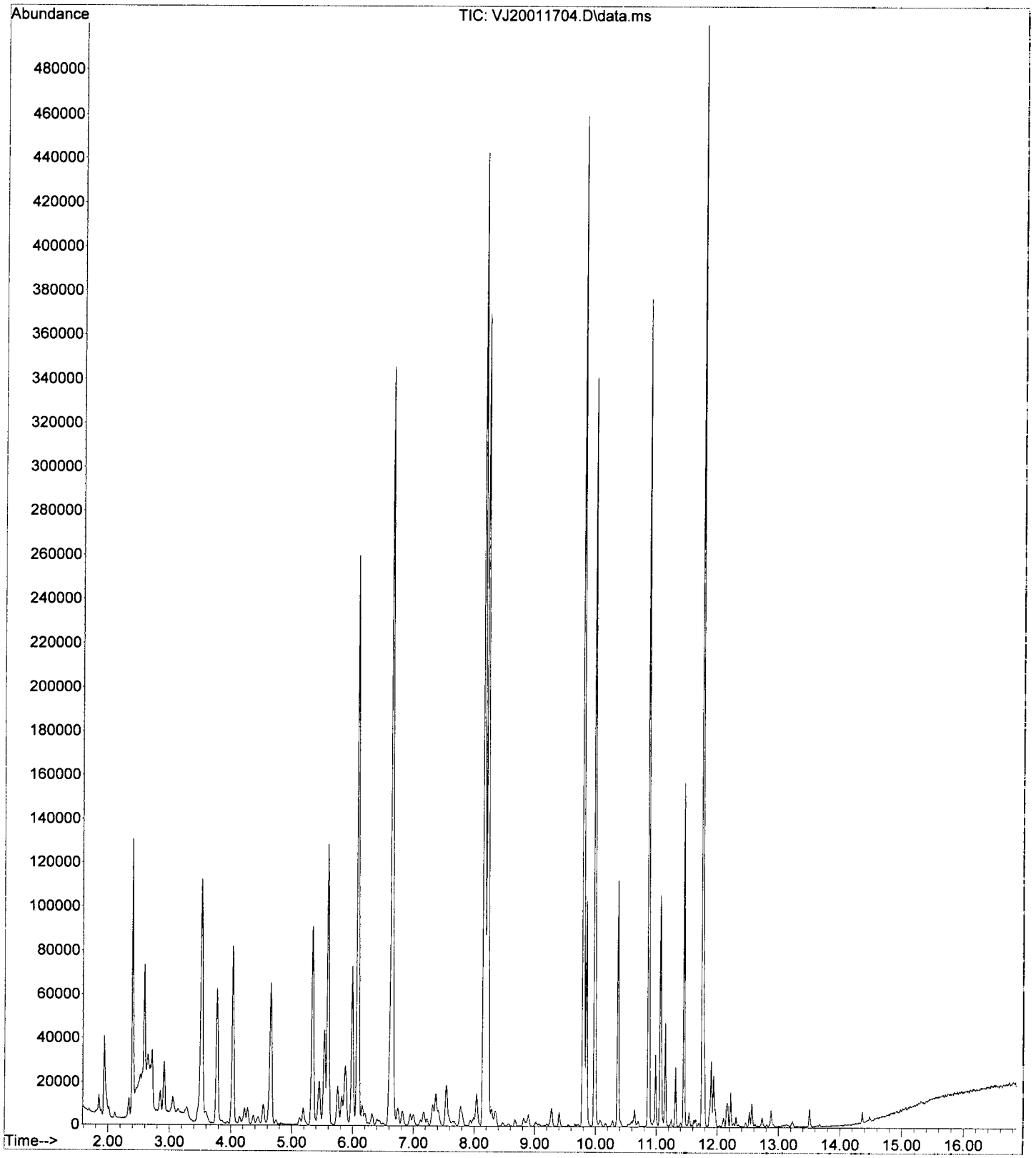
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 431.41 ug/L m

response 3122602

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

File :C:\msdchem\1\data\2020-01\0A17017\VJ20011704.D
Operator : IMA
Acquired : 17 Jan 2020 10:51 am using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010530-BS2
Misc Info : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011705.D
Acq On : 17 Jan 2020 11:18 am
Operator : IMA
Sample : 0010530-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 12:02:37 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	180685	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	281165	48.26	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	85611	50.03	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	318025	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	234186	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	166064	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	78764m	29.77	ug/L	<MDL
5) TPHg (C5-C9)	9.239	TIC	337466m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	321782m	22.99	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	362406m	1.86	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011705.D
Acq On : 17 Jan 2020 11:18 am
Operator : IMA
Sample : 0010530-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 17 12:02:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

IMA
1/17/20

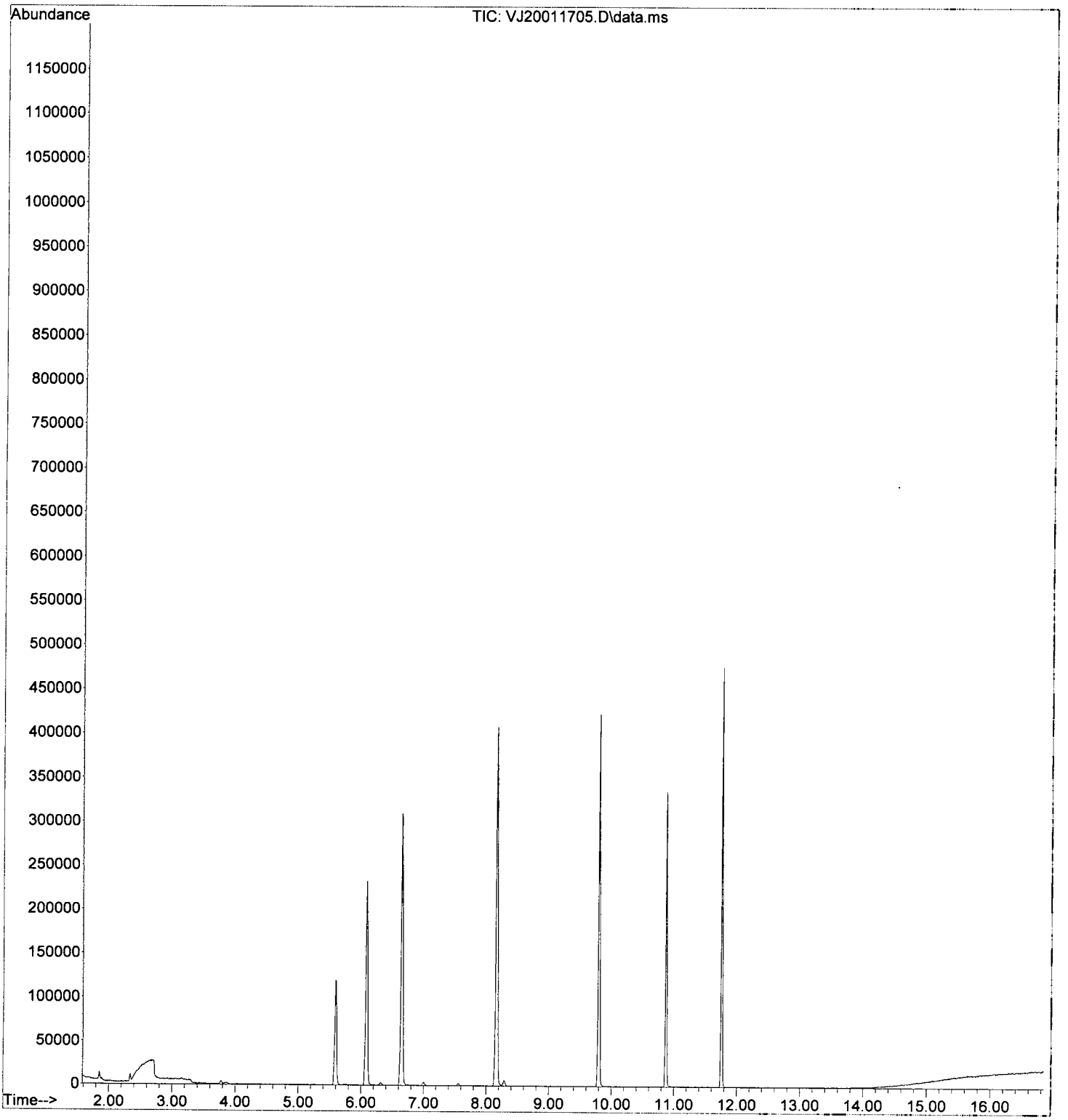
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	94406	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	234186	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	106578	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	80053	52.49	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	281165	51.05	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	317342	48.88	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	85611	52.04	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	1834	0.68	ug/L	<MDL	96
5) Bromomethane	2.342	96	3921	1.03	ug/L		91
6) Chloroethane	2.482	64	175	0.36	ug/L	#	1
8) Ethanol	3.285	45	3060	2.26	ug/L		86
12) Iodomethane	3.291	142	1343	4.08	ug/L		75
13) Methylene Chloride	3.777	84	1632	Below Cal			91
14) Acetone	3.869	43	1397	1.17	ug/L		75
32) 2-Butanone (MEK)	5.736	43	2003	1.07	ug/L		96
36) iso-Butyl Alcohol	6.314	43	1378	6.82	ug/L		82
58) m,p-Xylenes (2)	9.989	91	524	0.08	ug/L		70
84) Naphthalene	13.511	128	144	0.13	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011705.D
Acq On : 17 Jan 2020 11:18 am
Operator : IMA
Sample : 0010530-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 17 12:02:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 15:14:39 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

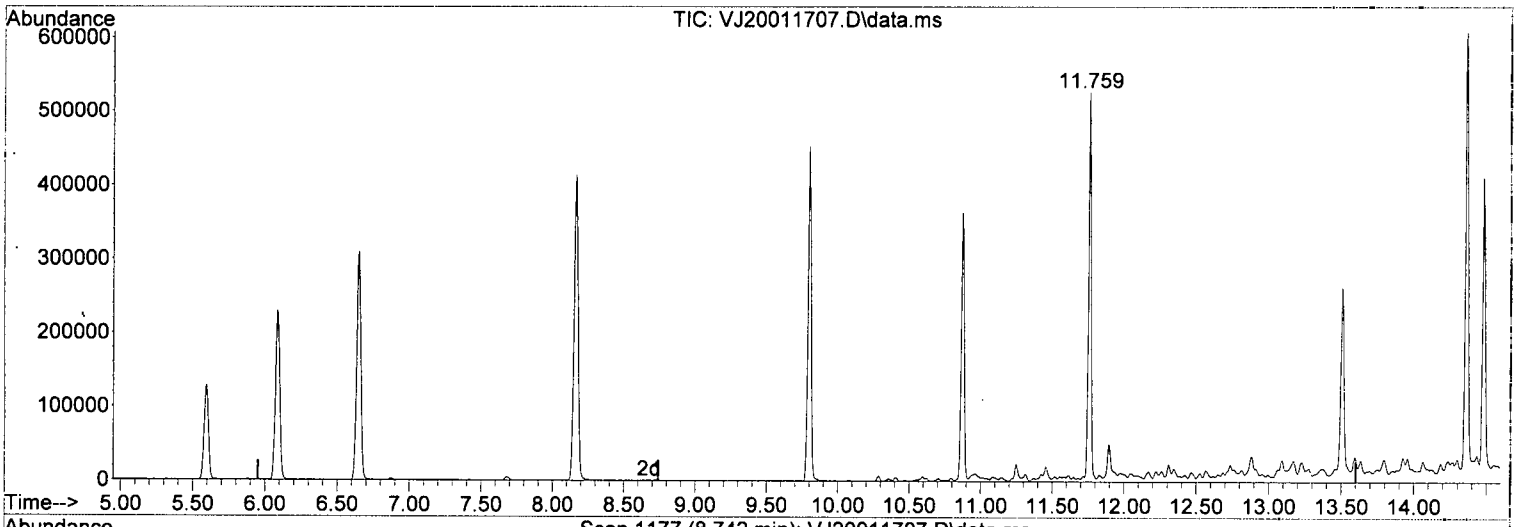
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	178483	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	277749	48.27	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.871	174	93367	55.23	ug/L	-0.01
9) Toluene-d8 (NR)	8.164	98	316485	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	240070	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	183185	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	1237747m	202.16	ug/L	
5) TPHg (C5-C9)	9.239	TIC	367617m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	351156m	27.60	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	845504m	50.49	ug/L	

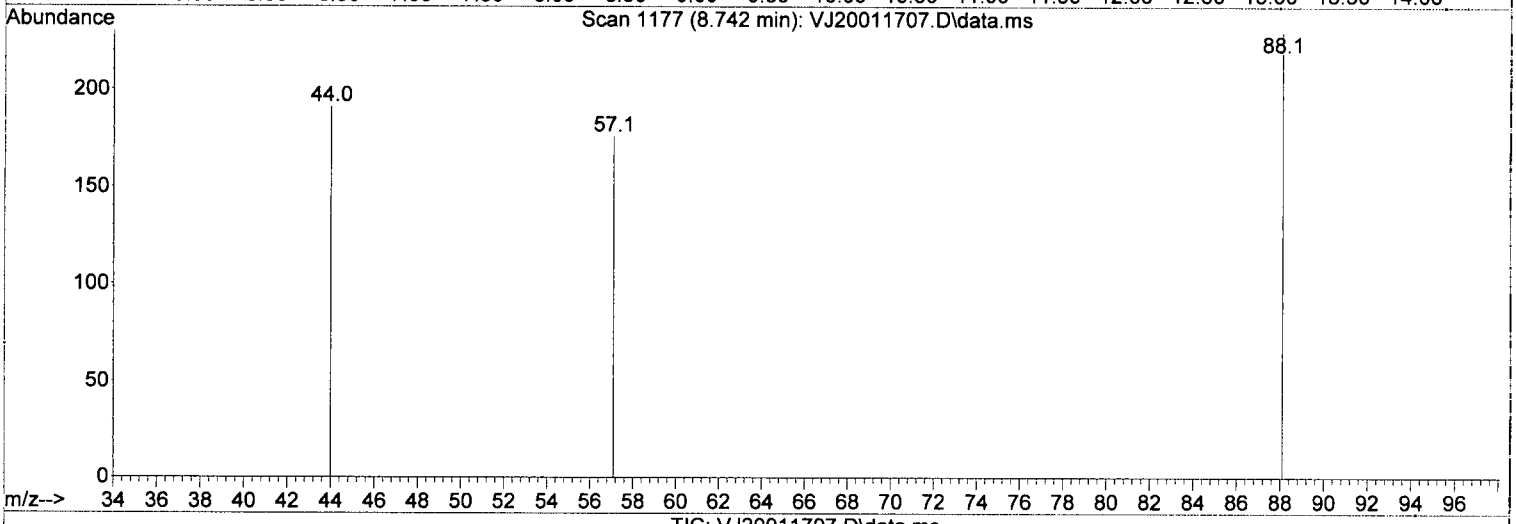
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 15:14:39 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011707.D\data.ms

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

8.739min (0.000) 202.16 ug/L m

response 1237747

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.20#
0.00	0.00	0.78#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 15:14:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

IMA
1/17/20

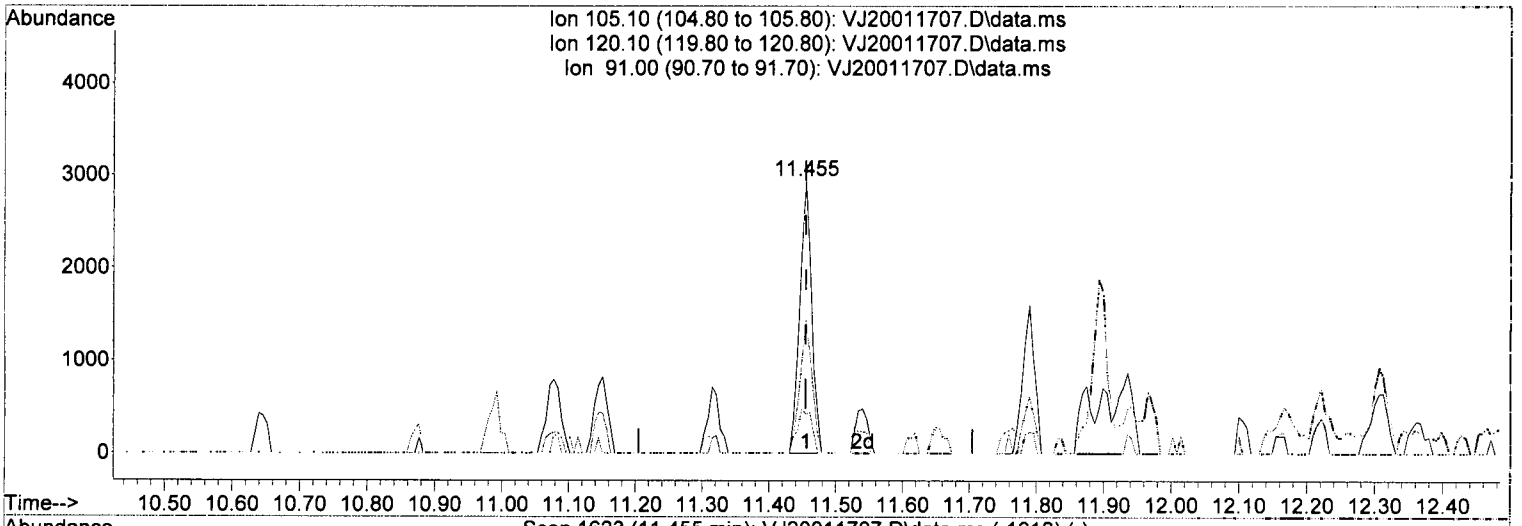
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	92795	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	239801	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	117501	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	85649	57.14	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	276765	51.13	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	316485	47.61	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	93367	51.48	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.891	50	1293	0.49	ug/L	<MDL	93
5) Bromomethane	2.342	96	2640	Below Cal			98
6) Chloroethane	2.451	64	130	0.27	ug/L	#	1
8) Ethanol	3.266	45	694	Below Cal		#	29
12) Iodomethane	3.303	142	745	2.28	ug/L		87
13) Methylene Chloride	3.777	84	1668	Below Cal			91
14) Acetone	3.863	43	2208	1.88	ug/L		93
18) tert-Butanol (TBA)	4.252	59	1022	1.95	ug/L	#	49
36) iso-Butyl Alcohol	6.314	43	134	0.67	ug/L		84
39) tert-Amyl ethyl ether ...	6.880	59	348	0.09	ug/L	#	53
47) Tetrachloroethene (PCE)	8.681	166	387	0.18	ug/L	#	66
56) Ethylbenzene	9.855	91	1287	0.14	ug/L		90
60) Styrene	10.415	104	233	0.26	ug/L		55
67) 1,1,2,2-Tetrachloroethane	11.047	83	1168	0.45	ug/L	#	24
69) 1,3,5-Trimethylbenzene	11.151	105	1113	0.16	ug/L		94
73) tert-Butylbenzene	11.449	91	732	0.19	ug/L	#	35
74) 1,2,4-Trimethylbenzene	11.455	105	3639	0.53	ug/L		97
76) 4-Isopropyltoluene	11.650	119	1373	0.20	ug/L	<MDL	90
79) n-Butylbenzene	11.966	91	715	0.11	ug/L		88
84) Naphthalene	13.505	128	183246	21.55	ug/L		98

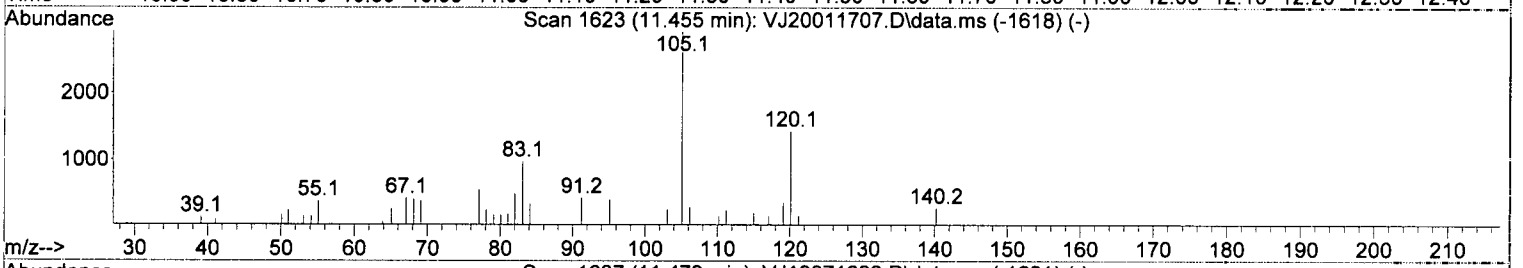
(#) = qualifier out of range (m) = manual integration (+) = signals summed

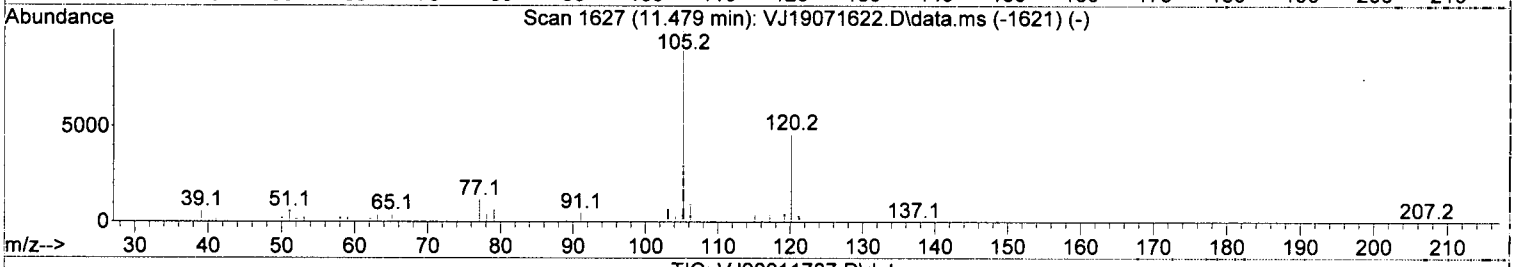
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 15:14:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011707.D\data.ms

(74) 1,2,4-Trimethylbenzene

11.455min (+ 0.001) 0.53 ug/L

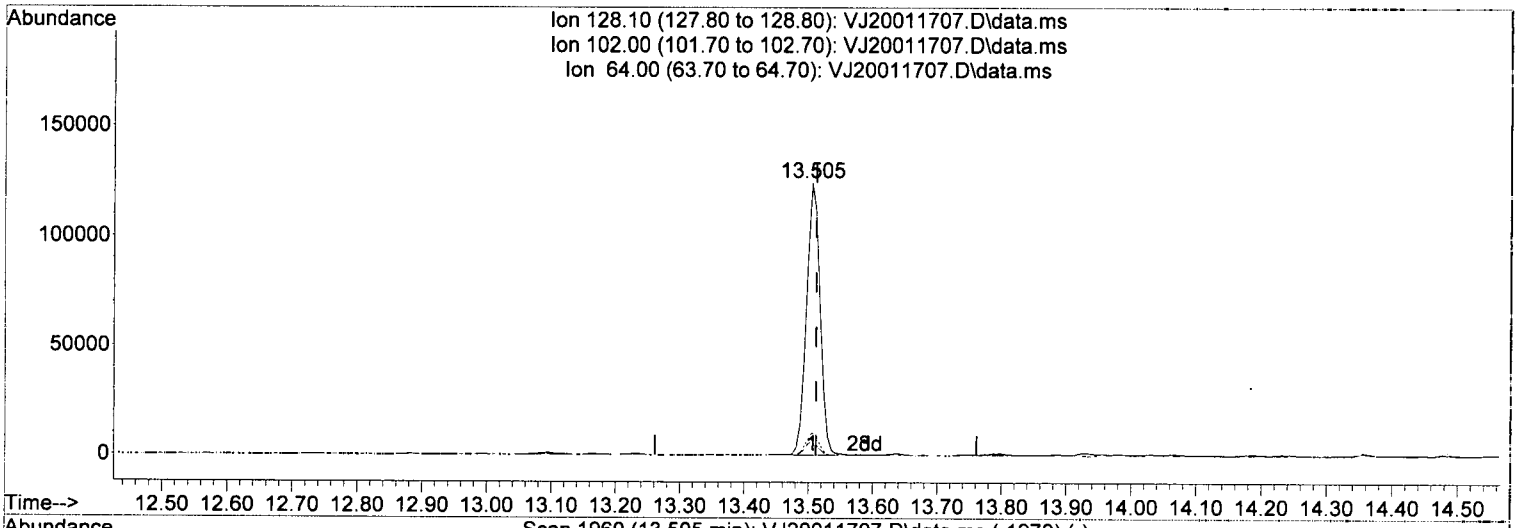
response 3639

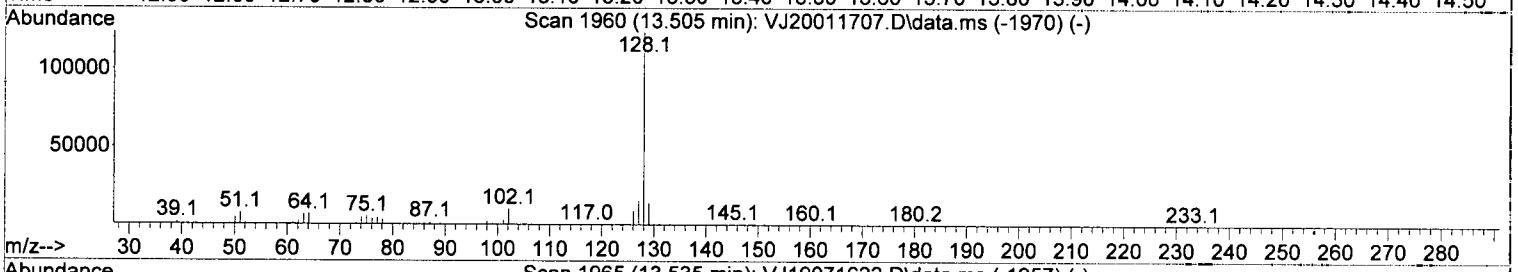
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	48.60	48.98
91.00	9.80	14.57
0.00	0.00	0.00

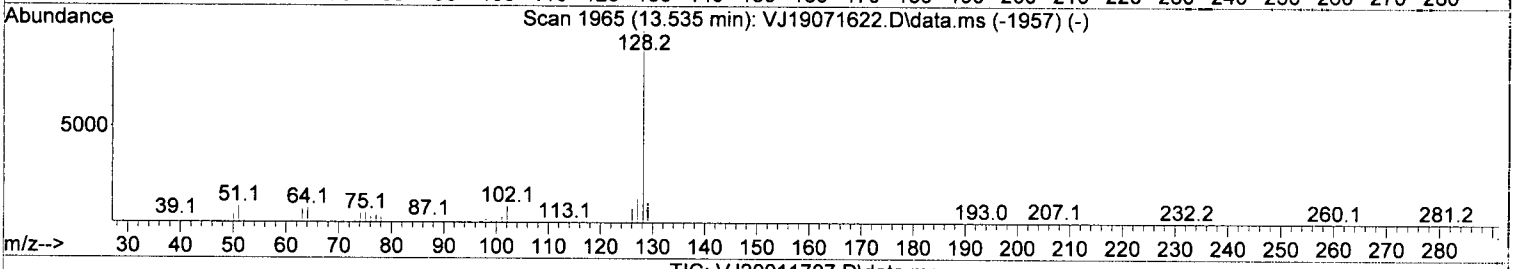
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 15:14:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011707.D\data.ms

(84) Naphthalene

13.505min (-0.006) 21.55 ug/L

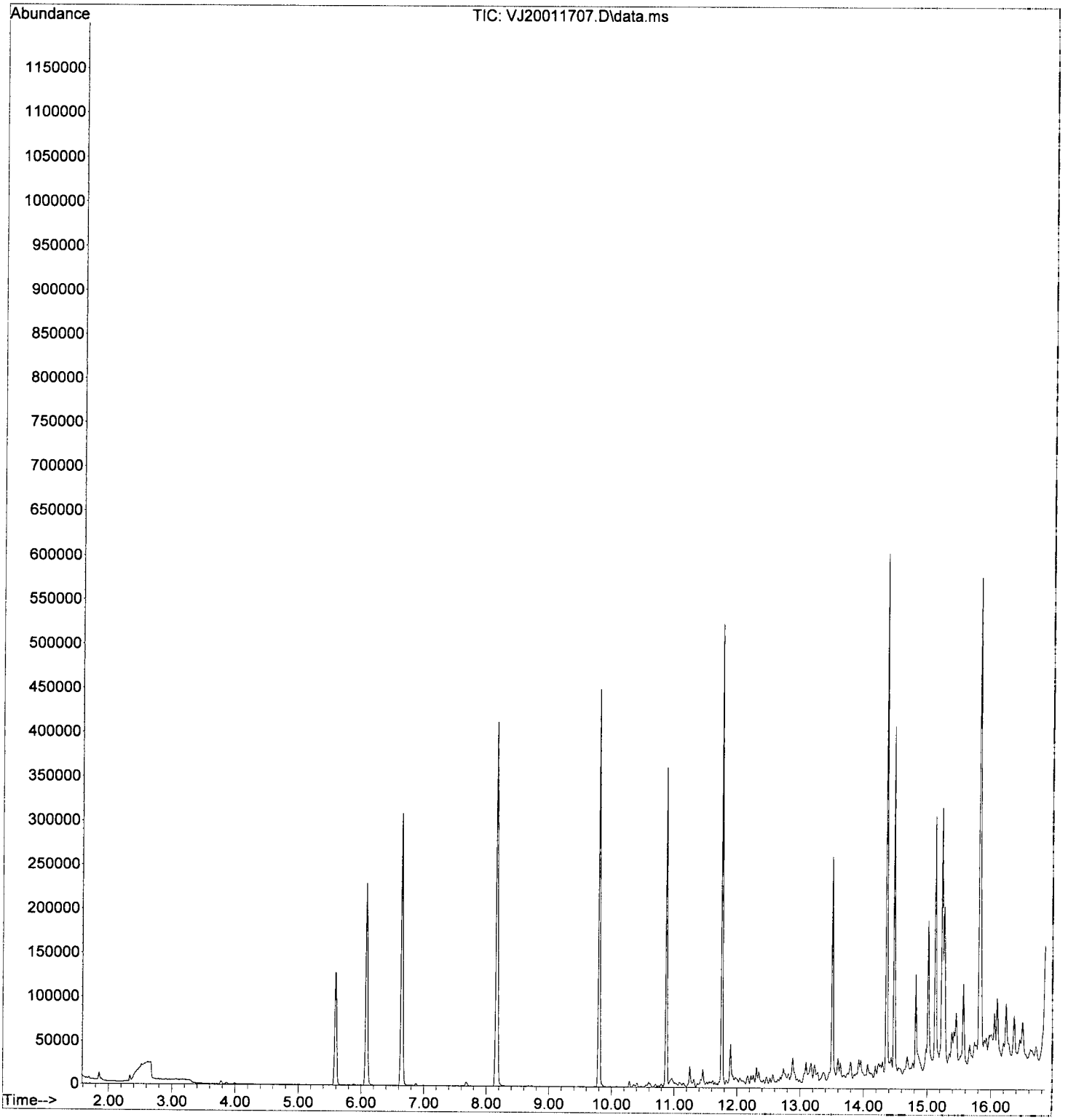
response 183246

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	8.16
64.00	6.30	5.35
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 15:14:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 15:15:05 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

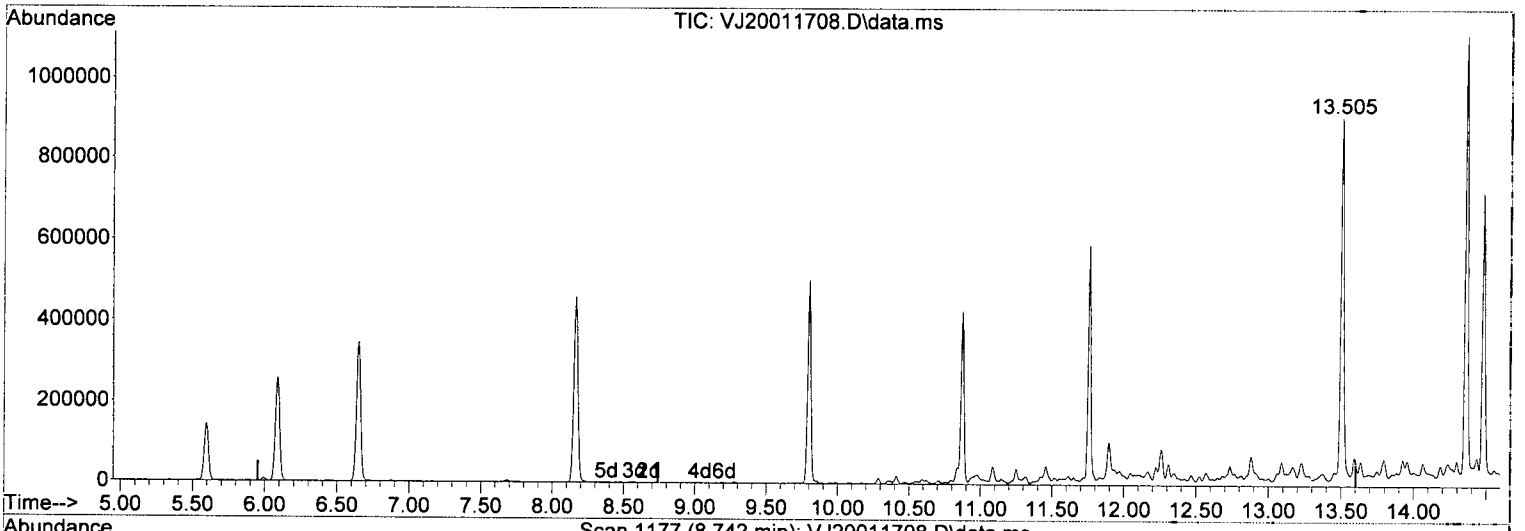
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	203825	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	318788	48.51	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	109791	56.88	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	355948	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	274951	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	211251	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3350897m	453.66	ug/L	
5) TPHg (C5-C9)	9.239	TIC	590870m	15.40	ug/L	
6) TPHg (C6-C10)	9.239	TIC	564891m	47.48	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	1807230m	123.98	ug/L	

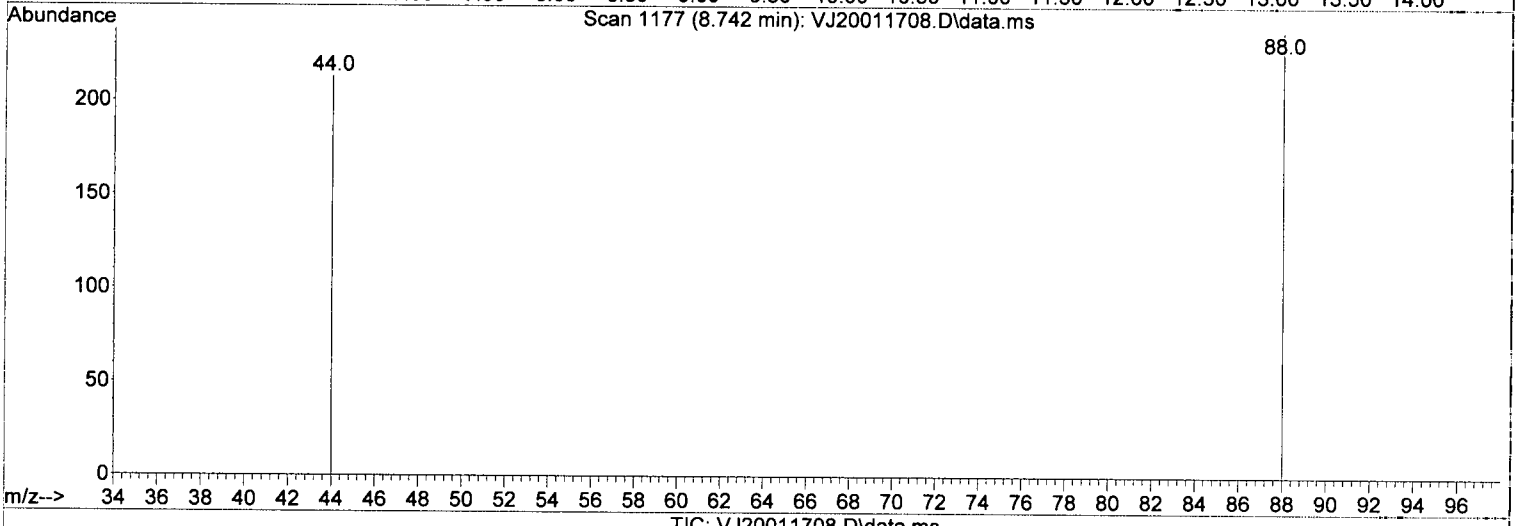
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:05 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011708.D\data.ms

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

8.739min (0.000) 453.66 ug/L m

response 3350897

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.60#
0.00	0.00	0.99#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

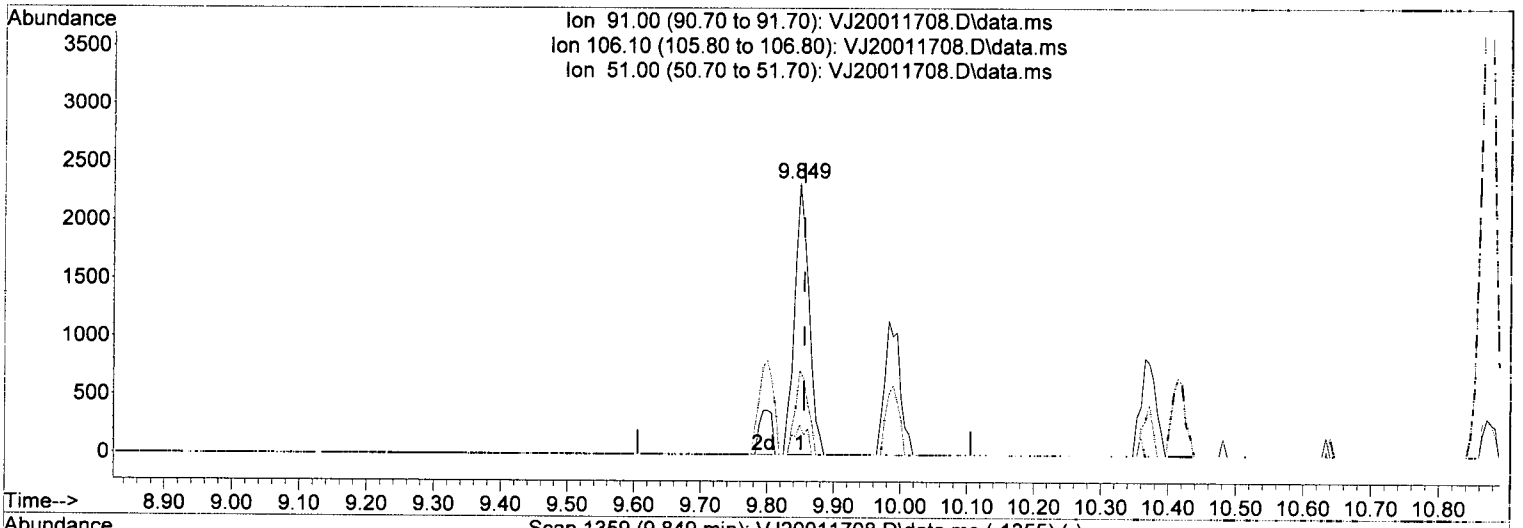
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	104610	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	274951	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	134877	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	94313	55.81	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	318236	52.15	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	355240	46.61	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	109791	52.73	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	1018	0.34	ug/L	<MDL	93
5) Bromomethane	2.342	96	2383	Below Cal			94
6) Chloroethane	2.470	64	56	0.10	ug/L	#	1
8) Ethanol	3.260	45	220	Below Cal		#	29
10) Carbon Disulfide	3.163	76	503	0.11	ug/L	#	33
12) Iodomethane	3.297	142	699	1.89	ug/L	#	47
13) Methylene Chloride	3.777	84	2047	Below Cal			96
14) Acetone	3.869	43	4695	3.55	ug/L		99
18) tert-Butanol (TBA)	4.246	59	3045	5.14	ug/L	#	94
33) Benzene	5.998	78	898	0.09	ug/L		56
36) iso-Butyl Alcohol	6.314	43	145	0.65	ug/L		73
46) Toluene	8.225	91	1532	0.14	ug/L		92
47) Tetrachloroethene (PCE)	8.669	166	408	0.16	ug/L	#	71
56) Ethylbenzene	9.849	91	3498	0.32	ug/L		98 ↑MDL=RL
58) m,p-Xylenes (2)	9.983	91	1849	0.24	ug/L	<MDL	87
59) o-Xylene	10.366	91	1311	0.18	ug/L		79
60) Styrene	10.415	104	4905	1.04	ug/L		96
62) Isopropylbenzene	10.646	105	1341	0.14	ug/L	<MDL	90
66) n-Propylbenzene	10.987	91	2754	0.23	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.047	83	1142	0.38	ug/L	#	24
69) 1,3,5-Trimethylbenzene	11.145	105	2285	0.29	ug/L		91
74) 1,2,4-Trimethylbenzene	11.455	105	9604	1.22	ug/L		96
75) sec-Butylbenzene	11.540	105	1051	0.11	ug/L	<MDL	61
76) 4-Isopropyltoluene	11.650	119	2952	0.38	ug/L		88
79) n-Butylbenzene	11.966	91	1367	0.19	ug/L		85
83) 1,2,4-Trichlorobenzene	13.244	180	296	0.12	ug/L	#	1
84) Naphthalene	13.505	128	647459	64.36	ug/L		98
85) 1,2,3-Trichlorobenzene	13.657	180	422	0.16	ug/L	#<MDL	12

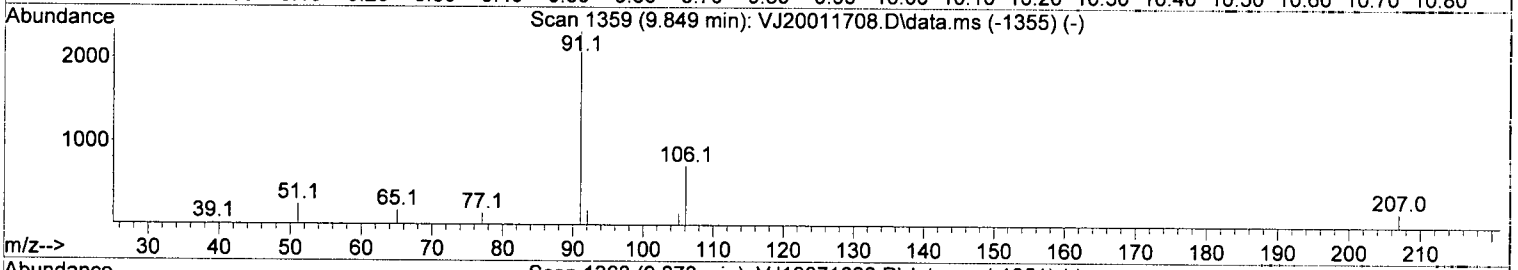
(#) = qualifier out of range (m) = manual integration (+) = signals summed

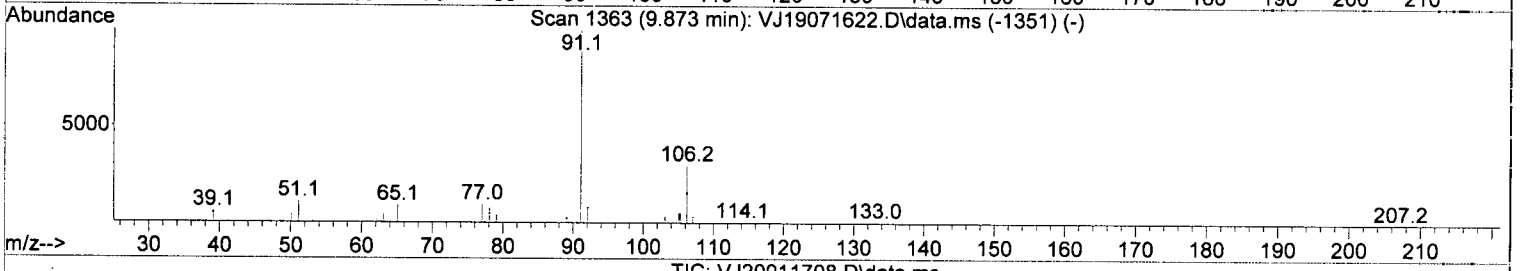
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011708.D\data.ms

(56) Ethylbenzene (C)

9.849min (-0.006) 0.32 ug/L

response 3498

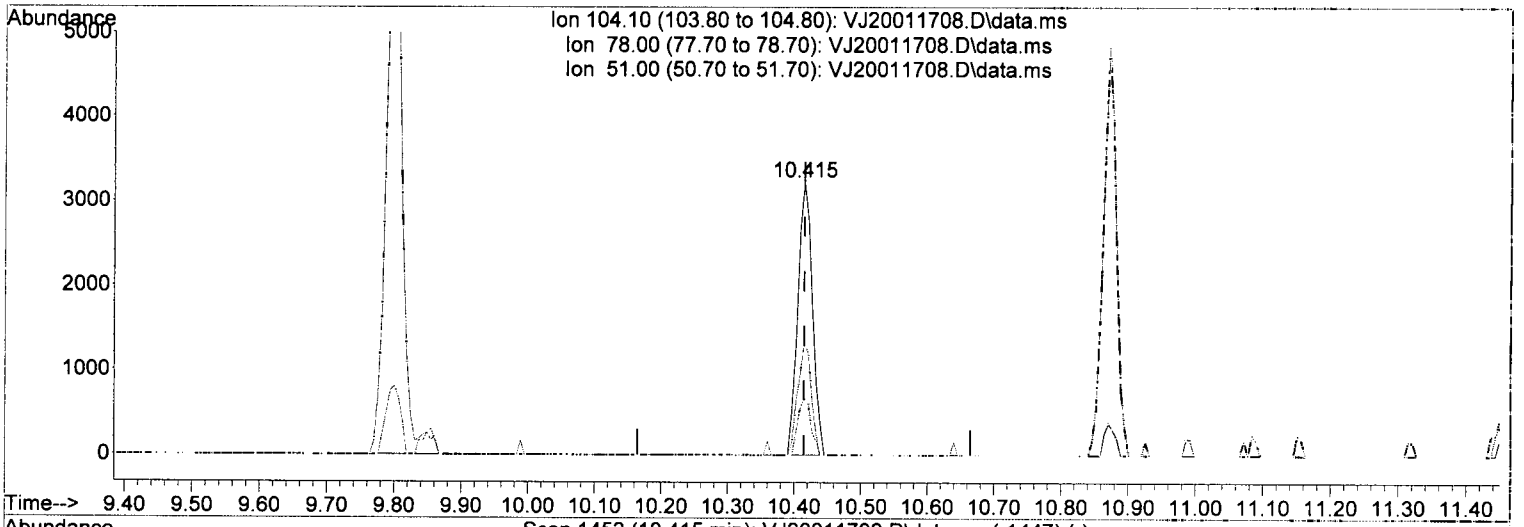
↑MDL=RL

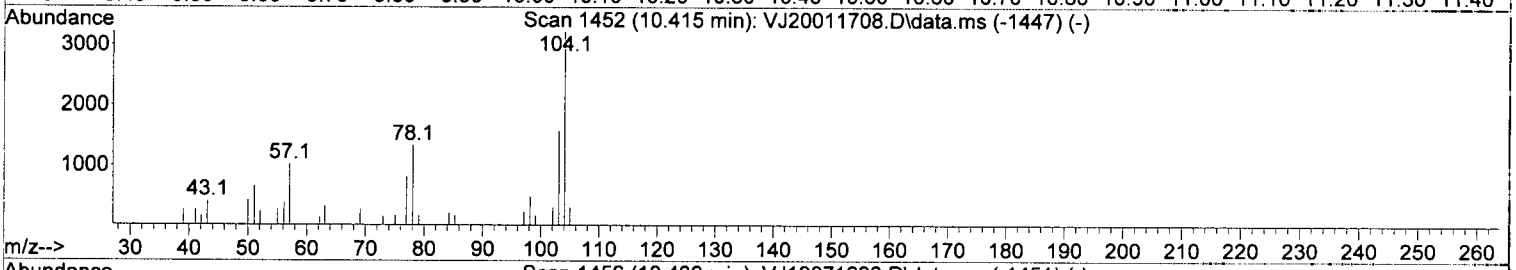
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	31.80	31.00
51.00	9.80	11.08
0.00	0.00	0.00

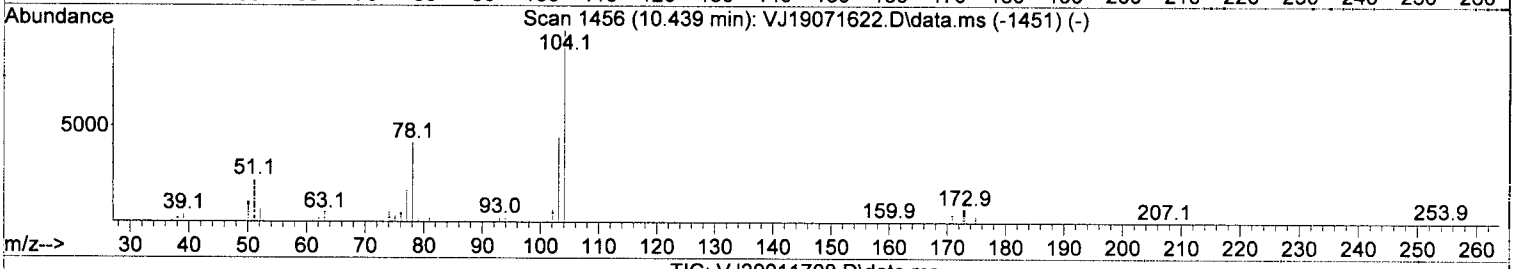
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011708.D\data.ms

(60) Styrene

10.415min (+ 0.001) 1.04 ug/L

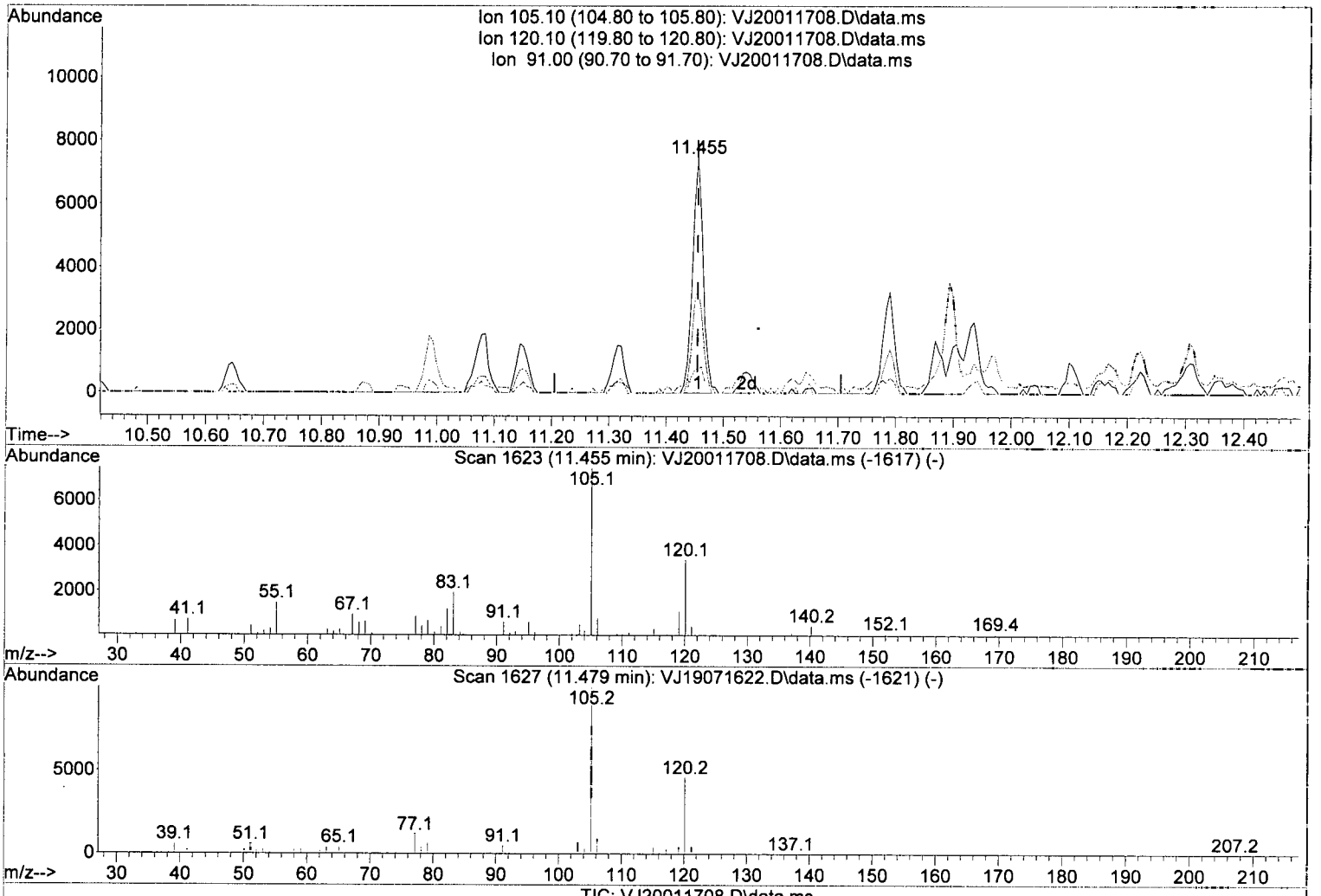
response 4905

Ion	Exp%	Act%
104.10	100.00	100.00
78.00	42.20	41.40
51.00	24.70	20.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20011708.D\data.ms

(74) 1,2,4-Trimethylbenzene

11.455min (+ 0.001) 1.22 ug/L

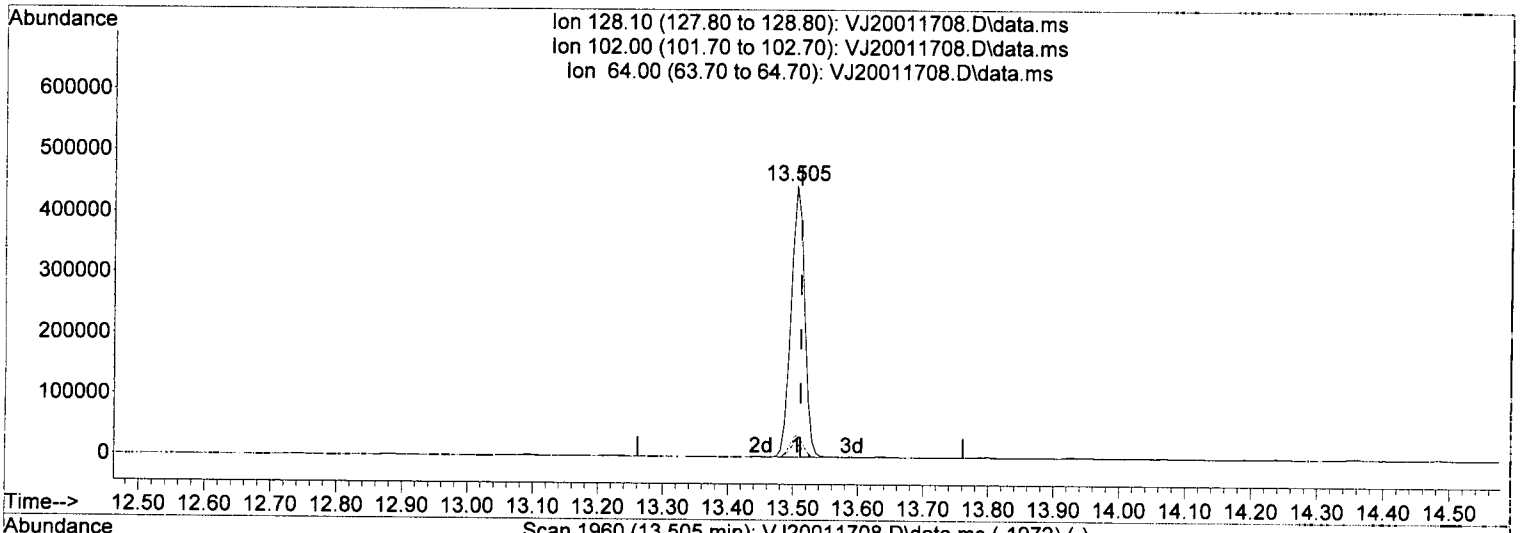
response 9604

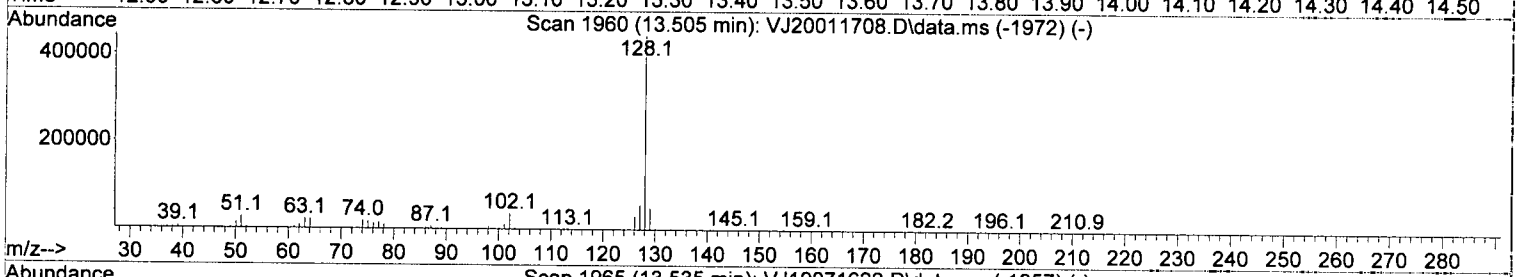
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	48.60	45.66
91.00	9.80	10.99
0.00	0.00	0.00

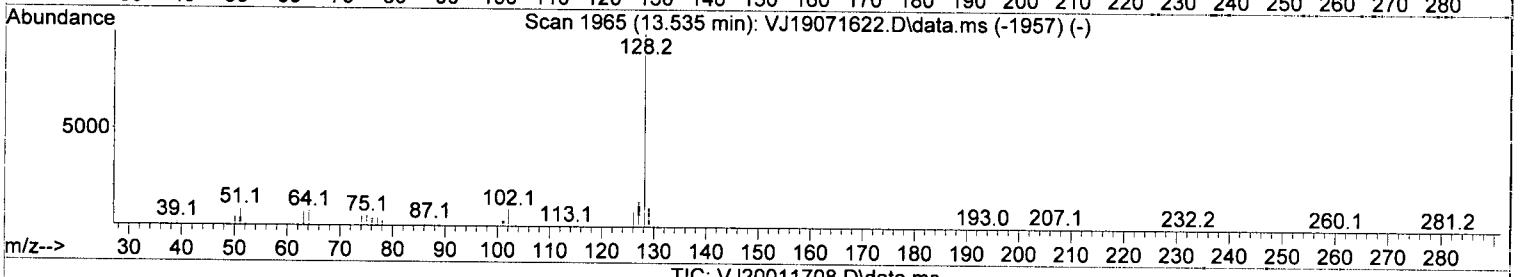
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011708.D\data.ms

(84) Naphthalene

13.505min (-0.006) 64.36 ug/L

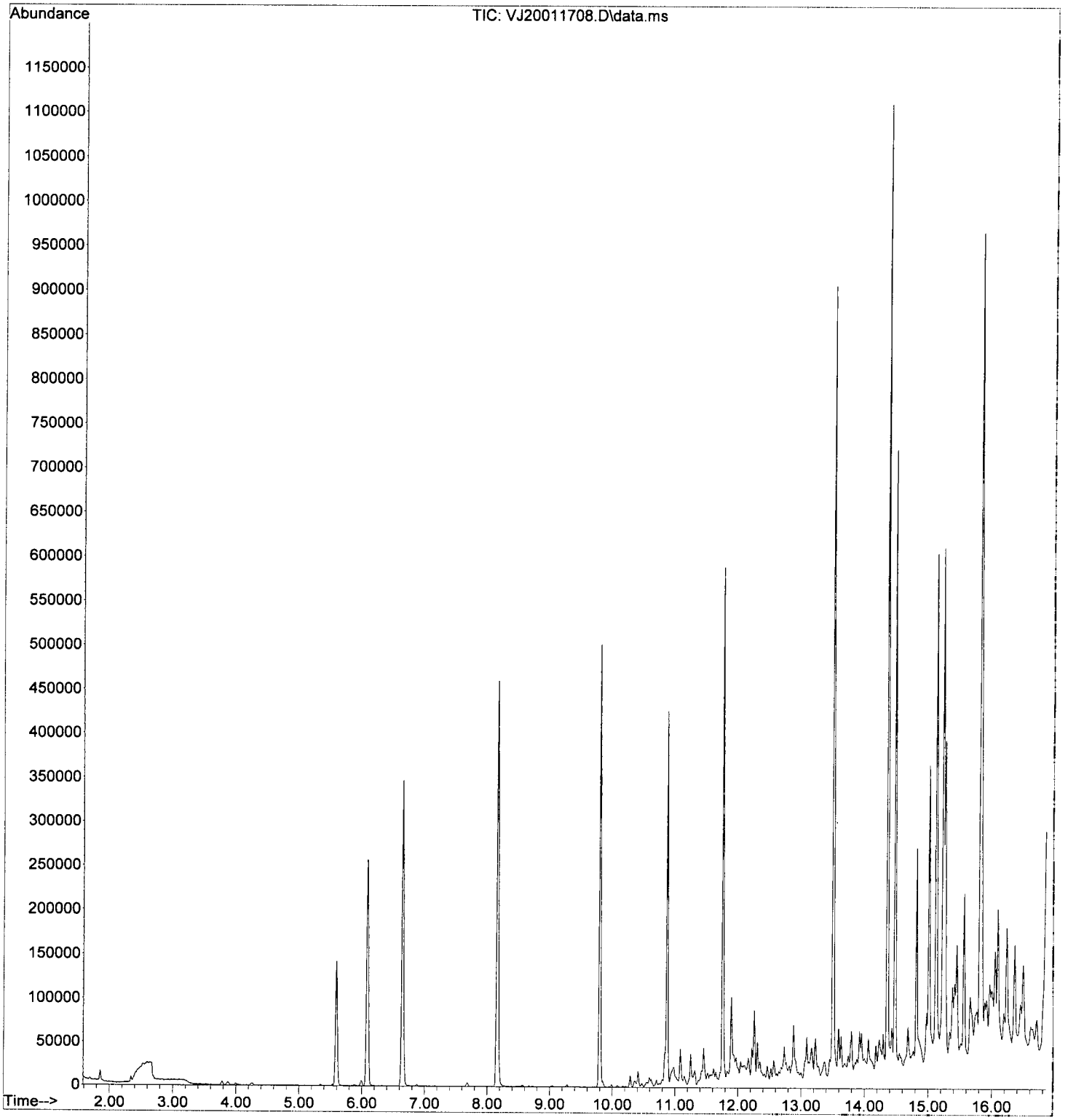
response 647459

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	8.15
64.00	6.30	5.05
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 17 15:25:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

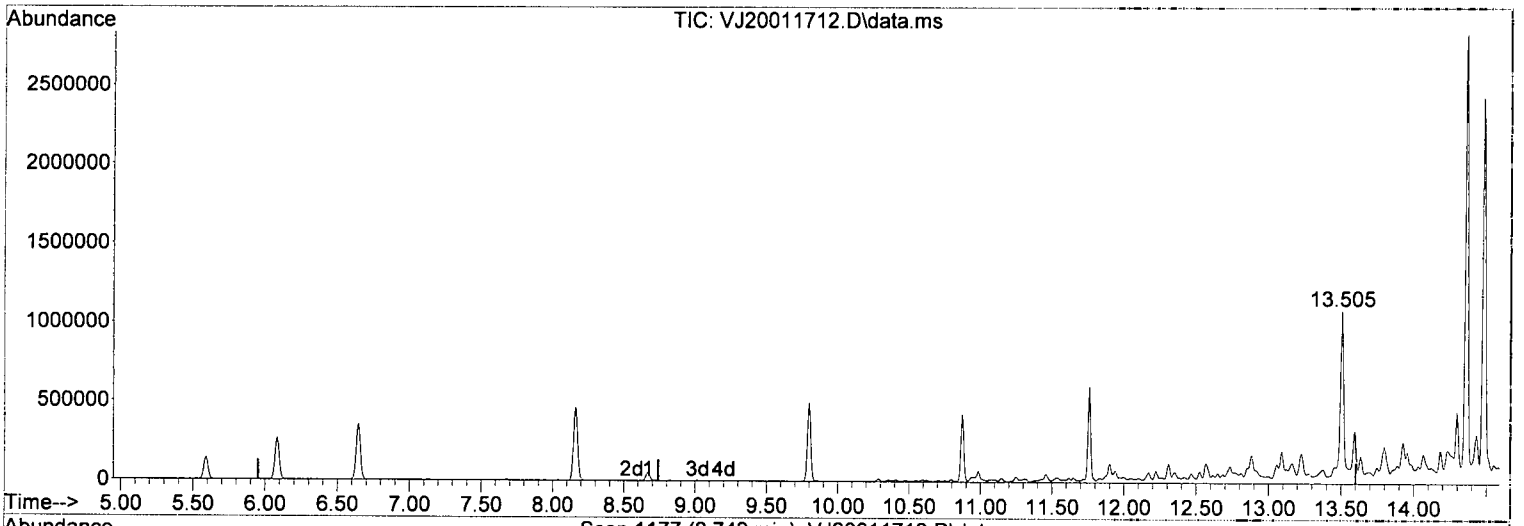
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	208609	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.643	114	327172	48.64	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.871	174	111804	56.59	ug/L	-0.01
9) Toluene-d8 (NR)	8.164	98	367785	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	283382	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	217986	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	5214952m	679.46	ug/L	
5) TPHg (C5-C9)	9.239	TIC	690733m	24.27	ug/L	
6) TPHg (C6-C10)	9.239	TIC	669073m	58.26	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	2396864m	170.66	ug/L	

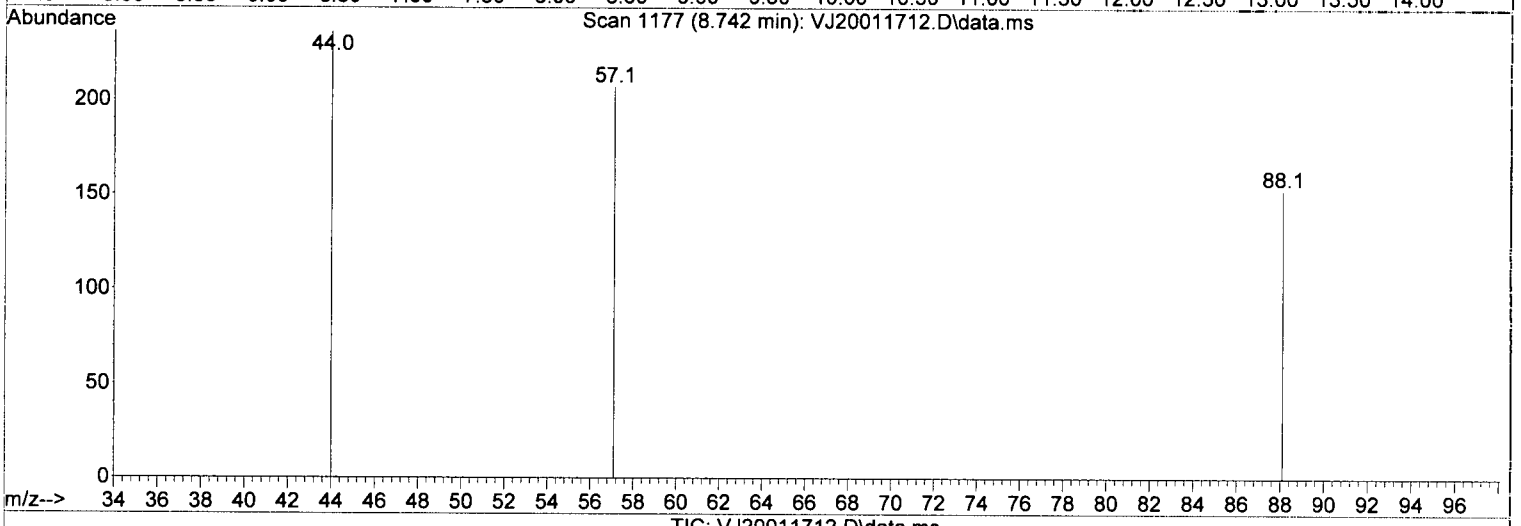
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:25:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011712.D\data.ms

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

8.739min (0.000) 679.46 ug/L m

response 5214952

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.13#
0.00	0.00	0.72#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

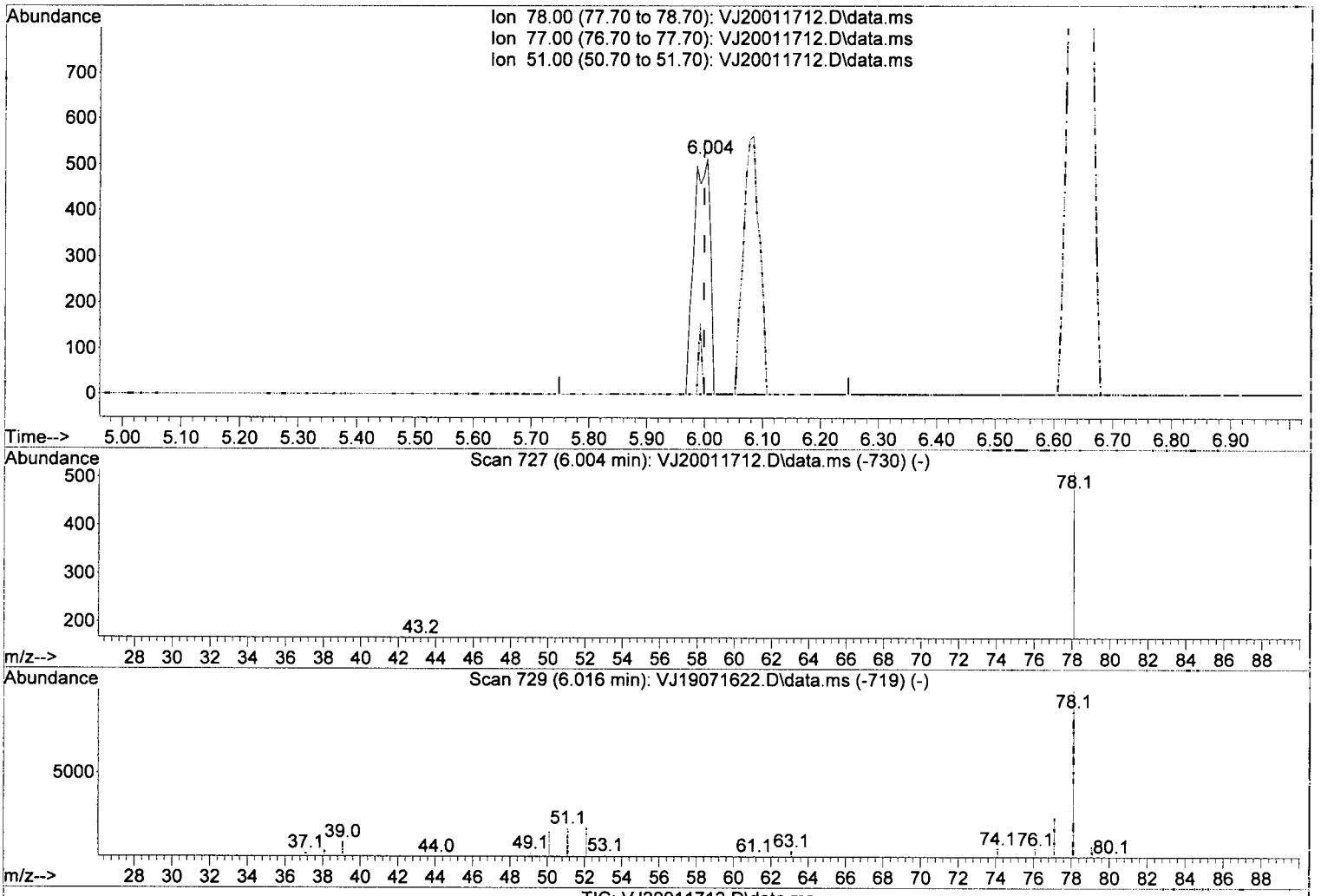
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	104693	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	283382	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	138740	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	95643	56.55	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	326684	53.49	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	367785	46.82	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	111804	52.20	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.885	50	1783	0.59	ug/L	<MDL	91
5) Bromomethane	2.329	96	3447	0.19	ug/L		93
6) Chloroethane	2.457	64	57	0.10	ug/L	#	26
8) Ethanol	3.266	45	175	Below Cal		#	29
10) Carbon Disulfide	3.145	76	566	0.12	ug/L	#	26
12) Iodomethane	3.291	142	1084	2.96	ug/L		80
13) Methylene Chloride	3.765	84	2061	Below Cal			91
14) Acetone	3.863	43	3086	2.33	ug/L		100
18) tert-Butanol (TBA)	4.264	59	1547	2.61	ug/L	#	80
23) c-1,2-Dichloroethene	5.116	61	303	0.10	ug/L	#	65
33) Benzene	6.004	78	998	0.10	ug/L		56
36) iso-Butyl Alcohol	6.314	43	204	0.91	ug/L	<MDL	74
38) Trichloroethene (TCE)	6.618	130	2354	1.04	ug/L		88
39) tert-Amyl ethyl ether ...	6.874	59	380	0.09	ug/L	#<MDL	49
47) Tetrachloroethene (PCE)	8.669	166	19338	7.51	ug/L		97
48) 4-Methyl-2-Pentanone (...	8.675	43	430	0.13	ug/L	#<MDL	43
56) Ethylbenzene	9.849	91	2163	0.19	ug/L		90
58) m,p-Xylenes (2)	9.989	91	826	0.10	ug/L		92
59) o-Xylene	10.372	91	639	0.09	ug/L	#	35
60) Styrene	10.421	104	932	0.37	ug/L		68
62) Isopropylbenzene	10.646	105	1153	0.12	ug/L		78
66) n-Propylbenzene	10.993	91	1860	0.15	ug/L		92
67) 1,1,2,2-Tetrachloroethane	~~11.041~~	~~83~~	~~2629~~	~~0.86 ug/L~~		~~#~~	~~24~~ QDEL
69) 1,3,5-Trimethylbenzene	11.151	105	6388	0.78	ug/L		94
72) 4-Chlorotoluene	11.248	91	598	0.09	ug/L	#<MDL	46
73) tert-Butylbenzene	11.406	91	955	0.21	ug/L	#	44
74) 1,2,4-Trimethylbenzene	11.455	105	7194	0.89	ug/L		93
75) sec-Butylbenzene	11.540	105	10176	1.04	ug/L		98
76) 4-Isopropyltoluene	11.650	119	8575	1.07	ug/L		93 (MQ1)
79) n-Butylbenzene	11.966	91	1989	0.27	ug/L	<MDL	89
83) 1,2,4-Trichlorobenzene	13.237	180	449	0.17	ug/L	#	1
84) Naphthalene	13.505	128	729717	70.25	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	627	0.23	ug/L	#<MDL	38

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20011712.D\data.ms

(33) Benzene

6.004min (+ 0.006) 0.10 ug/L

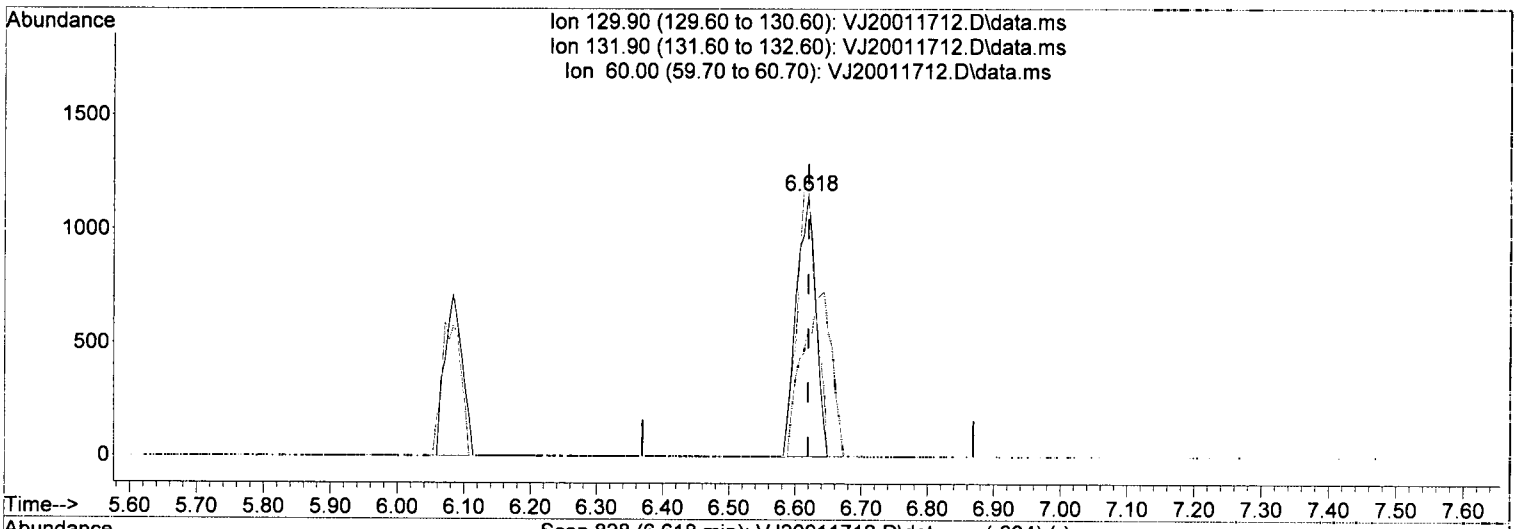
response 998

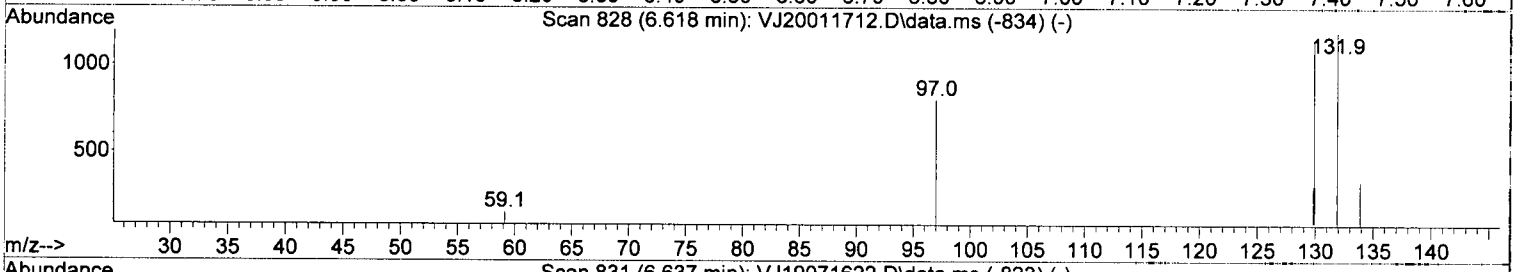
Ion	Exp%	Act%
78.00	100.00	100.00
77.00	23.60	0.00
51.00	16.20	0.00
0.00	0.00	0.00

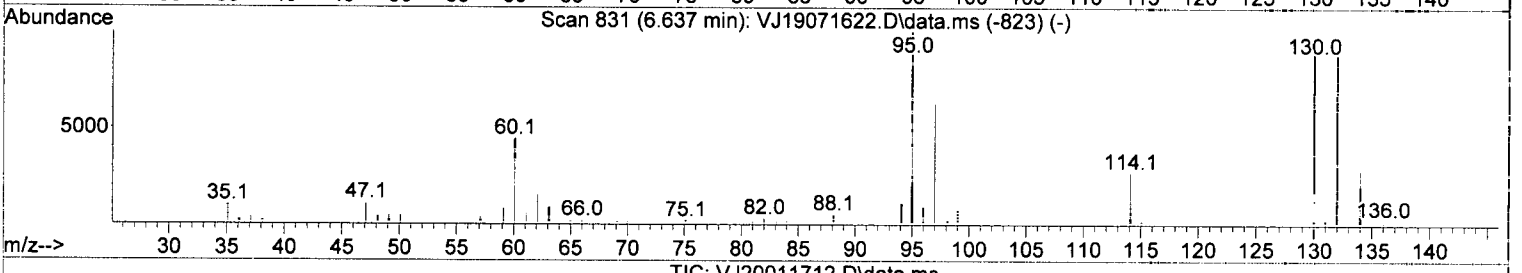
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(38) Trichloroethene (TCE)

6.618min (-0.000) 1.04 ug/L

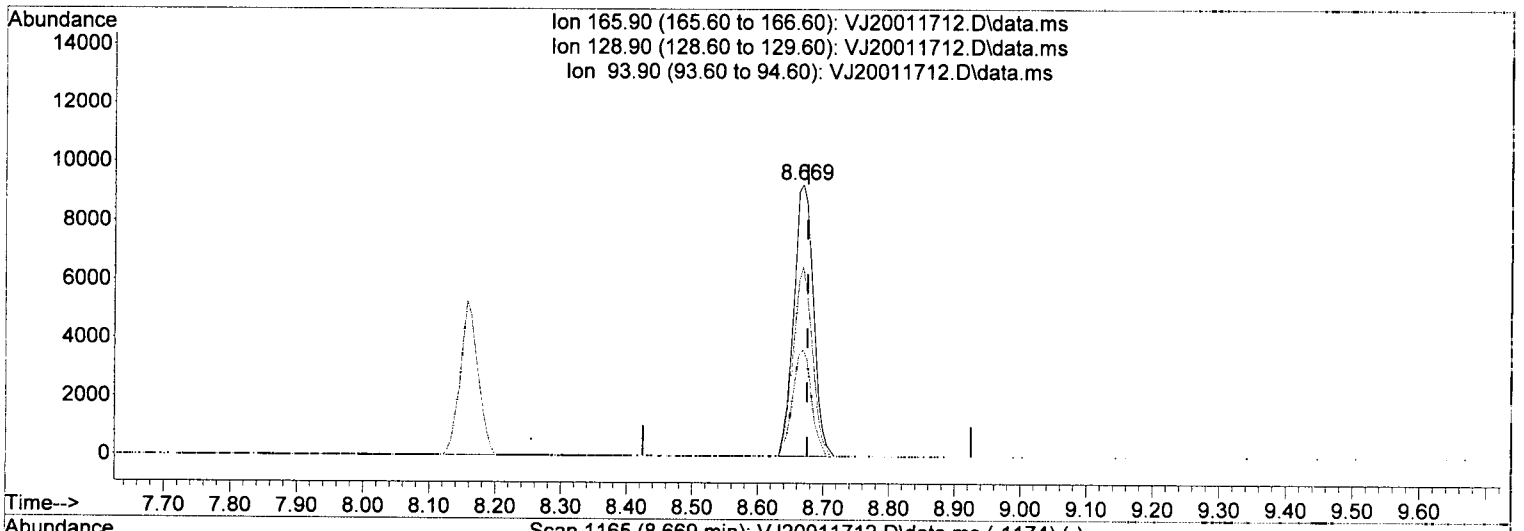
response 2354

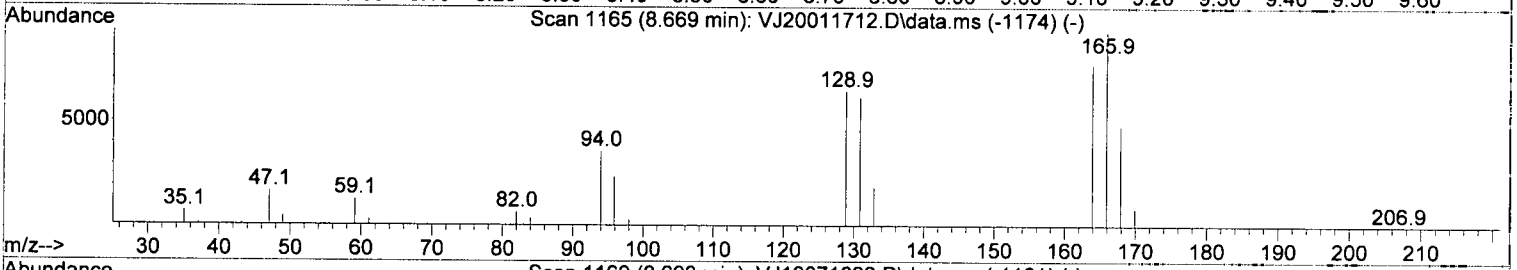
Ion	Exp%	Act%
129.90	100.00	100.00
131.90	94.60	104.08
60.00	38.70	49.52
0.00	0.00	0.00

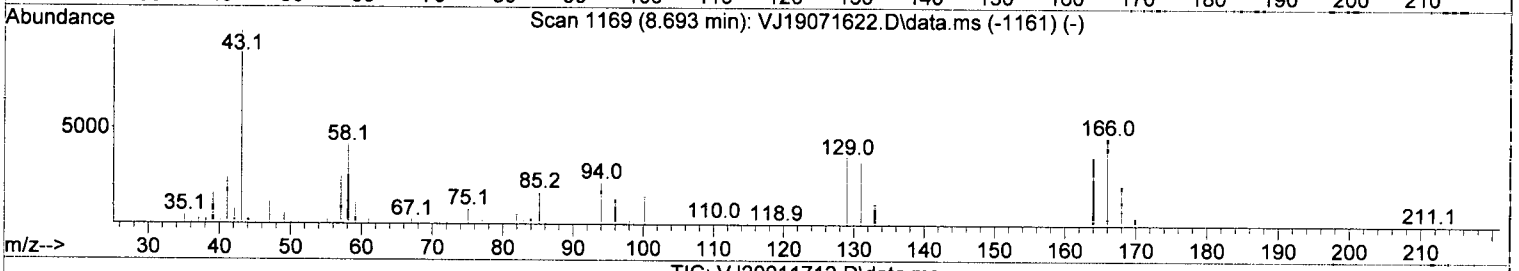
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(47) Tetrachloroethene (PCE)

8.669min (-0.006) 7.51 ug/L

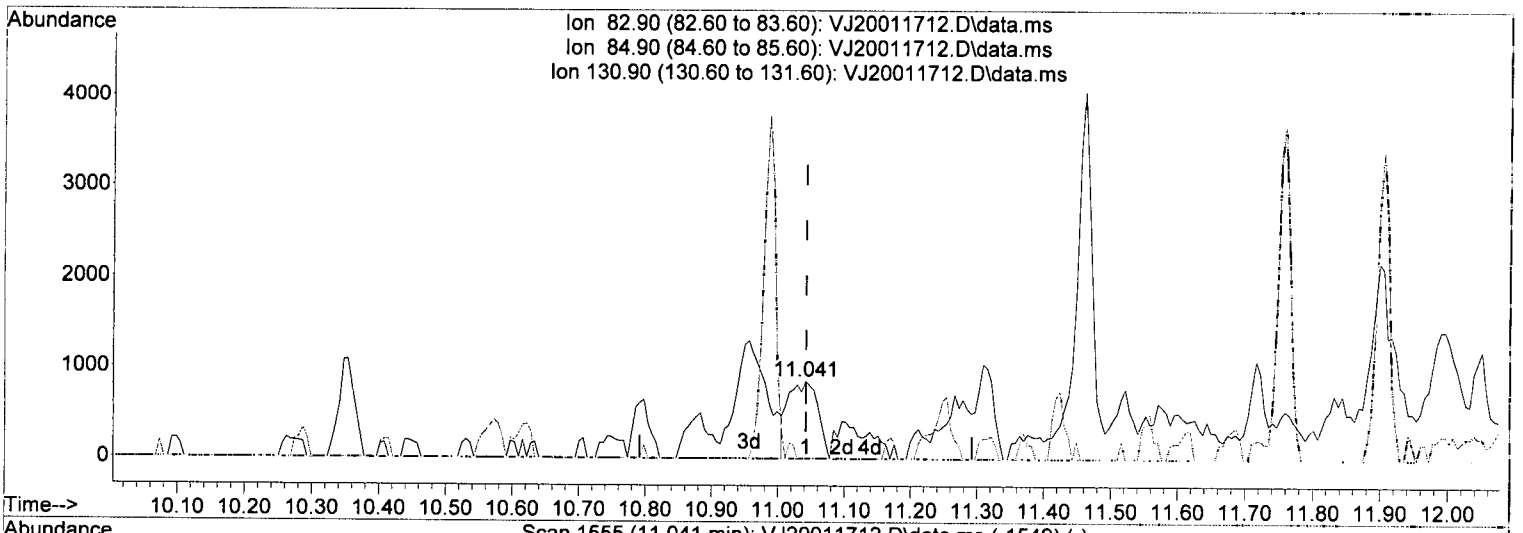
response 19338

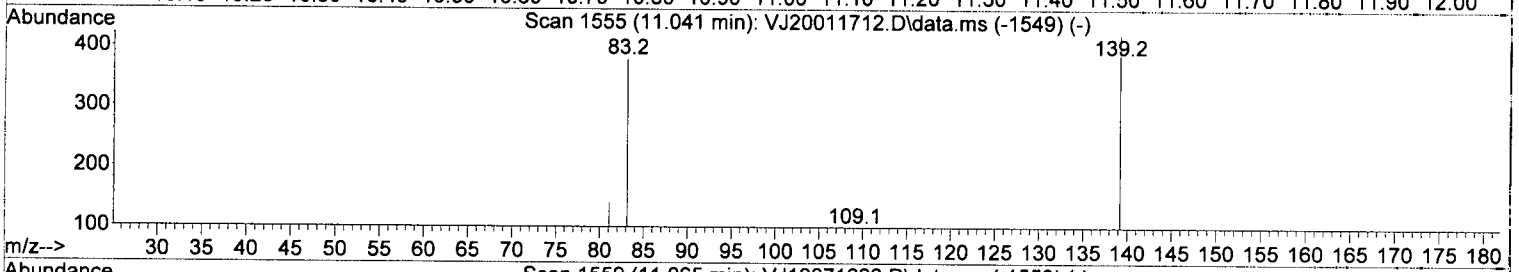
Ion	Exp%	Act%
165.90	100.00	100.00
128.90	68.30	69.99
93.90	36.00	39.13
0.00	0.00	0.00

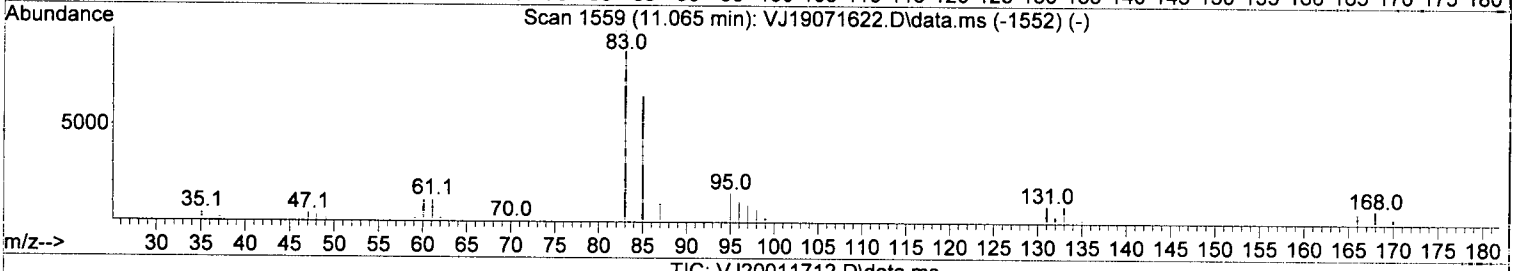
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

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

11.041min (-0.000) 0.86 ug/L

response 2629

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

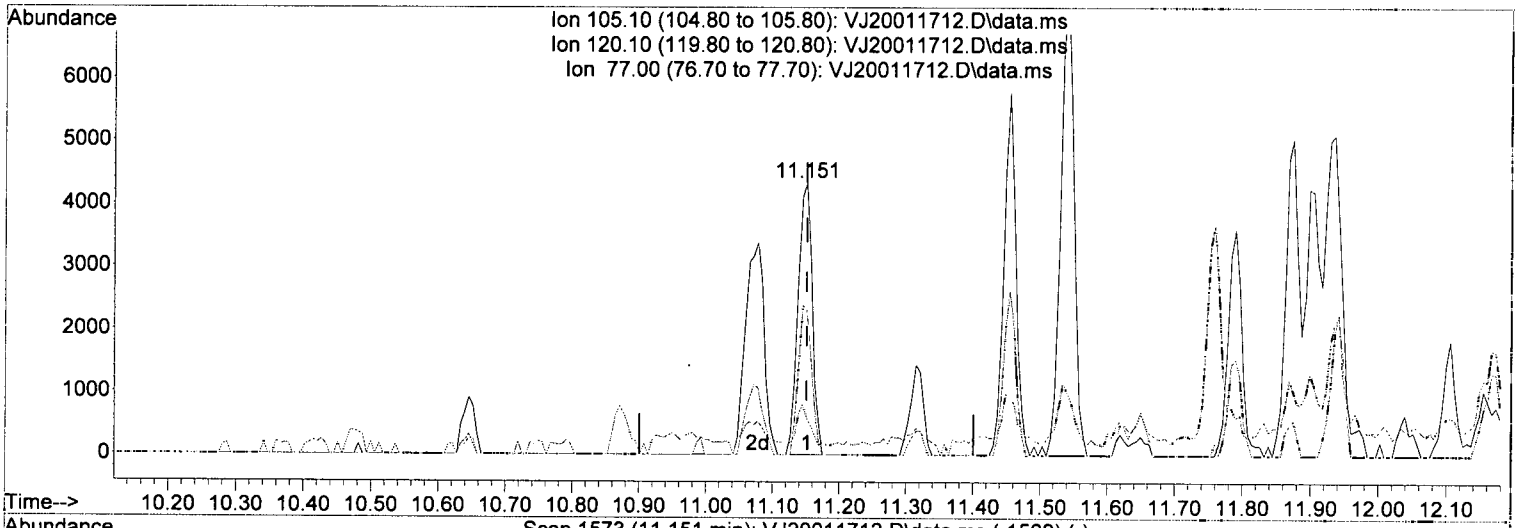
~~A.I.~~ IMA 1/20/20

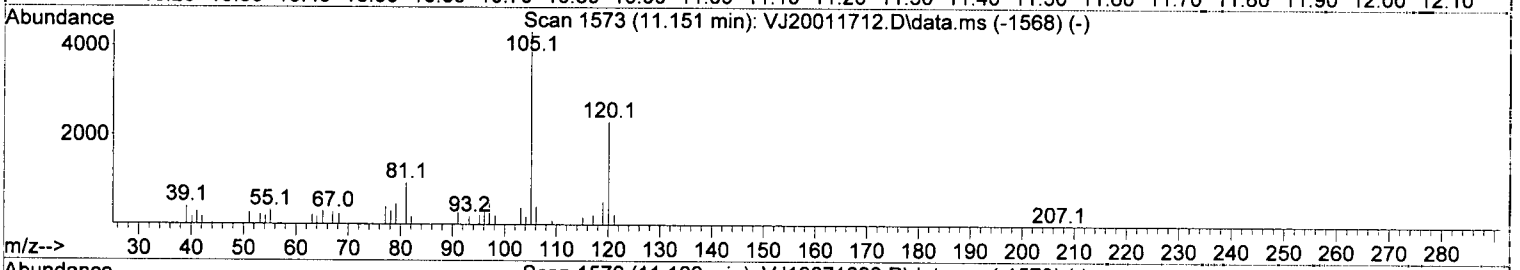
QDEL

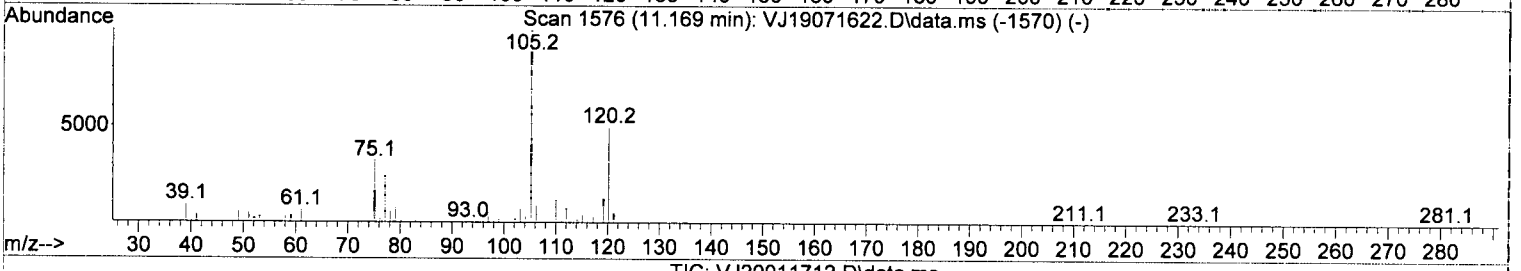
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(69) 1,3,5-Trimethylbenzene

11.151min (+ 0.001) 0.78 ug/L

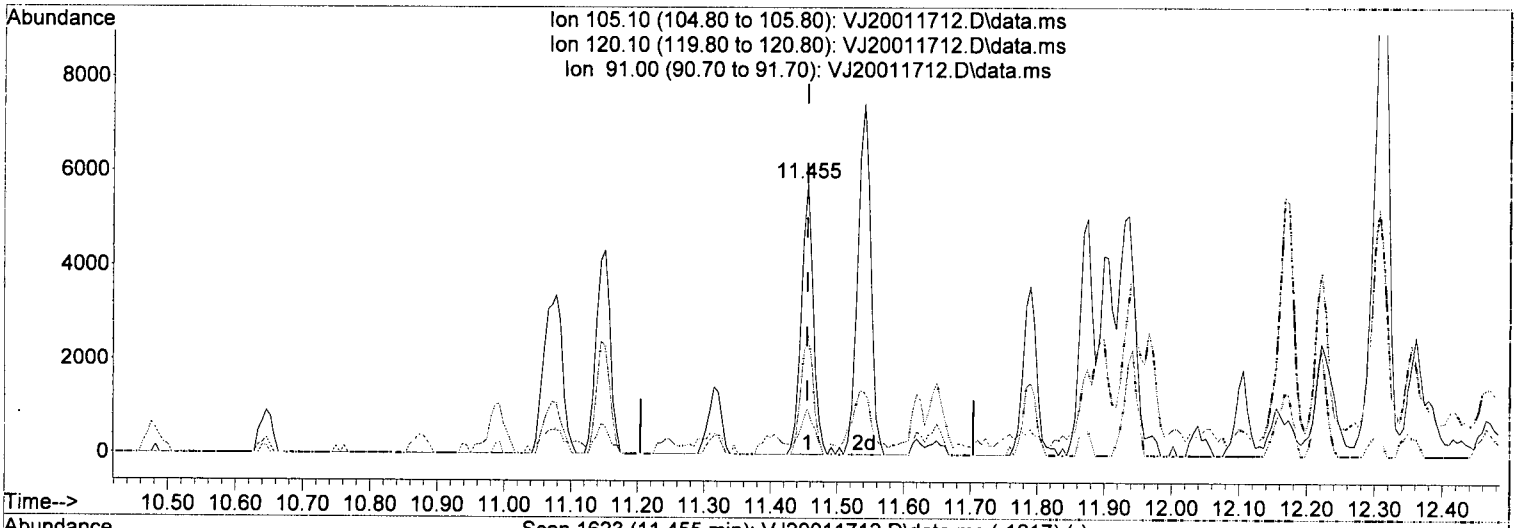
response 6388

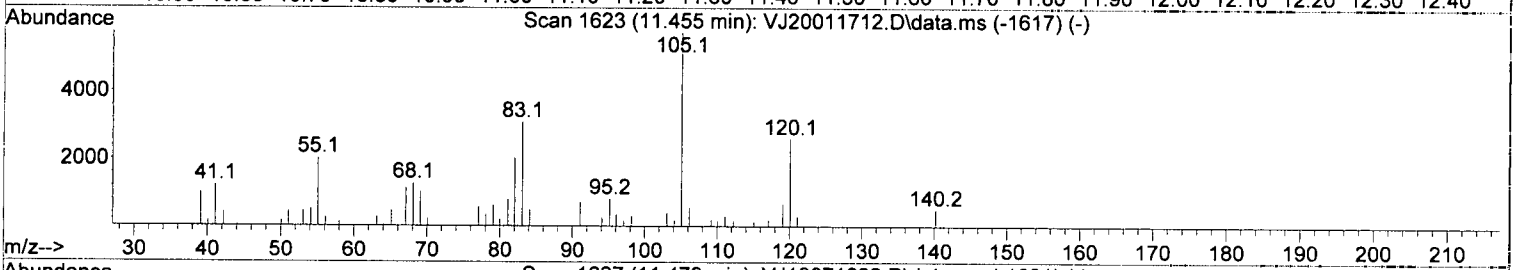
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	52.80	53.20
77.00	19.20	10.16
0.00	0.00	0.00

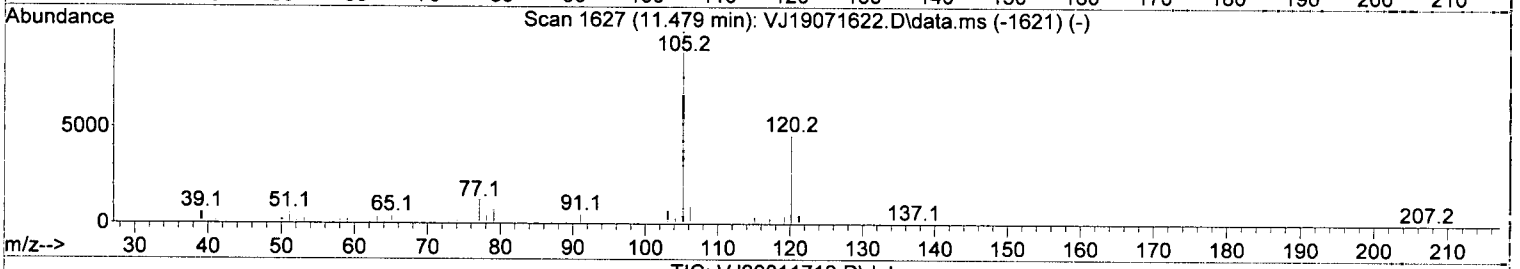
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(74) 1,2,4-Trimethylbenzene

11.455min (+ 0.001) 0.89 ug/L

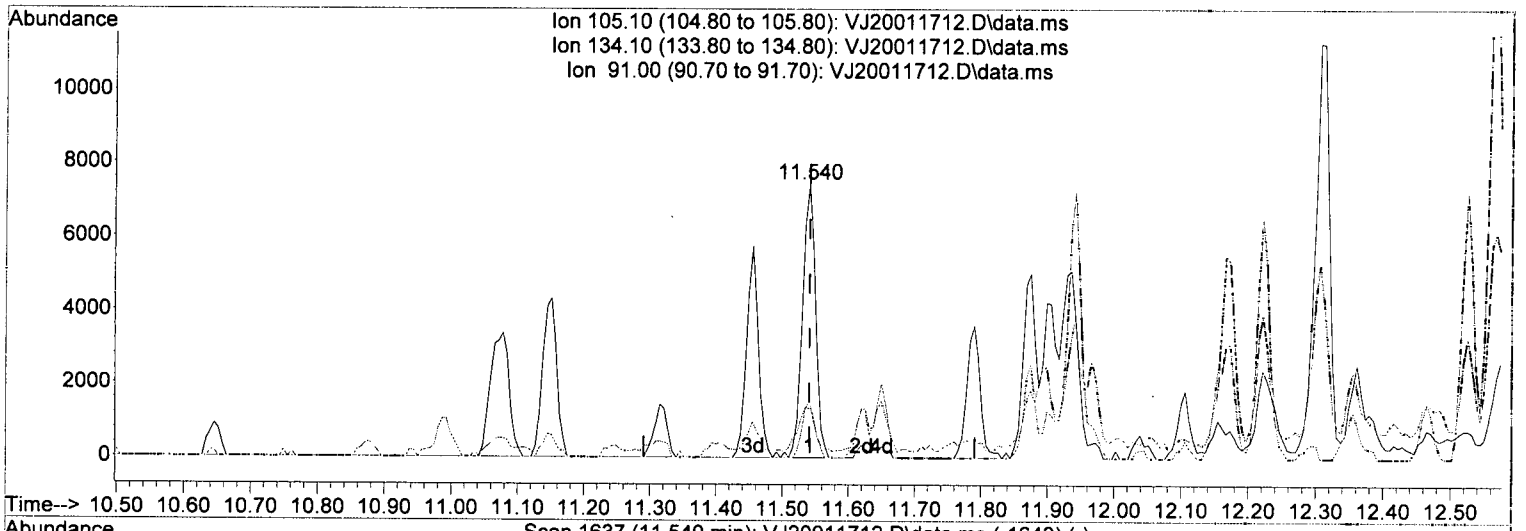
response 7194

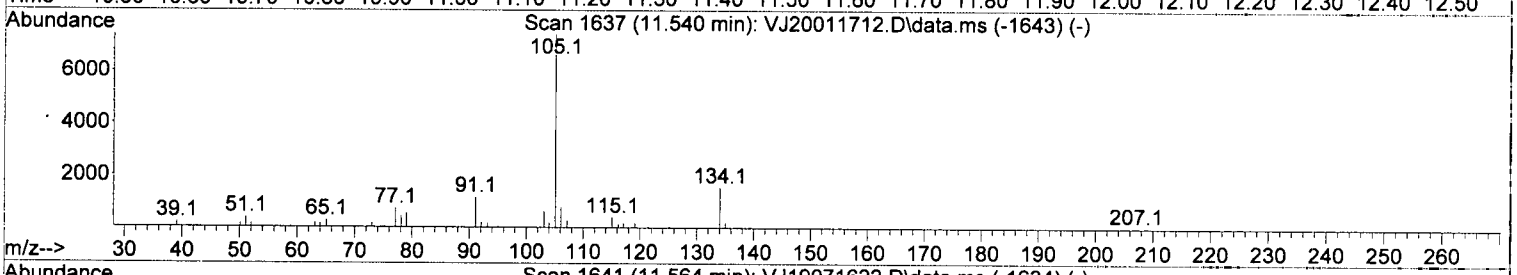
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	48.60	45.52
91.00	9.80	17.04
0.00	0.00	0.00

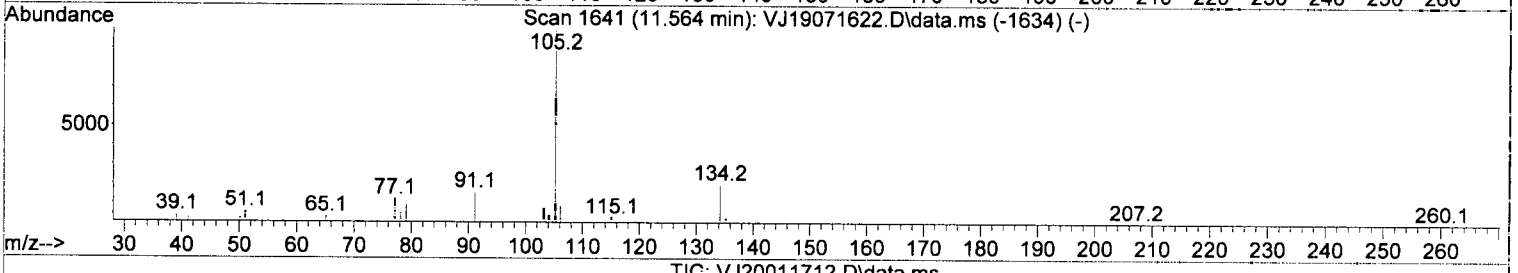
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(75) sec-Butylbenzene

11.540min (+ 0.000) 1.04 ug/L

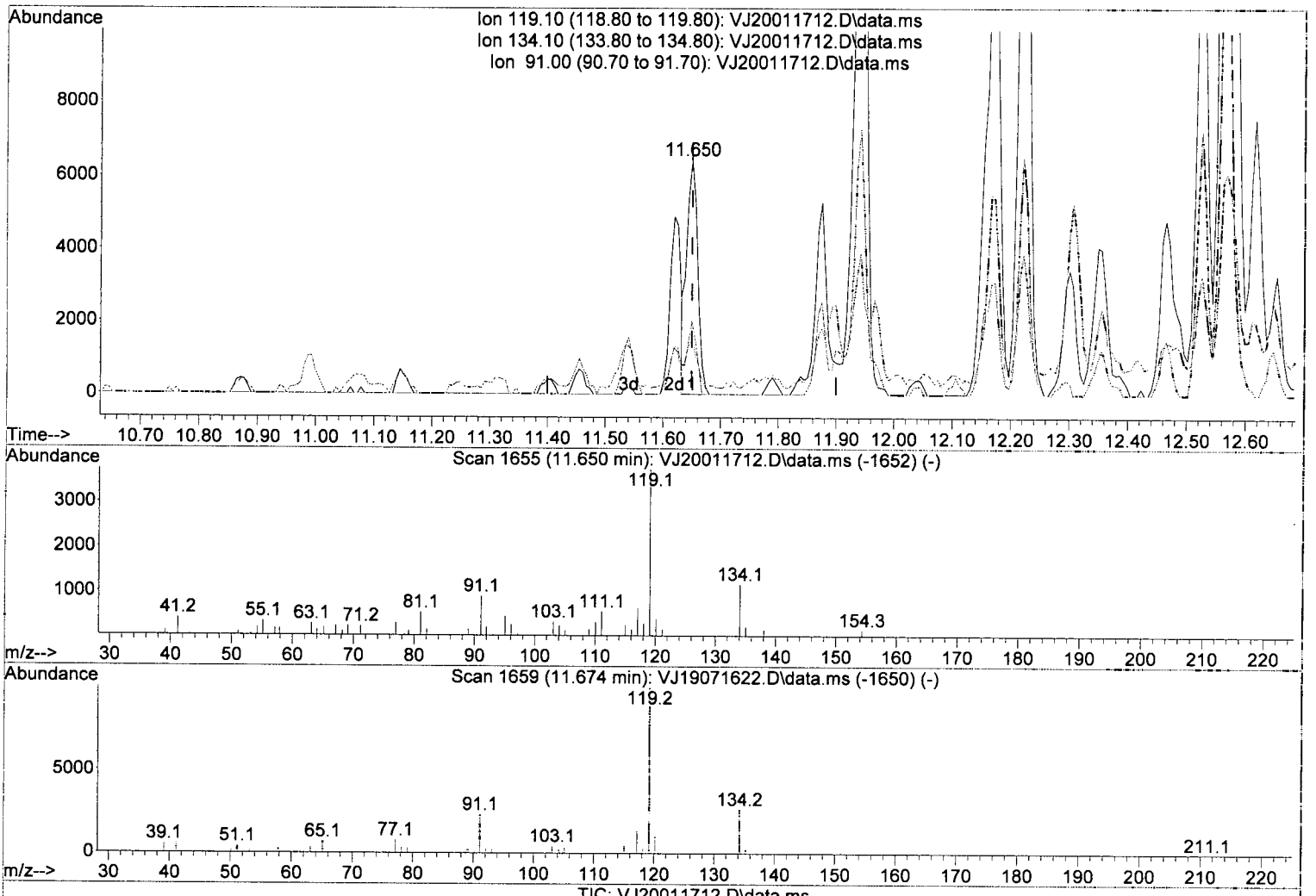
response 10176

Ion	Exp%	Act%
105.10	100.00	100.00
134.10	21.70	21.15
91.00	14.90	15.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20011712.D\data.ms

(76) 4-Isopropyltoluene

11.650min (+ 0.001) 1.07 ug/L

response 8575

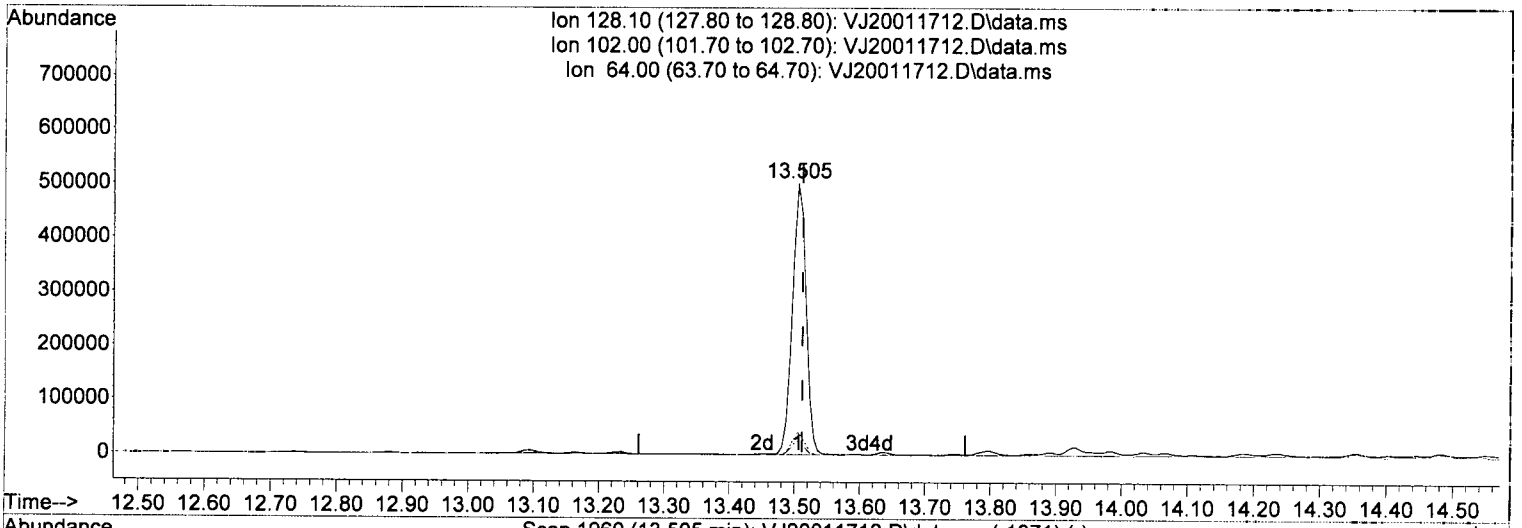
Ion	Exp%	Act%
119.10	100.00	100.00
134.10	26.60	31.27
91.00	21.70	20.05
0.00	0.00	0.00

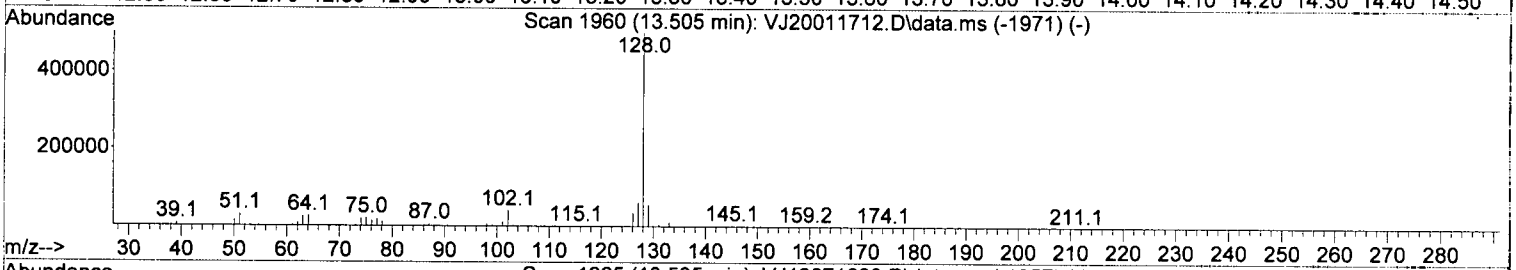
MO2

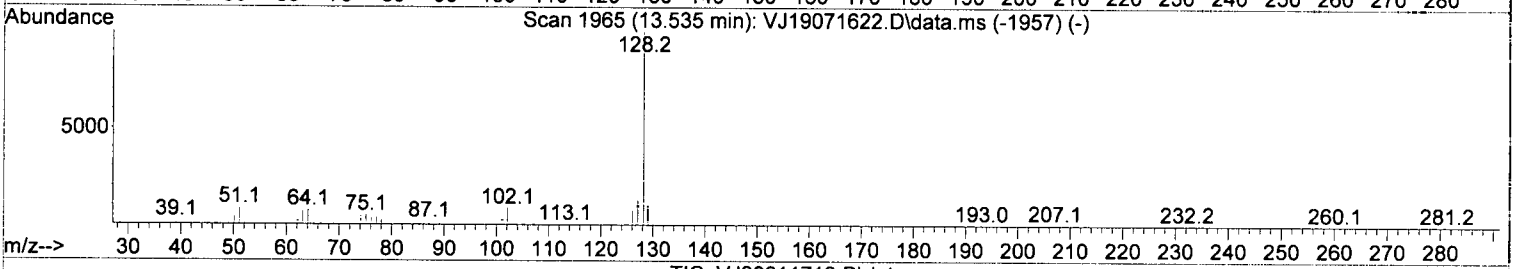
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(84) Naphthalene

13.505min (-0.006) 70.25 ug/L

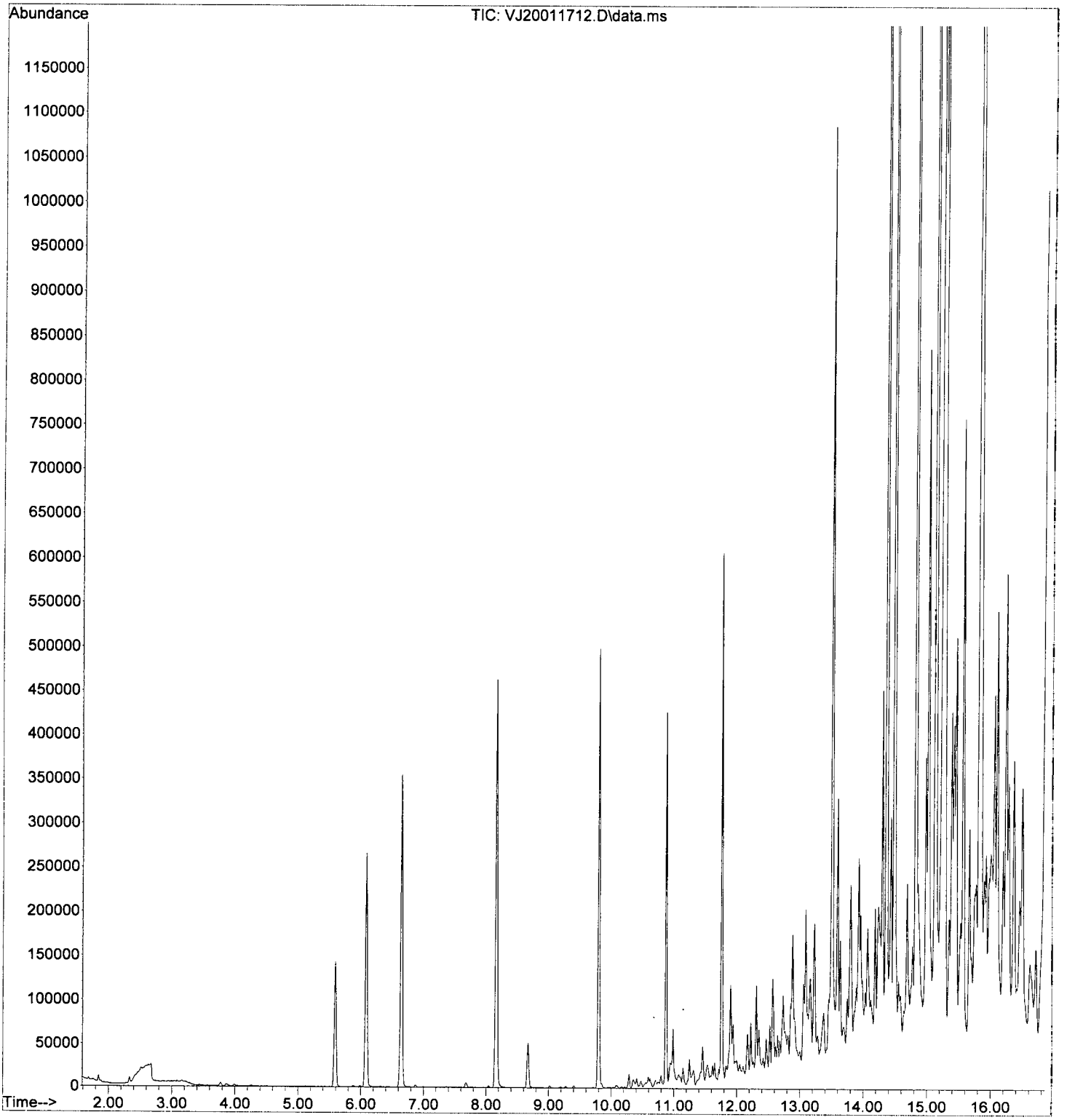
response 729717

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	8.18
64.00	6.30	5.16
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**0A17017**	Instrument:	**VOA-GCMS10**
Date:	**01/17/20 09:11**	Calibration:	**A0A0801**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A17017-IBL1	Soil	QC	QC			A19L200	
2	0A17017-TUN1	Soil	QC	QC			A19L200	
3	0A17017-CCV1	Soil	QC	QC			A19L200	
4	0010530-BS1	Soil	QC	QC		0010530	A19L200	
5	0A17017-CCV2	Soil	QC	QC			A19L200	
6	0010530-BS2	Soil	QC	QC		0010530	A19L200	
7	0010530-BLK1	Soil	QC	QC		0010530	A19L200	
8	A0A0547-01	Soil	8260C Full List		01/17/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/17/20	0010530	A19L200	
9	A0A0539-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
10	0010530-DUP1	Soil	QC	QC		0010530	A19L200	
11	A0A0538-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
12	0010530-MS1	Soil	QC	QC		0010530	A19L200	
13	0A17017-IBL2	Soil	QC	QC			A19L200	
14	A0A0539-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
15	A0A0507-03	Soil	8260C BTEX+N		01/20/20	0010530	A19L200	
16	A0A0538-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
17	0A17017-IBL3	Soil	QC	QC			A19L200	
18	0A17017-IBL4	Soil	QC	QC			A19L200	
19	A0A0436-03	Soil	8260C BTEX		01/20/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/20/20	0010530	A19L200	
20	0A17017-IBL5	Soil	QC	QC			A19L200	
21	0010544-BLK1	Soil	QC	QC		0010544	A19L200	
22	0010544-BS1	Soil	QC	QC		0010544	A19L200	
23	0010544-BS2	Soil	QC	QC		0010544	A19L200	
24	0010544-BS3	Soil	QC	QC		0010544	A19L200	
25	0010544-BS4	Soil	QC	QC		0010544	A19L200	
26	0010545-BLK1	Soil	QC	QC		0010545	A19L200	
27	0010545-BS1	Soil	QC	QC		0010545	A19L200	
28	0010545-BS2	Soil	QC	QC		0010545	A19L200	
29	0010545-BS3	Soil	QC	QC		0010545	A19L200	
30	0010545-BS4	Soil	QC	QC		0010545	A19L200	
31	0A17017-IBL6	Soil	QC	QC			A19L200	

Data Entered By: IMA 1/22/20

Data Reviewed By: [illegible] 1/27/20

Comments:

T1,2 DCPA to 1/2 ppb

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011719.D
Acq On : 17 Jan 2020 5:34 pm
Operator : IMA 4 IMA 1/22/20
Sample : 0010545-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

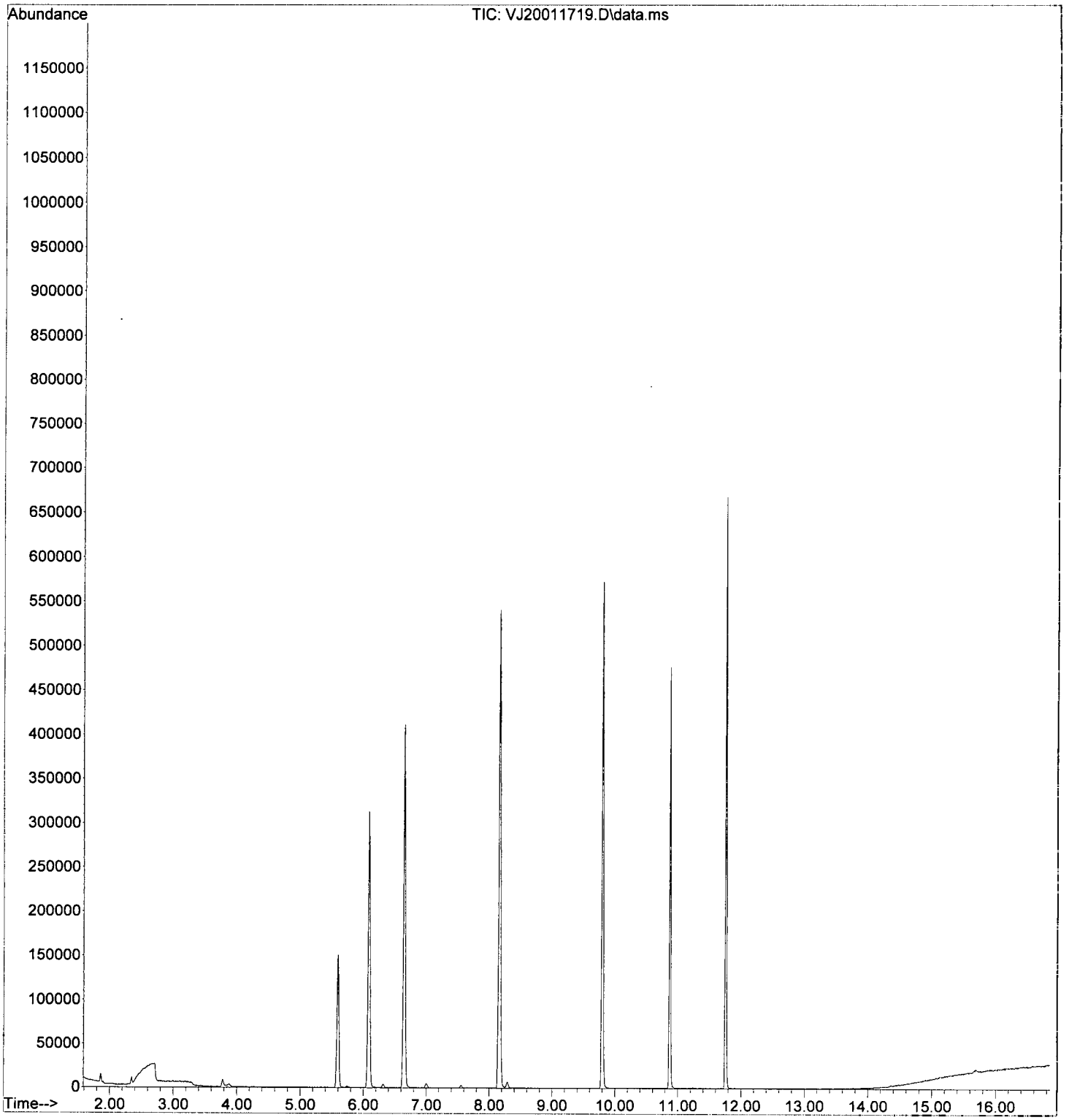
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	121682	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	327711	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	155987	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	102286	52.04	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	386387	54.43	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	434783	47.86	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	125755	52.23	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.898	50	1203	0.34	ug/L	<MDL	97
5) Bromomethane	2.348	96	3294	Below Cal			99
6) Chloroethane	2.457	64	59	0.09	ug/L	#	1
8) Ethanol	3.285	45	3485	Below Cal			84
12) Iodomethane	3.303	142	769	1.78	ug/L	#	47
13) Methylene Chloride	3.777	84	4076	0.69	ug/L		88
14) Acetone	3.869	43	2988	1.94	ug/L		88
18) tert-Butanol (TBA)	4.252	59	215	0.31	ug/L	#	46
32) 2-Butanone (MEK)	5.742	43	2746	1.14	ug/L		92
36) iso-Butyl Alcohol	6.320	43	1640	6.29	ug/L		93
84) Naphthalene	13.505	128	400	0.14	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011719.D
Acq On : 17 Jan 2020 5:34 pm
Operator : IMA IMA 1/22/20
Sample : 0010545-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 20 10:32:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011720.D
Acq On : 17 Jan 2020 6:01 pm
Operator : IMA
Sample : 0010544-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 20 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	116	0.00	
2		Dichlorodifluoromethane	20.000	15.561	22.2#	99	-0.01	Q55
3	P	Chloromethane	20.000	15.993	20.0#	100	-0.01	
4	C	Vinyl Chloride	20.000	16.098	19.5	95	-0.02	
5		Bromomethane	20.000	20.054	-0.3	119	0.00	
6		Chloroethane	20.000	17.854	10.7	115	0.00	
7		Trichlorofluoromethane	20.000	19.376	3.1	116	0.00	
8		Ethanol	1250.000	949.154	24.1#	93	0.06	Q55
9	C	1,1-Dichloroethene	20.000	18.216	8.9	110	0.00	
10		Carbon Disulfide	20.000	18.323	8.4	114	0.00	
11		Freon 113	20.000	19.613	1.9	113	0.00	
12		Iodomethane	20.000	21.158	-5.8	134	-0.01	
13		Methylene Chloride	20.000	20.354	-1.8	122	-0.01	
14		Acetone	40.000	33.314	16.7	106	-0.01	
15		t-1,2-Dichloroethene	20.000	19.338	3.3	114	0.00	
16		n-Hexane	20.000	20.600	-3.0	116	0.00	
17		Methyl-tert-butyl-ether	20.000	20.295	-1.5	119	-0.01	
18		tert-Butanol (TBA)	1250.000	1157.014	7.4	102	0.04	
19		Diisopropyl ether (DIPE)	5.000	4.812	3.8	106	-0.01	
20	P	1,1-Dichloroethane	20.000	19.730	1.3	115	0.00	
21		Acrylonitrile	20.000	18.340	8.3	103	-0.01	
22		Ethyl-tert-butyl ether (ETB	5.000	4.891	2.2	104	0.00	
23		c-1,2-Dichloroethene	20.000	20.429	-2.1	115	0.00	
24		2,2-Dichloropropane	20.000	19.309	3.5	112	0.00	
25		Bromochloromethane	20.000	19.056	4.7	110	-0.01	
26	C	Chloroform	20.000	20.159	-0.8	117	0.00	
27		Carbon Tetrachloride	20.000	20.732	-3.7	120	0.00	
28		Tetrahydrofuran	20.000	17.475	12.6	101	0.00	
29		1,1,1-Trichloroethane	20.000	20.270	-1.3	114	-0.01	
30	S	Dibromofluoromethane (S)	50.000	51.001	-2.0	122	0.00	
31		1,1-Dichloropropene	20.000	20.791	-4.0	116	0.00	
32		2-Butanone (MEK)	40.000	33.190	17.0	104	0.00	
33		Benzene	20.000	20.984	-4.9	122	0.00	
34		tert-Amyl methyl ether (TAM	5.000	5.108	-2.2	123	-0.01	
35		1,2-Dichloroethane (EDC)	20.000	19.301	3.5	111	0.00	
36		iso-Butyl Alcohol	500.000	415.309	16.9	101	0.02	
37	S	1,4-Difluorobenzene (S)	50.000	54.487	-9.0	129	0.00	
38		Trichloroethene (TCE)	20.000	23.668	-18.3	133	0.00	
39		tert-Amyl ethyl ether (TAEE	5.000	5.324	-6.5	121	0.00	
40		Dibromomethane	20.000	21.647	-8.2	123	0.00	
41	C	1,2-Dichloropropane	20.000	21.038	-5.2	123	0.00	
42		Bromodichloromethane	20.000	21.578	-7.9	122	0.00	
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	134	0.00	
44		c-1,3-Dichloropropene	20.000	18.862	5.7	117	0.00	
45	S	Toluene-d8 (S)	50.000	46.586	6.8	123	0.00	
46	C	Toluene	20.000	18.799	6.0	126	0.00	
47		Tetrachloroethene (PCE)	20.000	21.078	-5.4	134	0.00	
48		4-Methyl-2-Pentanone (MIBK)	40.000	31.740	20.7#	107	0.00	Q55
49		t-1,3-Dichloropropene	20.000	20.282	-1.4	123	0.00	
50		1,1,2-Trichloroethane	20.000	20.076	-0.4	133	0.00	

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011720.D
Acq On : 17 Jan 2020 6:01 pm
Operator : IMA
Sample : 0010544-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 20 10:32:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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)	
51		Dibromochloromethane	20.000	20.340	-1.7	136	0.00	
52		1,3-Dichloropropane	20.000	19.779	1.1	128	0.00	
53		1,2-Dibromoethane (EDB)	20.000	20.362	-1.8	134	0.00	
54		2-Hexanone	40.000	29.412	-26.5#	105	0.00	QSS
55	P	Chlorobenzene	20.000	20.082	-0.4	134	0.00	
56	C	Ethylbenzene	20.000	19.568	2.2	126	0.00	
57		1,1,1,2-Tetrachloroethane	20.000	20.951	-4.8	139	0.00	
58		m,p-Xylenes (2)	40.000	40.895	-2.2	124	0.00	
59		o-Xylene	20.000	21.095	-5.5	127	0.00	
60		Styrene	20.000	19.263	3.7	137	0.00	
61	P	Bromoform	20.000	21.409	-7.0	140	0.00	
62		Isopropylbenzene	20.000	20.729	-3.6	130	0.00	
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	138	0.00	
64	S	4-Bromofluorobenzene (S)	50.000	52.728	-5.5	145	0.00	
65		Bromobenzene	20.000	21.425	-7.1	143	0.00	
66		n-Propylbenzene	20.000	19.250	3.8	124	0.00	
67	P	1,1,2,2-Tetrachloroethane	20.000	18.775	6.1	120	0.00	
68		2-Chlorotoluene	20.000	21.260	-6.3	135	0.00	
69		1,3,5-Trimethylbenzene	20.000	21.352	-6.8	129	0.00	
70		1,2,3-Trichloropropane	20.000	18.927	5.4	124	0.00	
71		t-1,4-Dichloro-2-butene	20.000	16.428	17.9	113	0.00	
72		4-Chlorotoluene	20.000	20.584	-2.9	130	0.00	
73		tert-Butylbenzene	20.000	19.468	2.7	123	0.00	
74		1,2,4-Trimethylbenzene	20.000	22.115	-10.6	133	0.00	
75		sec-Butylbenzene	20.000	20.509	-2.5	125	0.00	
76		4-Isopropyltoluene	20.000	21.814	-9.1	131	0.00	
77		1,3-Dichlorobenzene	20.000	21.286	-6.4	136	0.00	
78		1,4-Dichlorobenzene	20.000	19.568	2.2	137	0.00	
79		n-Butylbenzene	20.000	19.468	2.7	127	0.00	
80		1,2-Dichlorobenzene	20.000	21.081	-5.4	135	0.00	
81		1,2-Dibromo-3-Chloropropane	20.000	16.765	16.2	119	0.00	
82		Hexachlorobutadiene	20.000	21.558	-7.8	139	0.00	
83		1,2,4-Trichlorobenzene	20.000	20.591	-3.0	134	0.00	
84		Naphthalene	20.000	17.025	14.9	120	0.00	
85		1,2,3-Trichlorobenzene	20.000	20.289	-1.4	127	0.00	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011720.D
Acq On : 17 Jan 2020 6:01 pm
Operator : IMA
Sample : 0010544-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 20 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	126374	50.00	ug/L	#	0.00
43) Chlorobenzene-d5 (I)	9.800	117	346171	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	166057	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	104119	51.00	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	401680	54.49	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	447057	46.59	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	135161	52.73	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	38275	15.56	ug/L		99
3) Chloromethane	1.886	50	57985	15.99	ug/L		100
4) Vinyl Chloride	1.983	62	44026	16.10	ug/L		95
5) Bromomethane	2.336	96	29246	20.05	ug/L		97
6) Chloroethane	2.470	64	11727	17.85	ug/L		90
7) Trichlorofluoromethane	2.597	101	18796	19.38	ug/L		99
8) Ethanol	3.321	45	76727	949.15	ug/L		88
9) 1,1-Dichloroethene	3.145	61	55925	18.22	ug/L		93
10) Carbon Disulfide	3.157	76	101062	18.32	ug/L		97
11) Freon 113	3.200	101	44740	19.61	ug/L		91
12) Iodomethane	3.291	142	10714	21.16	ug/L		98
13) Methylene Chloride	3.771	84	52820	20.35	ug/L		96
14) Acetone	3.857	43	53239	33.31	ug/L		96
15) t-1,2-Dichloroethene	3.942	61	72719	19.34	ug/L		93
16) n-Hexane	4.039	86	11858	20.60	ug/L		93
17) Methyl-tert-butyl-ether	4.094	73	187955	20.29	ug/L		78
18) tert-Butanol (TBA)	4.301	59	827355	1157.01	ug/L	#	86
19) Diisopropyl ether (DIPE)	4.489	45	39694	4.81	ug/L		95
20) 1,1-Dichloroethane	4.574	63	85535	19.73	ug/L		99
21) Acrylonitrile	4.623	53	29858	18.34	ug/L		99
22) Ethyl-tert-butyl ether...	4.860	59	38375	4.89	ug/L		96
23) c-1,2-Dichloroethene	5.122	61	71491	20.43	ug/L		93
24) 2,2-Dichloropropane	5.232	77	77127	19.31	ug/L		93
25) Bromochloromethane	5.317	49	41240	19.06	ug/L		93
26) Chloroform	5.408	83	96027	20.16	ug/L		97
27) Carbon Tetrachloride	5.548	117	70970	20.73	ug/L		96
28) Tetrahydrofuran	5.584	42	27071	17.47	ug/L		92
29) 1,1,1-Trichloroethane	5.609	97	88949	20.27	ug/L		98
31) 1,1-Dichloropropene	5.743	75	75244	20.79	ug/L		97
32) 2-Butanone (MEK)	5.724	43	83221	33.19	ug/L		97
33) Benzene	5.992	78	242921	20.98	ug/L		99
34) tert-Amyl methyl ether...	6.138	73	38414	5.11	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.199	62	79183	19.30	ug/L		98
36) iso-Butyl Alcohol	6.296	43	112409	415.31	ug/L		96
38) Trichloroethene (TCE)	6.612	130	64434	23.67	ug/L		100
39) tert-Amyl ethyl ether ...	6.898	59	27725	5.32	ug/L		95
40) Dibromomethane	7.051	93	35210	21.65	ug/L		98
41) 1,2-Dichloropropane	7.160	63	57289	21.04	ug/L		96
42) Bromodichloromethane	7.239	83	69547	21.58	ug/L		99
44) c-1,3-Dichloropropene	7.945	75	81554	18.86	ug/L		94
46) Toluene	8.219	91	254941	18.80	ug/L		96
47) Tetrachloroethene (PCE)	8.669	166	66277	21.08	ug/L		98
48) 4-Methyl-2-Pentanone (...	8.657	43	128556	31.74	ug/L		93

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011720.D
Acq On : 17 Jan 2020 6:01 pm
Operator : IMA
Sample : 0010544-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 20 10:32:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

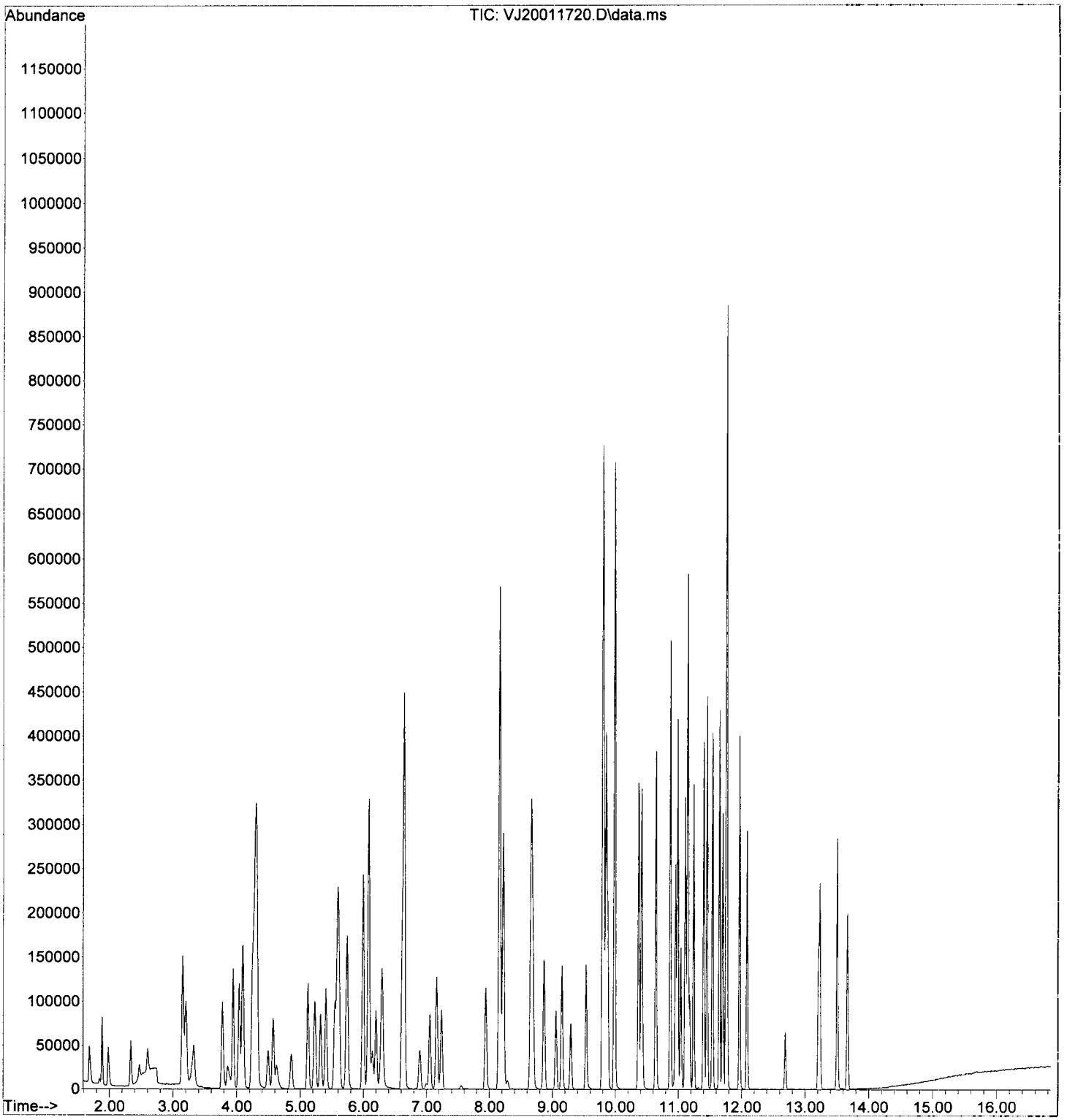
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49)	t-1,3-Dichloropropene	8.693	75	83657	20.28	ug/L		96
50)	1,1,2-Trichloroethane	8.870	97	56110	20.08	ug/L		95
51)	Dibromochloromethane	9.058	129	52633	20.34	ug/L		99
52)	1,3-Dichloropropane	9.155	76	94516	19.78	ug/L		94
53)	1,2-Dibromoethane (EDB)	9.295	107	56704	20.36	ug/L		98
54)	2-Hexanone	9.533	43	90727	29.41	ug/L		98
55)	Chlorobenzene	9.812	112	164938	20.08	ug/L		98
56)	Ethylbenzene	9.849	91	268128	19.57	ug/L		99
57)	1,1,1,2-Tetrachloroethane	9.879	131	57608	20.95	ug/L		98
58)	m,p-Xylenes (2)	9.989	91	393544	40.90	ug/L		99
59)	o-Xylene	10.366	91	188547	21.09	ug/L		97
60)	Styrene	10.415	104	144994	19.26	ug/L		94
61)	Bromoform	10.427	173	38604	21.41	ug/L		97
62)	Isopropylbenzene	10.646	105	244009	20.73	ug/L		99
65)	Bromobenzene	10.956	156	67080	21.42	ug/L		96
66)	n-Propylbenzene	10.987	91	278912	19.25	ug/L		99
67)	1,1,2,2-Tetrachloroethane	11.041	83	68951	18.77	ug/L		96
68)	2-Chlorotoluene	11.108	126	57831	21.26	ug/L		98
69)	1,3,5-Trimethylbenzene	11.145	105	208067	21.35	ug/L		98
70)	1,2,3-Trichloropropane	11.145	110	26249	18.93	ug/L	#	78
71)	t-1,4-Dichloro-2-butene	11.181	88	9809	16.43	ug/L		93
72)	4-Chlorotoluene	11.242	91	171527	20.58	ug/L		97
73)	tert-Butylbenzene	11.400	91	105340	19.47	ug/L		99
74)	1,2,4-Trimethylbenzene	11.455	105	214460	22.12	ug/L		99
75)	sec-Butylbenzene	11.540	105	239622	20.51	ug/L		100
76)	4-Isopropyltoluene	11.650	119	208527	21.81	ug/L		99
77)	1,3-Dichlorobenzene	11.704	146	119151	21.29	ug/L		100
78)	1,4-Dichlorobenzene	11.771	146	118530	19.57	ug/L		97
79)	n-Butylbenzene	11.966	91	173882	19.47	ug/L		97
80)	1,2-Dichlorobenzene	12.088	146	107659	21.08	ug/L		96
81)	1,2-Dibromo-3-Chloropr...	12.690	157	16957	16.76	ug/L		93
82)	Hexachlorobutadiene	13.213	223	17824	21.56	ug/L		94
83)	1,2,4-Trichlorobenzene	13.231	180	65003	20.59	ug/L		98
84)	Naphthalene	13.505	128	203694	17.02	ug/L		99
85)	1,2,3-Trichlorobenzene	13.669	180	64984	20.29	ug/L		99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011720.D
Acq On : 17 Jan 2020 6:01 pm
Operator : IMA
Sample : 0010544-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 20 10:32:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011721.D
Acq On : 17 Jan 2020 6:28 pm
Operator : IMA
Sample : 0010544-BS2
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 21 Sample Multiplier: 1

IMA 1/20/20

Quant Time: Jan 20 10:32:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	117	0.00
2		Dichlorodifluoromethane	20.000	14.897	25.5#	95	0.00
3	P	Chloromethane	20.000	15.334	23.3#	96	0.00
4	C	Vinyl Chloride	20.000	15.245	23.8#	90	-0.02
5		Bromomethane	20.000	18.663	6.7	112	0.00
6		Chloroethane	20.000	18.084	9.6	117	0.00
7		Trichlorofluoromethane	20.000	17.852	10.7	107	0.00
8		Ethanol	1250.000	1012.513	19.0	99	0.05
9	C	1,1-Dichloroethene	20.000	17.431	12.8	106	0.00
10		Carbon Disulfide	20.000	17.677	11.6	110	0.00
11		Freon 113	20.000	18.591	7.0	107	0.00
12		Iodomethane	20.000	22.312	-11.6	143	0.00
13		Methylene Chloride	20.000	19.769	1.2	119	0.00
14		Acetone	40.000	33.383	16.5	106	0.00
15		t-1,2-Dichloroethene	20.000	18.324	8.4	109	0.00
16		n-Hexane	20.000	20.086	-0.4	113	0.00
17		Methyl-tert-butyl-ether	20.000	19.670	1.6	116	-0.01
18		tert-Butanol (TBA)	1250.000	1139.211	8.9	101	0.03
19		Diisopropyl ether (DIPE)	5.000	4.647	7.1	102	0.00
20	P	1,1-Dichloroethane	20.000	19.031	4.8	111	0.00
21		Acrylonitrile	20.000	19.411	2.9	109	-0.01
22		Ethyl-tert-butyl ether (ETB	5.000	4.826	3.5	103	0.00
23		c-1,2-Dichloroethene	20.000	19.485	2.6	110	0.00
24		2,2-Dichloropropane	20.000	18.115	9.4	105	0.00
25		Bromochloromethane	20.000	18.283	8.6	106	0.00
26	C	Chloroform	20.000	19.487	2.6	114	0.00
27		Carbon Tetrachloride	20.000	19.684	1.6	114	0.00
28		Tetrahydrofuran	20.000	18.033	9.8	105	0.00
29		1,1,1-Trichloroethane	20.000	19.265	3.7	109	0.00
30	S	Dibromofluoromethane (S)	50.000	50.889	-1.8	122	0.00
31		1,1-Dichloropropene	20.000	19.464	2.7	109	0.00
32		2-Butanone (MEK)	40.000	33.804	15.5	106	0.00
33		Benzene	20.000	19.838	0.8	115	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.887	2.3	118	0.00
35		1,2-Dichloroethane (EDC)	20.000	18.826	5.9	109	0.00
36		iso-Butyl Alcohol	500.000	406.060	18.8	99	0.02
37	S	1,4-Difluorobenzene (S)	50.000	54.102	-8.2	128	0.00
38		Trichloroethene (TCE)	20.000	22.231	-11.2	125	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	5.104	-2.1	117	0.00
40		Dibromomethane	20.000	21.456	-7.3	122	0.00
41	C	1,2-Dichloropropane	20.000	20.075	-0.4	118	0.00
42		Bromodichloromethane	20.000	20.848	-4.2	118	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	134	0.00
44		c-1,3-Dichloropropene	20.000	18.058	9.7	112	0.00
45	S	Toluene-d8 (S)	50.000	46.420	7.2	123	0.00
46	C	Toluene	20.000	17.927	10.4	120	0.00
47		Tetrachloroethene (PCE)	20.000	19.977	0.1	127	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	31.912	20.2#	107	0.00
49		t-1,3-Dichloropropene	20.000	19.827	0.9	120	0.00
50		1,1,2-Trichloroethane	20.000	19.660	1.7	130	0.00

L Q56 Q55 IMA 1/22/20 OK

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011721.D
Acq On : 17 Jan 2020 6:28 pm
Operator : IMA
Sample : 0010544-BS2
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 20 10:32:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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)
51		Dibromochloromethane	20.000	20.255	-1.3	136	0.00
52		1,3-Dichloropropane	20.000	19.605	2.0	127	0.00
53		1,2-Dibromoethane (EDB)	20.000	20.055	-0.3	132	0.00
54		2-Hexanone	40.000	29.449	L 26.4#	105	0.00 QSS
55	P	Chlorobenzene	20.000	19.032	4.8	127	0.00
56	C	Ethylbenzene	20.000	18.804	6.0	121	0.00
57		1,1,1,2-Tetrachloroethane	20.000	20.229	-1.1	135	0.00
58		m,p-Xylenes (2)	40.000	39.338	1.7	120	0.00
59		o-Xylene	20.000	20.237	-1.2	122	0.00
60		Styrene	20.000	18.382	8.1	131	0.00
61	P	Bromoform	20.000	21.073	-5.4	137	0.00
62		Isopropylbenzene	20.000	19.896	0.5	125	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	138	0.00
64	S	4-Bromofluorobenzene (S)	50.000	52.541	-5.1	145	0.00
65		Bromobenzene	20.000	20.805	-4.0	139	0.00
66		n-Propylbenzene	20.000	18.442	7.8	119	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	18.234	8.8	117	0.00
68		2-Chlorotoluene	20.000	20.450	-2.2	130	0.00
69		1,3,5-Trimethylbenzene	20.000	20.584	-2.9	125	0.00
70		1,2,3-Trichloropropane	20.000	18.519	7.4	121	0.00
71		t-1,4-Dichloro-2-butene	20.000	16.645	16.8	114	0.00
72		4-Chlorotoluene	20.000	19.864	0.7	125	0.00
73		tert-Butylbenzene	20.000	18.651	6.7	118	0.00
74		1,2,4-Trimethylbenzene	20.000	21.115	-5.6	127	0.00
75		sec-Butylbenzene	20.000	19.648	1.8	120	0.00
76		4-Isopropyltoluene	20.000	21.034	-5.2	126	0.00
77		1,3-Dichlorobenzene	20.000	20.363	-1.8	131	0.00
78		1,4-Dichlorobenzene	20.000	19.041	4.8	134	0.00
79		n-Butylbenzene	20.000	18.466	7.7	120	0.00
80		1,2-Dichlorobenzene	20.000	19.947	0.3	128	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	16.828	15.9	119	0.00
82		Hexachlorobutadiene	20.000	20.408	-2.0	132	0.00
83		1,2,4-Trichlorobenzene	20.000	20.127	-0.6	131	0.00
84		Naphthalene	20.000	16.863	15.7	119	0.00
85		1,2,3-Trichlorobenzene	20.000	19.662	1.7	123	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011721.D
Acq On : 17 Jan 2020 6:28 pm
Operator : IMA
Sample : 0010544-BS2
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 21 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	126670	50.00	ug/L	#	0.00
43) Chlorobenzene-d5 (I)	9.800	117	346247	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	166380	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	104134	50.89	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	399773	54.10	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	445555	46.42	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	134943	52.54	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	36728	14.90	ug/L		98
3) Chloromethane	1.891	50	55726	15.33	ug/L		98
4) Vinyl Chloride	1.983	62	41791	15.25	ug/L		94
5) Bromomethane	2.342	96	27597	18.66	ug/L		97
6) Chloroethane	2.469	64	11906	18.08	ug/L		97
7) Trichlorofluoromethane	2.603	101	17358	17.85	ug/L		95
8) Ethanol	3.315	45	81610	1012.51	ug/L		87
9) 1,1-Dichloroethene	3.145	61	53639	17.43	ug/L		92
10) Carbon Disulfide	3.157	76	97729	17.68	ug/L		97
11) Freon 113	3.199	101	42509	18.59	ug/L		94
12) Iodomethane	3.297	142	11438	22.31	ug/L		95
13) Methylene Chloride	3.777	84	51502	19.77	ug/L		92
14) Acetone	3.863	43	53475	33.38	ug/L		99
15) t-1,2-Dichloroethene	3.942	61	69068	18.32	ug/L		92
16) n-Hexane	4.039	86	11589	20.09	ug/L		96
17) Methyl-tert-butyl-ether	4.094	73	182594	19.67	ug/L		95
18) tert-Butanol (TBA)	4.288	59	816532	1139.21	ug/L	#	87
19) Diisopropyl ether (DIPE)	4.495	45	38423	4.65	ug/L		96
20) 1,1-Dichloroethane	4.574	63	82694	19.03	ug/L		99
21) Acrylonitrile	4.623	53	31676	19.41	ug/L		96
22) Ethyl-tert-butyl ether...	4.860	59	37955	4.83	ug/L		98
23) c-1,2-Dichloroethene	5.122	61	68347	19.48	ug/L		94
24) 2,2-Dichloropropane	5.231	77	72527	18.11	ug/L		93
25) Bromochloromethane	5.323	49	39659	18.28	ug/L		90
26) Chloroform	5.408	83	93043	19.49	ug/L		97
27) Carbon Tetrachloride	5.548	117	67541	19.68	ug/L		96
28) Tetrahydrofuran	5.584	42	28002	18.03	ug/L		93
29) 1,1,1-Trichloroethane	5.615	97	84739	19.27	ug/L		97
31) 1,1-Dichloropropene	5.742	75	70607	19.46	ug/L		98
32) 2-Butanone (MEK)	5.724	43	84960	33.80	ug/L		98
33) Benzene	5.998	78	230197	19.84	ug/L		98
34) tert-Amyl methyl ether...	6.144	73	36834	4.89	ug/L		99
35) 1,2-Dichloroethane (EDC)	6.199	62	77417	18.83	ug/L		99
36) iso-Butyl Alcohol	6.290	43	110163	406.06	ug/L		96
38) Trichloroethene (TCE)	6.612	130	60663	22.23	ug/L		99
39) tert-Amyl ethyl ether ...	6.892	59	26638	5.10	ug/L		96
40) Dibromomethane	7.056	93	34981	21.46	ug/L		95
41) 1,2-Dichloropropane	7.166	63	54794	20.07	ug/L		92
42) Bromodichloromethane	7.239	83	67351	20.85	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	78095	18.06	ug/L		94
46) Toluene	8.218	91	243169	17.93	ug/L		98
47) Tetrachloroethene (PCE)	8.669	166	62829	19.98	ug/L		99
48) 4-Methyl-2-Pentanone (...	8.656	43	129282	31.91	ug/L		94

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011721.D
Acq On : 17 Jan 2020 6:28 pm
Operator : IMA
Sample : 0010544-BS2
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 20 10:32:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

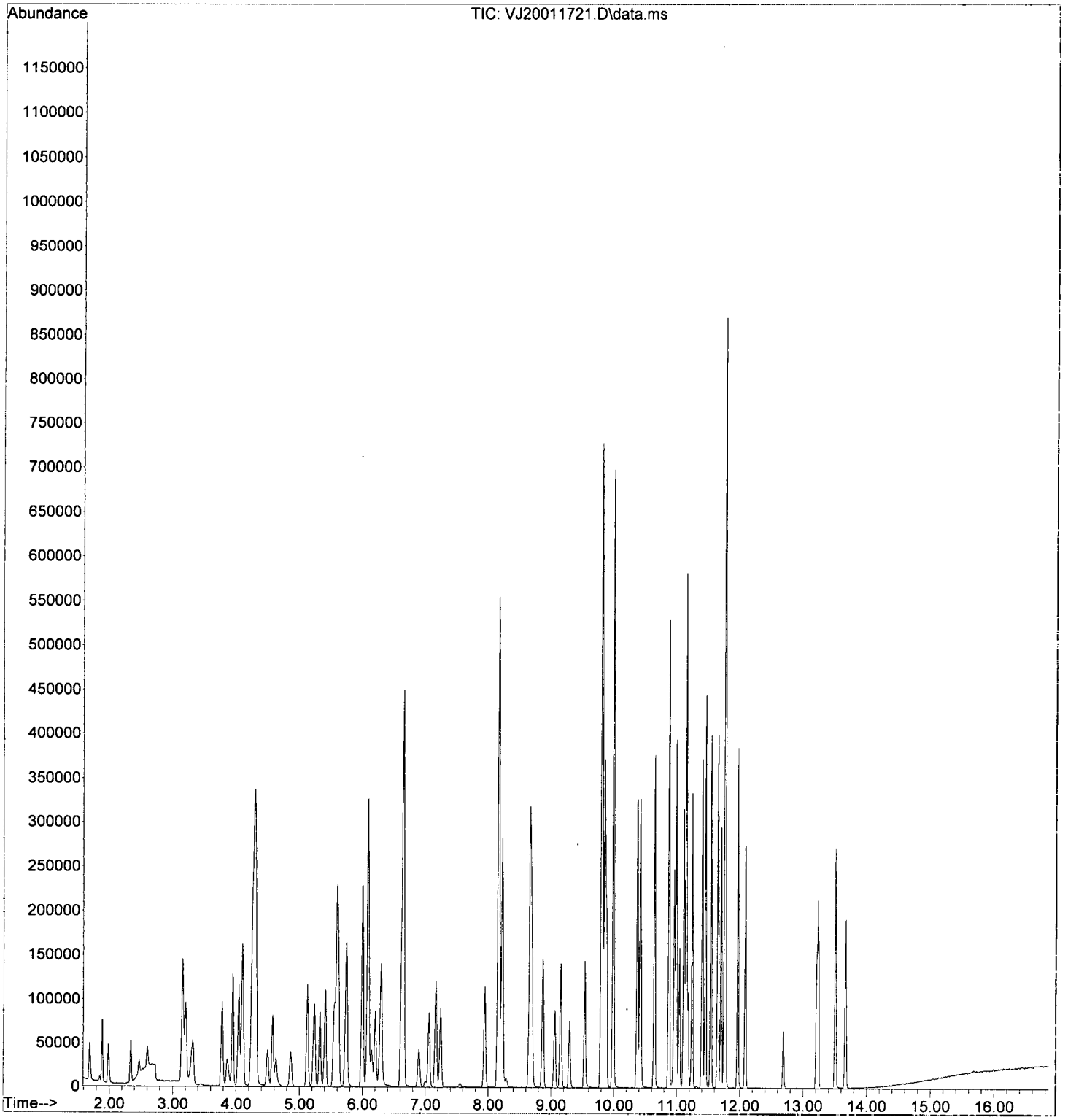
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	81797	19.83	ug/L		97
50) 1,1,2-Trichloroethane	8.863	97	54957	19.66	ug/L		97
51) Dibromochloromethane	9.058	129	52425	20.25	ug/L		100
52) 1,3-Dichloropropane	9.155	76	93706	19.61	ug/L		95
53) 1,2-Dibromoethane (EDB)	9.295	107	55863	20.06	ug/L		98
54) 2-Hexanone	9.532	43	90865	29.45	ug/L		98
55) Chlorobenzene	9.812	112	156341	19.03	ug/L		99
56) Ethylbenzene	9.849	91	257705	18.80	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	55635	20.23	ug/L		97
58) m,p-Xylenes (2)	9.989	91	378638	39.34	ug/L		99
59) o-Xylene	10.372	91	180919	20.24	ug/L		99
60) Styrene	10.415	104	138231	18.38	ug/L		95
61) Bromoform	10.427	173	37979	21.07	ug/L		98
62) Isopropylbenzene	10.646	105	234263	19.90	ug/L		99
65) Bromobenzene	10.956	156	65267	20.81	ug/L		98
66) n-Propylbenzene	10.986	91	267726	18.44	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	67093	18.23	ug/L		97
68) 2-Chlorotoluene	11.108	126	55735	20.45	ug/L		98
69) 1,3,5-Trimethylbenzene	11.145	105	200971	20.58	ug/L		96
70) 1,2,3-Trichloropropane	11.145	110	25734	18.52	ug/L		85
71) t-1,4-Dichloro-2-butene	11.181	88	9958	16.65	ug/L	#	86
72) 4-Chlorotoluene	11.242	91	165848	19.86	ug/L		97
73) tert-Butylbenzene	11.400	91	101116	18.65	ug/L		95
74) 1,2,4-Trimethylbenzene	11.455	105	205159	21.11	ug/L		100
75) sec-Butylbenzene	11.540	105	230008	19.65	ug/L		99
76) 4-Isopropyltoluene	11.650	119	201464	21.03	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	114205	20.36	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	115563	19.04	ug/L		98
79) n-Butylbenzene	11.966	91	165249	18.47	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	102065	19.95	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	17057	16.83	ug/L		95
82) Hexachlorobutadiene	13.213	223	16906	20.41	ug/L		97
83) 1,2,4-Trichlorobenzene	13.231	180	63662	20.13	ug/L		94
84) Naphthalene	13.505	128	202120	16.86	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	63097	19.66	ug/L		99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011721.D
Acq On : 17 Jan 2020 6:28 pm
Operator : IMA
Sample : 0010544-BS2
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 20 10:32:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011722.D
Acq On : 17 Jan 2020 6:55 pm
Operator : IMA
Sample : 0010544-BS3
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 22 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	109	0.00	
2		Dichlorodifluoromethane	20.000	15.772	21.1#	94	0.00	Q55
3	P	Chloromethane	20.000	16.783	16.1	98	0.00	
4	C	Vinyl Chloride	20.000	18.908	5.5	104	0.00	
5		Bromomethane	20.000	18.894	5.5	105	0.00	
6		Chloroethane	20.000	18.712	6.4	113	0.00	
7		Trichlorofluoromethane	20.000	17.328	13.4	97	0.00	
8		Ethanol	1250.000	1127.493	9.8	102	0.02	
9	C	1,1-Dichloroethene	20.000	18.290	8.6	103	0.00	
10		Carbon Disulfide	20.000	18.725	6.4	109	0.00	
11		Freon 113	20.000	19.809	1.0	107	0.00	
12		Iodomethane	20.000	25.247	-26.2#	155	0.00	Q56
13		Methylene Chloride	20.000	20.112	-0.6	112	0.00	
14		Acetone	40.000	37.983	5.0	113	0.00	
15		t-1,2-Dichloroethene	20.000	19.137	4.3	106	0.00	
16		n-Hexane	20.000	20.481	-2.4	107	0.00	
17		Methyl-tert-butyl-ether	20.000	20.143	-0.7	110	0.00	
18		tert-Butanol (TBA)	1250.000	1273.567	-1.9	105	0.01	
19		Diisopropyl ether (DIPE)	5.000	4.799	4.0	99	0.00	
20	P	1,1-Dichloroethane	20.000	20.210	-1.1	110	0.00	
21		Acrylonitrile	20.000	20.195	-1.0	106	0.00	
22		Ethyl-tert-butyl ether (ETB	5.000	4.967	0.7	99	0.00	
23		c-1,2-Dichloroethene	20.000	20.345	-1.7	107	0.00	
24		2,2-Dichloropropane	20.000	18.801	6.0	102	0.00	
25		Bromochloromethane	20.000	19.000	5.0	103	0.00	
26	C	Chloroform	20.000	20.195	-1.0	110	0.00	
27		Carbon Tetrachloride	20.000	20.182	-0.9	109	0.00	
28		Tetrahydrofuran	20.000	18.643	6.8	101	0.00	
29		1,1,1-Trichloroethane	20.000	20.145	-0.7	106	0.00	
30	S	Dibromofluoromethane (S)	50.000	51.476	-3.0	115	0.00	
31		1,1-Dichloropropene	20.000	20.486	-2.4	107	0.00	
32		2-Butanone (MEK)	40.000	35.243	11.9	103	0.00	
33		Benzene	20.000	20.519	-2.6	111	0.00	
34		tert-Amyl methyl ether (TAM	5.000	5.075	-1.5	115	0.00	
35		1,2-Dichloroethane (EDC)	20.000	19.128	4.4	103	0.00	
36		iso-Butyl Alcohol	500.000	448.309	10.3	102	0.00	
37	S	1,4-Difluorobenzene (S)	50.000	53.814	-7.6	119	0.00	
38		Trichloroethene (TCE)	20.000	22.955	-14.8	121	0.00	
39		tert-Amyl ethyl ether (TAEE	5.000	5.082	-1.6	108	0.00	
40		Dibromomethane	20.000	21.732	-8.7	116	0.00	
41	C	1,2-Dichloropropane	20.000	20.292	-1.5	111	0.00	
42		Bromodichloromethane	20.000	20.900	-4.5	110	0.00	
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	120	0.00	
44		c-1,3-Dichloropropene	20.000	18.840	5.8	105	0.00	
45	S	Toluene-d8 (S)	50.000	48.102	3.8	113	0.00	
46	C	Toluene	20.000	19.319	3.4	115	0.00	
47		Tetrachloroethene (PCE)	20.000	21.768	-8.8	124	0.00	
48		4-Methyl-2-Pentanone (MIBK)	40.000	33.941	15.1	102	0.00	
49		t-1,3-Dichloropropene	20.000	20.405	-2.0	111	0.00	
50		1,1,2-Trichloroethane	20.000	20.255	-1.3	120	0.00	

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011722.D
Acq On : 17 Jan 2020 6:55 pm
Operator : IMA
Sample : 0010544-BS3
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 20 10:32:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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)
51		Dibromochloromethane	20.000	20.105	-0.5	120	0.00
52		1,3-Dichloropropane	20.000	19.907	0.5	115	0.00
53		1,2-Dibromoethane (EDB)	20.000	20.936	-4.7	123	0.00
54		2-Hexanone	40.000	32.410	19.0	103	0.00
55	P	Chlorobenzene	20.000	20.165	-0.8	120	0.00
56	C	Ethylbenzene	20.000	19.869	0.7	114	0.00
57		1,1,1,2-Tetrachloroethane	20.000	20.887	-4.4	124	0.00
58		m,p-Xylenes (2)	40.000	42.507	-6.3	115	0.00
59		o-Xylene	20.000	21.623	-8.1	116	0.00
60		Styrene	20.000	19.225	3.9	122	0.00
61	P	Bromoform	20.000	21.591	-8.0	126	0.00
62		Isopropylbenzene	20.000	21.116	-5.6	118	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	127	0.00
64	S	4-Bromofluorobenzene (S)	50.000	51.242	-2.5	130	0.00
65		Bromobenzene	20.000	21.205	-6.0	130	0.00
66		n-Propylbenzene	20.000	19.187	4.1	114	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	19.004	5.0	112	0.00
68		2-Chlorotoluene	20.000	20.809	-4.0	121	0.00
69		1,3,5-Trimethylbenzene	20.000	21.136	-5.7	117	0.00
70		1,2,3-Trichloropropane	20.000	18.868	5.7	113	0.00
71		t-1,4-Dichloro-2-butene	20.000	17.510	12.4	110	0.00
72		4-Chlorotoluene	20.000	20.090	-0.4	116	0.00
73		tert-Butylbenzene	20.000	19.399	3.0	112	0.00
74		1,2,4-Trimethylbenzene	20.000	21.543	-7.7	119	0.00
75		sec-Butylbenzene	20.000	20.734	-3.7	116	0.00
76		4-Isopropyltoluene	20.000	21.638	-8.2	119	0.00
77		1,3-Dichlorobenzene	20.000	21.057	-5.3	124	0.00
78		1,4-Dichlorobenzene	20.000	19.443	2.8	126	0.00
79		n-Butylbenzene	20.000	19.059	4.7	114	0.00
80		1,2-Dichlorobenzene	20.000	20.735	-3.7	122	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	18.114	9.4	118	0.00
82		Hexachlorobutadiene	20.000	20.412	-2.1	121	0.00
83		1,2,4-Trichlorobenzene	20.000	21.054	-5.3	126	0.00
84		Naphthalene	20.000	18.308	8.5	119	0.00
85		1,2,3-Trichlorobenzene	20.000	21.294	-6.5	122	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011722.D
Acq On : 17 Jan 2020 6:55 pm
Operator : IMA
Sample : 0010544-BS3
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 22 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	118190	50.00	ug/L	#	0.00
43) Chlorobenzene-d5 (I)	9.800	117	309013	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	152673	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	98283	51.48	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	371028	53.81	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	412055	48.10	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	120766	51.24	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.703	85	36281	15.77	ug/L		100
3) Chloromethane	1.898	50	56906	16.78	ug/L		99
4) Vinyl Chloride	2.001	62	48362	18.91	ug/L		94
5) Bromomethane	2.348	96	26016	18.89	ug/L		94
6) Chloroethane	2.469	64	11495	18.71	ug/L		98
7) Trichlorofluoromethane	2.597	101	15721	17.33	ug/L		97
8) Ethanol	3.291	45	84060	1127.49	ug/L		90
9) 1,1-Dichloroethene	3.145	61	52515	18.29	ug/L		93
10) Carbon Disulfide	3.157	76	96593	18.73	ug/L		98
11) Freon 113	3.200	101	42260	19.81	ug/L		94
12) Iodomethane	3.297	142	12380	25.25	ug/L		98
13) Methylene Chloride	3.784	84	48842	20.11	ug/L		93
14) Acetone	3.869	43	56771	37.98	ug/L		98
15) t-1,2-Dichloroethene	3.948	61	67302	19.14	ug/L		92
16) n-Hexane	4.045	86	11026	20.48	ug/L	#	84
17) Methyl-tert-butyl-ether	4.106	73	174470	20.14	ug/L		69
18) tert-Butanol (TBA)	4.270	59	851722	1273.57	ug/L	#	86
19) Diisopropyl ether (DIPE)	4.501	45	37019	4.80	ug/L		93
20) 1,1-Dichloroethane	4.580	63	81941	20.21	ug/L		98
21) Acrylonitrile	4.635	53	30748	20.19	ug/L		100
22) Ethyl-tert-butyl ether...	4.866	59	36451	4.97	ug/L		100
23) c-1,2-Dichloroethene	5.128	61	66586	20.34	ug/L		93
24) 2,2-Dichloropropane	5.237	77	70234	18.80	ug/L		95
25) Bromochloromethane	5.329	49	38455	19.00	ug/L		88
26) Chloroform	5.414	83	89966	20.19	ug/L		97
27) Carbon Tetrachloride	5.554	117	64614	20.18	ug/L		95
28) Tetrahydrofuran	5.584	42	27011	18.64	ug/L		91
29) 1,1,1-Trichloroethane	5.615	97	82675	20.14	ug/L		98
31) 1,1-Dichloropropene	5.749	75	69337	20.49	ug/L		98
32) 2-Butanone (MEK)	5.730	43	82645	35.24	ug/L		96
33) Benzene	5.998	78	222160	20.52	ug/L		98
34) tert-Amyl methyl ether...	6.144	73	35693	5.07	ug/L		97
35) 1,2-Dichloroethane (EDC)	6.205	62	73392	19.13	ug/L		97
36) iso-Butyl Alcohol	6.278	43	113483	448.31	ug/L		94
38) Trichloroethene (TCE)	6.618	130	58446	22.96	ug/L		98
39) tert-Amyl ethyl ether ...	6.898	59	24751	5.08	ug/L		99
40) Dibromomethane	7.056	93	33060	21.73	ug/L		98
41) 1,2-Dichloropropane	7.166	63	51679	20.29	ug/L		90
42) Bromodichloromethane	7.245	83	62998	20.90	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	72716	18.84	ug/L		97
46) Toluene	8.218	91	233869	19.32	ug/L		98
47) Tetrachloroethene (PCE)	8.669	166	61102	21.77	ug/L		98
48) 4-Methyl-2-Pentanone (...	8.656	43	122716	33.94	ug/L		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011722.D
Acq On : 17 Jan 2020 6:55 pm
Operator : IMA
Sample : 0010544-BS3
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 20 10:32:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

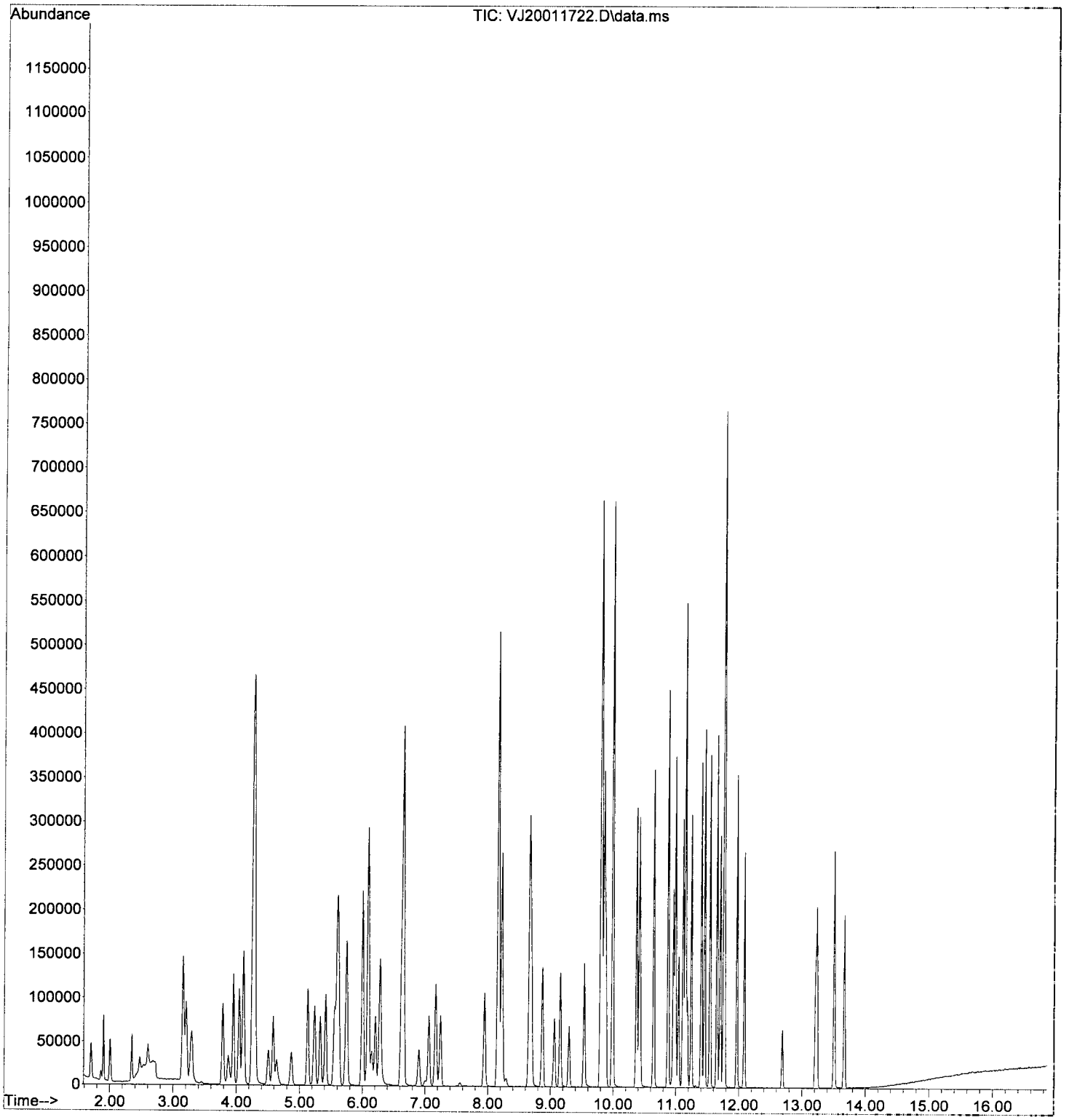
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	75128	20.40	ug/L		97
50) 1,1,2-Trichloroethane	8.869	97	50533	20.26	ug/L		95
51) Dibromochloromethane	9.058	129	46442	20.11	ug/L		99
52) 1,3-Dichloropropane	9.155	76	84915	19.91	ug/L		95
53) 1,2-Dibromoethane (EDB)	9.295	107	52044	20.94	ug/L		100
54) 2-Hexanone	9.533	43	89595	32.41	ug/L		99
55) Chlorobenzene	9.812	112	147839	20.17	ug/L		100
56) Ethylbenzene	9.849	91	243020	19.87	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.879	131	51268	20.89	ug/L		98
58) m,p-Xylenes (2)	9.989	91	365148	42.51	ug/L		99
59) o-Xylene	10.372	91	172526	21.62	ug/L		99
60) Styrene	10.415	104	129170	19.23	ug/L		94
61) Bromoform	10.433	173	34767	21.59	ug/L		95
62) Isopropylbenzene	10.646	105	221888	21.12	ug/L		99
65) Bromobenzene	10.956	156	61040	21.20	ug/L		95
66) n-Propylbenzene	10.986	91	255601	19.19	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	64166	19.00	ug/L		98
68) 2-Chlorotoluene	11.108	126	52041	20.81	ug/L		99
69) 1,3,5-Trimethylbenzene	11.145	105	189356	21.14	ug/L		97
70) 1,2,3-Trichloropropane	11.145	110	24058	18.87	ug/L	#	84
71) t-1,4-Dichloro-2-butene	11.181	88	9612	17.51	ug/L	#	87
72) 4-Chlorotoluene	11.242	91	153916	20.09	ug/L		98
73) tert-Butylbenzene	11.400	91	96506	19.40	ug/L		99
74) 1,2,4-Trimethylbenzene	11.455	105	192075	21.54	ug/L		99
75) sec-Butylbenzene	11.540	105	222730	20.73	ug/L		99
76) 4-Isopropyltoluene	11.650	119	190173	21.64	ug/L		100
77) 1,3-Dichlorobenzene	11.704	146	108371	21.06	ug/L		99
78) 1,4-Dichlorobenzene	11.771	146	108283	19.44	ug/L		98
79) n-Butylbenzene	11.966	91	156506	19.06	ug/L		97
80) 1,2-Dichlorobenzene	12.088	146	97358	20.74	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	16902	18.11	ug/L		94
82) Hexachlorobutadiene	13.213	223	15516	20.41	ug/L		97
83) 1,2,4-Trichlorobenzene	13.237	180	61107	21.05	ug/L		98
84) Naphthalene	13.505	128	201646	18.31	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	62704	21.29	ug/L		98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011722.D
Acq On : 17 Jan 2020 6:55 pm
Operator : IMA
Sample : 0010544-BS3
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 20 10:32:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011723.D
Acq On : 17 Jan 2020 7:22 pm
Operator : IMA
Sample : 0010544-BS4
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 23 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	109	0.00
2		Dichlorodifluoromethane	20.000	16.180	19.1	96	-0.01
3	P	Chloromethane	20.000	18.043	9.8	105	-0.01
4	C	Vinyl Chloride	20.000	19.077	4.6	105	-0.01
5		Bromomethane	20.000	20.283	-1.4	112	0.00
6		Chloroethane	20.000	19.123	4.4	115	0.00
7		Trichlorofluoromethane	20.000	18.383	8.1	103	-0.01
8		Ethanol	1250.000	1075.782	13.9	97	0.02
9	C	1,1-Dichloroethene	20.000	18.952	5.2	107	-0.01
10		Carbon Disulfide	20.000	19.278	3.6	112	-0.02
11		Freon 113	20.000	19.851	0.7	107	-0.02
12		Iodomethane	20.000	27.108	# -35.5#	169	-0.02 Q56
13		Methylene Chloride	20.000	20.447	-2.2	114	-0.01
14		Acetone	40.000	37.566	6.1	111	0.00
15		t-1,2-Dichloroethene	20.000	19.664	1.7	109	-0.01
16		n-Hexane	20.000	20.957	-4.8	110	-0.01
17		Methyl-tert-butyl-ether	20.000	20.057	-0.3	110	0.00
18		tert-Butanol (TBA)	1250.000	1272.797	-1.8	105	0.00
19		Diisopropyl ether (DIPE)	5.000	4.786	4.3	98	0.00
20	P	1,1-Dichloroethane	20.000	19.992	0.0	108	-0.01
21		Acrylonitrile	20.000	20.223	-1.1	106	0.00
22		Ethyl-tert-butyl ether (ETB	5.000	4.853	2.9	96	0.00
23		c-1,2-Dichloroethene	20.000	20.667	-3.3	108	0.00
24		2,2-Dichloropropane	20.000	19.291	3.5	104	0.00
25		Bromochloromethane	20.000	19.176	4.1	103	0.00
26	C	Chloroform	20.000	20.560	-2.8	112	0.00
27		Carbon Tetrachloride	20.000	20.779	-3.9	112	0.00
28		Tetrahydrofuran	20.000	19.417	2.9	105	0.00
29		1,1,1-Trichloroethane	20.000	20.824	-4.1	109	0.00
30	S	Dibromofluoromethane (S)	50.000	51.600	-3.2	115	0.00
31		1,1-Dichloropropene	20.000	21.116	-5.6	110	0.00
32		2-Butanone (MEK)	40.000	35.315	11.7	103	0.00
33		Benzene	20.000	21.069	-5.3	114	0.00
34		tert-Amyl methyl ether (TAM	5.000	5.121	-2.4	115	-0.01
35		1,2-Dichloroethane (EDC)	20.000	19.460	2.7	105	0.00
36		iso-Butyl Alcohol	500.000	450.604	9.9	103	0.00
37	S	1,4-Difluorobenzene (S)	50.000	53.559	-7.1	118	0.00
38		Trichloroethene (TCE)	20.000	23.658	-18.3	124	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	5.187	-3.7	110	0.00
40		Dibromomethane	20.000	21.778	-8.9	115	0.00
41	C	1,2-Dichloropropane	20.000	20.619	-3.1	112	0.00
42		Bromodichloromethane	20.000	21.111	-5.6	111	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	120	0.00
44		c-1,3-Dichloropropene	20.000	19.108	4.5	106	0.00
45	S	Toluene-d8 (S)	50.000	47.481	5.0	112	0.00
46	C	Toluene	20.000	19.489	2.6	117	0.00
47		Tetrachloroethene (PCE)	20.000	22.243	-11.2	127	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	33.946	15.1	102	0.00
49		t-1,3-Dichloropropene	20.000	20.555	-2.8	112	0.00
50		1,1,2-Trichloroethane	20.000	19.962	0.2	118	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011723.D
Acq On : 17 Jan 2020 7:22 pm
Operator : IMA
Sample : 0010544-BS4
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 20 10:32:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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)
51		Dibromochloromethane	20.000	20.189	-0.9	121	0.00
52		1,3-Dichloropropane	20.000	19.770	1.2	115	0.00
53		1,2-Dibromoethane (EDB)	20.000	20.917	-4.6	123	0.00
54		2-Hexanone	40.000	31.850	OK 20.4#	102	0.00
55	P	Chlorobenzene	20.000	20.519	-2.6	123	0.00
56	C	Ethylbenzene	20.000	20.288	-1.4	117	0.00
57		1,1,1,2-Tetrachloroethane	20.000	20.710	-3.6	123	0.00
58		m,p-Xylenes (2)	40.000	43.315	-8.3	118	0.00
59		o-Xylene	20.000	21.929	-9.6	118	0.00
60		Styrene	20.000	19.441	2.8	124	0.00
61	P	Bromoform	20.000	21.703	-8.5	127	0.00
62		Isopropylbenzene	20.000	21.669	-8.3	122	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	123	0.00
64	S	4-Bromofluorobenzene (S)	50.000	52.147	-4.3	128	0.00
65		Bromobenzene	20.000	22.046	-10.2	131	0.00
66		n-Propylbenzene	20.000	20.304	-1.5	117	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	19.453	2.7	111	0.00
68		2-Chlorotoluene	20.000	21.936	-9.7	124	0.00
69		1,3,5-Trimethylbenzene	20.000	22.409	-12.0	121	0.00
70		1,2,3-Trichloropropane	20.000	19.987	0.1	116	0.00
71		t-1,4-Dichloro-2-butene	20.000	17.962	10.2	110	0.00
72		4-Chlorotoluene	20.000	21.088	-5.4	118	0.00
73		tert-Butylbenzene	20.000	20.497	-2.5	115	0.00
74		1,2,4-Trimethylbenzene	20.000	22.653	-13.3	121	0.00
75		sec-Butylbenzene	20.000	22.048	-10.2	120	0.00
76		4-Isopropyltoluene	20.000	22.843	-14.2	122	0.00
77		1,3-Dichlorobenzene	20.000	21.995	-10.0	126	0.00
78		1,4-Dichlorobenzene	20.000	20.213	-1.1	127	0.00
79		n-Butylbenzene	20.000	20.021	-0.1	116	0.00
80		1,2-Dichlorobenzene	20.000	21.603	-8.0	123	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	18.641	6.8	118	0.00
82		Hexachlorobutadiene	20.000	22.434	-12.2	129	0.00
83		1,2,4-Trichlorobenzene	20.000	21.991	-10.0	127	0.00
84		Naphthalene	20.000	19.019	4.9	120	0.00
85		1,2,3-Trichlorobenzene	20.000	22.316	-11.6	124	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011723.D
Acq On : 17 Jan 2020 7:22 pm
Operator : IMA
Sample : 0010544-BS4
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 23 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	117842	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	310075	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	148086	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	98229	51.60	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	368182	53.56	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	408135	47.48	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	119205	52.15	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	37112	16.18	ug/L		97
3) Chloromethane	1.886	50	60998	18.04	ug/L		98
4) Vinyl Chloride	1.989	62	48651	19.08	ug/L		95
5) Bromomethane	2.336	96	27534	20.28	ug/L		97
6) Chloroethane	2.457	64	11713	19.12	ug/L		98
7) Trichlorofluoromethane	2.585	101	16629	18.38	ug/L		99
8) Ethanol	3.285	45	80272	1075.78	ug/L		87
9) 1,1-Dichloroethene	3.139	61	54256	18.95	ug/L		91
10) Carbon Disulfide	3.145	76	99149	19.28	ug/L		97
11) Freon 113	3.187	101	42225	19.85	ug/L		97
12) Iodomethane	3.285	142	13461	27.11	ug/L		98
13) Methylene Chloride	3.771	84	49466	20.45	ug/L		95
14) Acetone	3.863	43	55982	37.57	ug/L		99
15) t-1,2-Dichloroethene	3.936	61	68953	19.66	ug/L		94
16) n-Hexane	4.033	86	11249	20.96	ug/L		98
17) Methyl-tert-butyl-ether	4.100	73	173214	20.06	ug/L		93
18) tert-Butanol (TBA)	4.264	59	848701	1272.80	ug/L	#	86
19) Diisopropyl ether (DIPE)	4.495	45	36810	4.79	ug/L		99
20) 1,1-Dichloroethane	4.568	63	80816	19.99	ug/L		99
21) Acrylonitrile	4.629	53	30700	20.22	ug/L		98
22) Ethyl-tert-butyl ether...	4.860	59	35505	4.85	ug/L		93
23) c-1,2-Dichloroethene	5.122	61	67443	20.67	ug/L		94
24) 2,2-Dichloropropane	5.232	77	71853	19.29	ug/L		93
25) Bromochloromethane	5.323	49	38698	19.18	ug/L		86
26) Chloroform	5.408	83	91324	20.56	ug/L		98
27) Carbon Tetrachloride	5.548	117	66331	20.78	ug/L		98
28) Tetrahydrofuran	5.584	42	28049	19.42	ug/L		93
29) 1,1,1-Trichloroethane	5.615	97	85210	20.82	ug/L		96
31) 1,1-Dichloropropene	5.743	75	71260	21.12	ug/L		99
32) 2-Butanone (MEK)	5.724	43	82572	35.32	ug/L		98
33) Benzene	5.992	78	227444	21.07	ug/L		99
34) tert-Amyl methyl ether...	6.138	73	35913	5.12	ug/L		97
35) 1,2-Dichloroethane (EDC)	6.199	62	74445	19.46	ug/L		98
36) iso-Butyl Alcohol	6.278	43	113728	450.60	ug/L		98
38) Trichloroethene (TCE)	6.613	130	60058	23.66	ug/L		99
39) tert-Amyl ethyl ether ...	6.892	59	25188	5.19	ug/L		94
40) Dibromomethane	7.051	93	33032	21.78	ug/L		100
41) 1,2-Dichloropropane	7.166	63	52358	20.62	ug/L		92
42) Bromodichloromethane	7.239	83	63449	21.11	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	74002	19.11	ug/L		95
46) Toluene	8.219	91	236740	19.49	ug/L		96
47) Tetrachloroethene (PCE)	8.669	166	62648	22.24	ug/L		98
48) 4-Methyl-2-Pentanone (...	8.657	43	123155	33.95	ug/L		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011723.D
Acq On : 17 Jan 2020 7:22 pm
Operator : IMA
Sample : 0010544-BS4
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 20 10:32:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

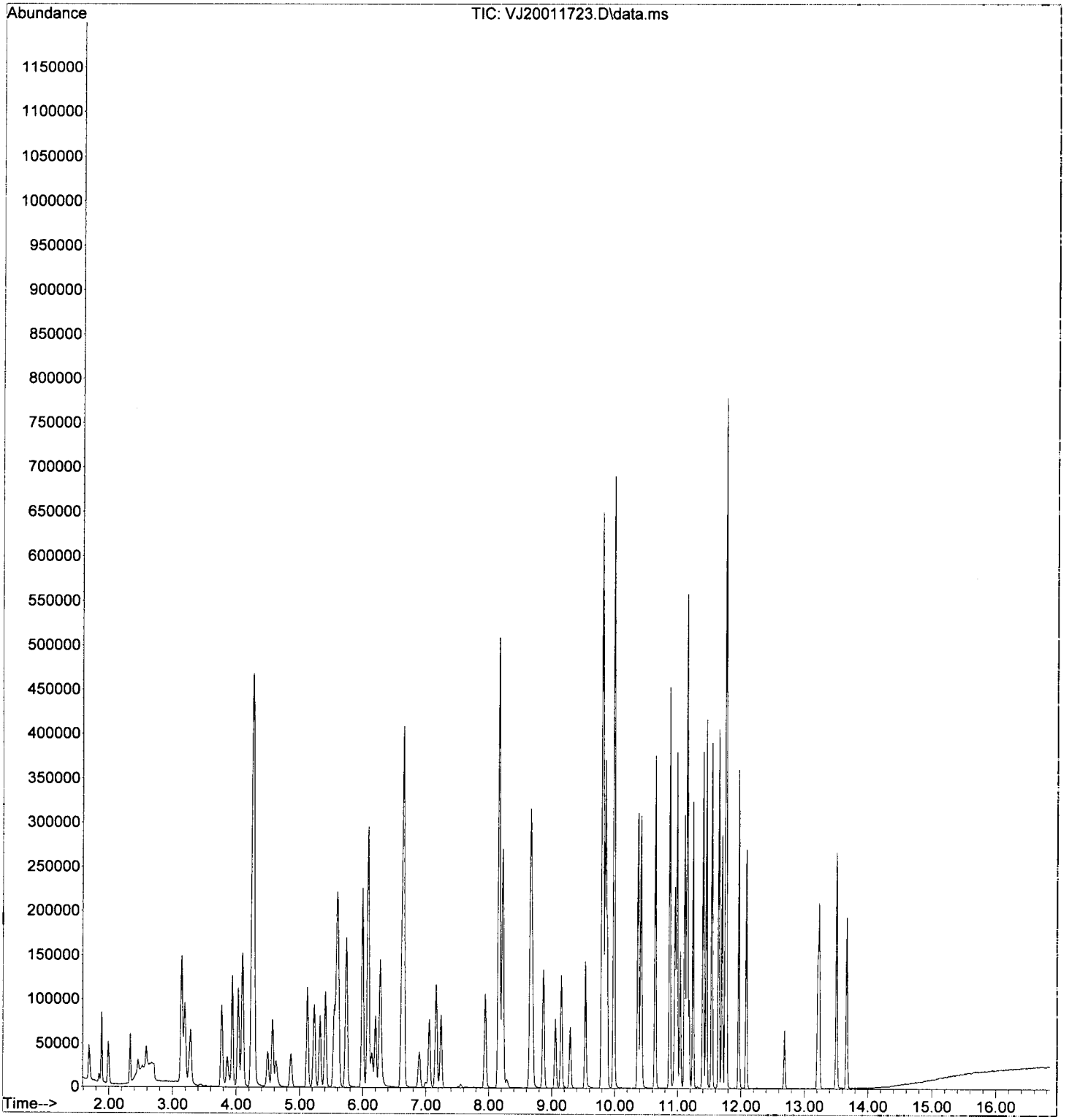
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	75943	20.56	ug/L		98
50) 1,1,2-Trichloroethane	8.870	97	49974	19.96	ug/L		97
51) Dibromochloromethane	9.058	129	46796	20.19	ug/L		100
52) 1,3-Dichloropropane	9.155	76	84619	19.77	ug/L		95
53) 1,2-Dibromoethane (EDB)	9.289	107	52176	20.92	ug/L		99
54) 2-Hexanone	9.533	43	88289	31.85	ug/L		97
55) Chlorobenzene	9.812	112	150952	20.52	ug/L		99
56) Ethylbenzene	9.849	91	249004	20.29	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.879	131	51006	20.71	ug/L		96
58) m,p-Xylenes (2)	9.989	91	373366	43.32	ug/L		99
59) o-Xylene	10.372	91	175569	21.93	ug/L		98
60) Styrene	10.415	104	131104	19.44	ug/L		93
61) Bromoform	10.427	173	35076	21.70	ug/L		95
62) Isopropylbenzene	10.646	105	228485	21.67	ug/L		99
65) Bromobenzene	10.956	156	61556	22.05	ug/L		96
66) n-Propylbenzene	10.987	91	262345	20.30	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	63709	19.45	ug/L		98
68) 2-Chlorotoluene	11.108	126	53212	21.94	ug/L		98
69) 1,3,5-Trimethylbenzene	11.145	105	194728	22.41	ug/L		96
70) 1,2,3-Trichloropropane	11.145	110	24719	19.99	ug/L		85
71) t-1,4-Dichloro-2-butene	11.181	88	9564	17.96	ug/L	#	86
72) 4-Chlorotoluene	11.242	91	156708	21.09	ug/L		97
73) tert-Butylbenzene	11.400	91	98902	20.50	ug/L		99
74) 1,2,4-Trimethylbenzene	11.455	105	195906	22.65	ug/L		99
75) sec-Butylbenzene	11.540	105	229735	22.05	ug/L		98
76) 4-Isopropyltoluene	11.650	119	194728	22.84	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	109797	22.00	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	109189	20.21	ug/L		99
79) n-Butylbenzene	11.966	91	159464	20.02	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	98384	21.60	ug/L		97
81) 1,2-Dibromo-3-Chloropr...	12.690	157	16891	18.64	ug/L		90
82) Hexachlorobutadiene	13.213	223	16541	22.43	ug/L		95
83) 1,2,4-Trichlorobenzene	13.238	180	61908	21.99	ug/L		98
84) Naphthalene	13.505	128	203324	19.02	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	63740	22.32	ug/L		97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011723.D
Acq On : 17 Jan 2020 7:22 pm
Operator : IMA
Sample : 0010544-BS4
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 20 10:32:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**0A17017**	Instrument:	**VOA-GCMS10**
Date:	**01/17/20 09:11**	Calibration:	**A0A0801**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A17017-IBL1	Soil	QC	QC			A19L200	
2	0A17017-TUN1	Soil	QC	QC			A19L200	
3	0A17017-CCV1	Soil	QC	QC			A19L200	
4	0010530-BS1	Soil	QC	QC		0010530	A19L200	
5	0A17017-CCV2	Soil	QC	QC			A19L200	
6	0010530-BS2	Soil	QC	QC		0010530	A19L200	
7	0010530-BLK1	Soil	QC	QC		0010530	A19L200	
8	A0A0547-01	Soil	8260C Full List		01/17/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/17/20	0010530	A19L200	
9	A0A0539-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
10	0010530-DUP1	Soil	QC	QC		0010530	A19L200	
11	A0A0538-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
12	0010530-MS1	Soil	QC	QC		0010530	A19L200	
13	0A17017-IBL2	Soil	QC	QC			A19L200	
14	A0A0539-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
15	A0A0507-03	Soil	8260C BTEX+N		01/20/20	0010530	A19L200	
16	A0A0538-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
17	0A17017-IBL3	Soil	QC	QC			A19L200	
18	0A17017-IBL4	Soil	QC	QC			A19L200	
19	A0A0436-03	Soil	8260C BTEX		01/20/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/20/20	0010530	A19L200	
20	0A17017-IBL5	Soil	QC	QC			A19L200	
21	0010544-BLK1	Soil	QC	QC		0010544	A19L200	
22	0010544-BS1	Soil	QC	QC		0010544	A19L200	
23	0010544-BS2	Soil	QC	QC		0010544	A19L200	
24	0010544-BS3	Soil	QC	QC		0010544	A19L200	
25	0010544-BS4	Soil	QC	QC		0010544	A19L200	
26	0010545-BLK1	Soil	QC	QC		0010545	A19L200	
27	0010545-BS1	Soil	QC	QC		0010545	A19L200	
28	0010545-BS2	Soil	QC	QC		0010545	A19L200	
29	0010545-BS3	Soil	QC	QC		0010545	A19L200	
30	0010545-BS4	Soil	QC	QC		0010545	A19L200	
31	0A17017-IBL6	Soil	QC	QC			A19L200	

Data Entered By: IMA 1/22/20

Data Reviewed By: [illegible] 1/27/20

Comments:

↑ 12DCPA to 1/2 ppb

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011724.D
Acq On : 17 Jan 2020 7:49 pm
Operator : IMA
Sample : 0010545-BLK1
Misc : 50X 7.5mL/5mL 1000uL/50mL DI+MeOH
ALS Vial : 24 Sample Multiplier: 1

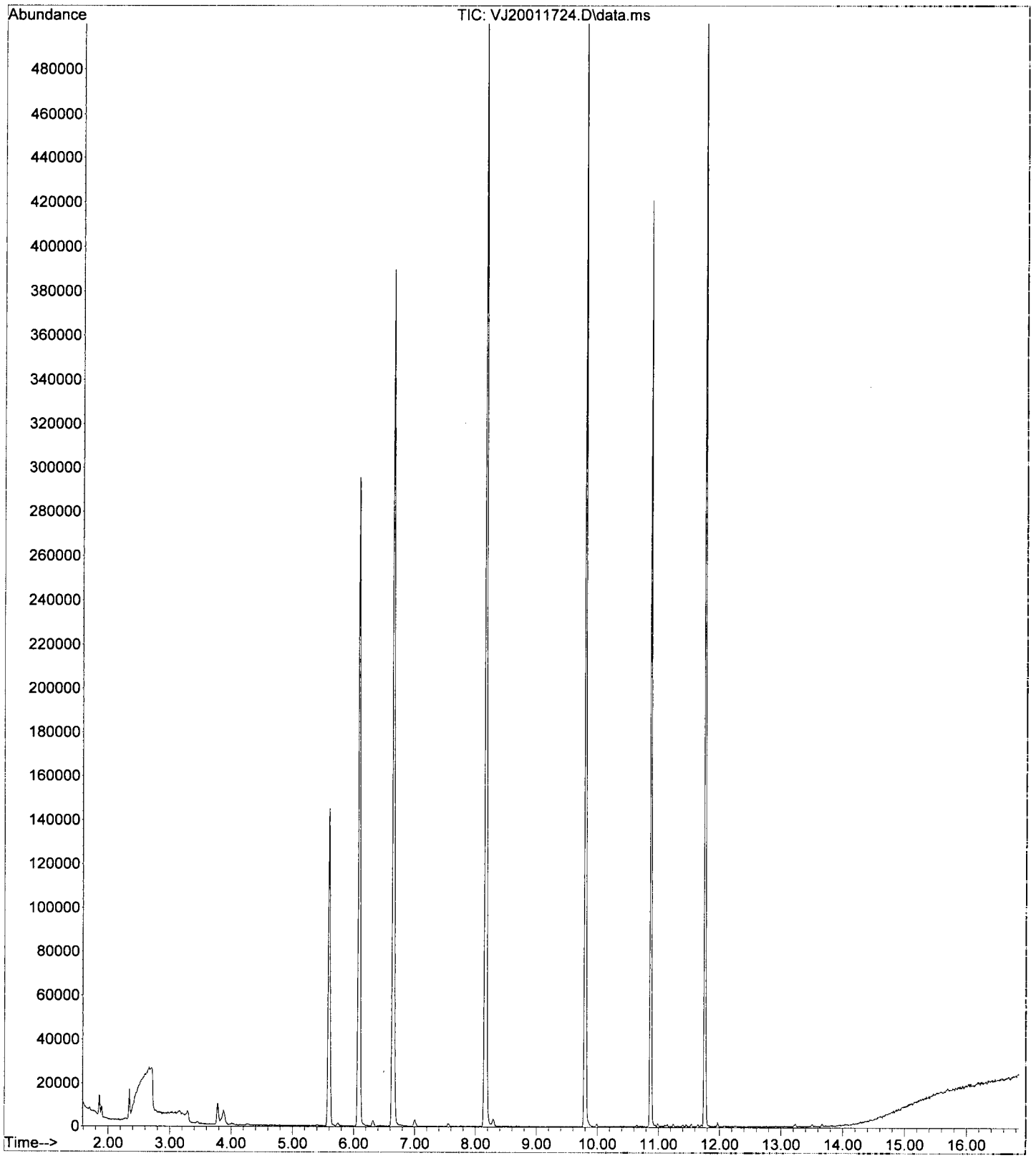
IMA
1/20/20

Quant Time: Jan 20 16:40:02 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	236537	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	364701	47.82	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.871	174	112920	50.41	ug/L	-0.01
9) Toluene-d8 (NR)	8.164	98	403896	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	301540	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	213309	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	70102m	26.06	ug/L	<MDL
5) TPHg (C5-C9)	9.239	TIC	433593m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	370384m	17.67	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	443931m	Below Cal		

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

File :C:\msdchem\1\data\2020-01\0A17017\VJ20011724.D
Operator : IMA
Acquired : 17 Jan 2020 7:49 pm using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010545-BLK1
Misc Info : 50X 7.5mL/5mL 1000uL/50mL DI+MeOH
Vial Number: 24



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011725.D
Acq On : 17 Jan 2020 8:15 pm
Operator : IMA
Sample : 0010545-BS1
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 25 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:40:11 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 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 (IS)	50.000	50.000	0.0	121	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	47.137	5.7	114	-0.01
3	S	4-Bromofluorobenzene (Sur)	50.000	50.054	-0.1	123	-0.01
4	H	NWTPH-Gx (TPH)	500.000	417.550	16.5	107	0.00
5	H	TPHg (C5-C9)	500.000	387.262	22.5	102	0.00
6	H	TPHg (C6-C10)	500.000	414.019	17.2	104	0.00
7	H	CA-LUFT (C5-C12)	500.000	390.527	21.9	103	0.00
8		Benzene (NR)	-1.000	0.000	0.0	112	-0.01
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	110	-0.01
10		Toluene (NR)	-1.000	0.000	0.0	110	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	113	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	123	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	124	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011725.D
Acq On : 17 Jan 2020 8:15 pm
Operator : IMA
Sample : 0010545-BS1
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 25 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:40:11 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

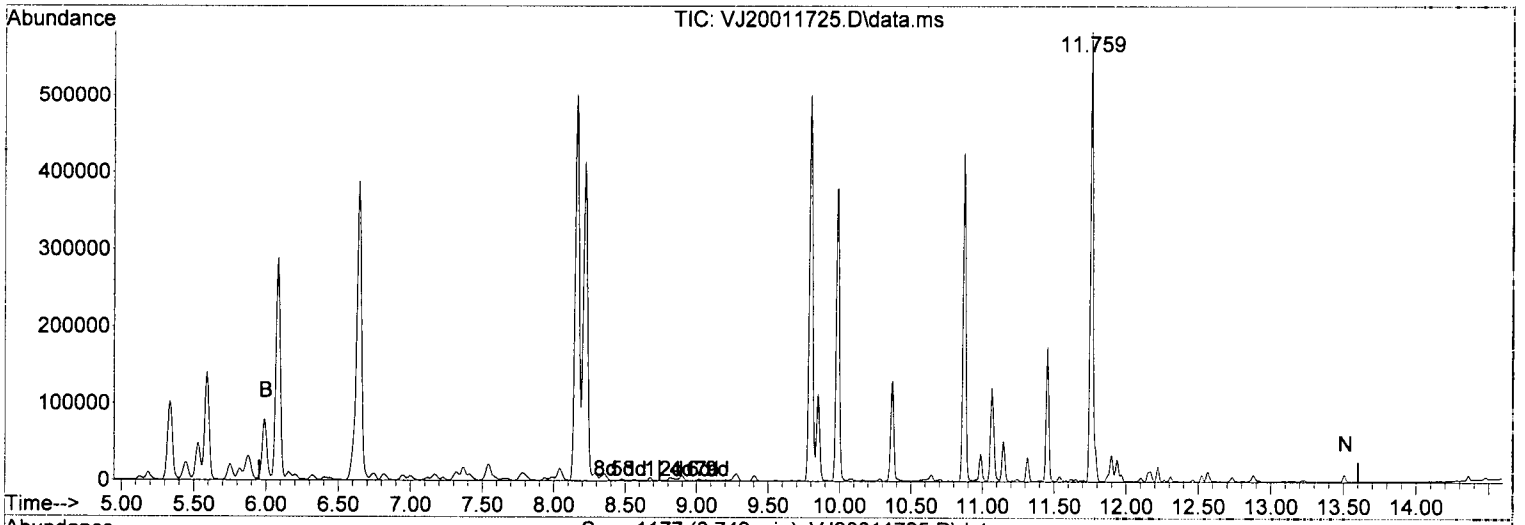
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	233640	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.643	114	355074	47.14	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.871	174	110757	50.05	ug/L	-0.01
9) Toluene-d8 (NR)	8.158	98	393871	0.00	ug/L	-0.01
11) Chlorobenzene-d5 (NR)	9.800	117	289468	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	217051	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3521758m	417.55	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4712547m	387.26	ug/L	
6) TPHg (C6-C10)	9.239	TIC	4110300m	414.02	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5572864m	390.53	ug/L	

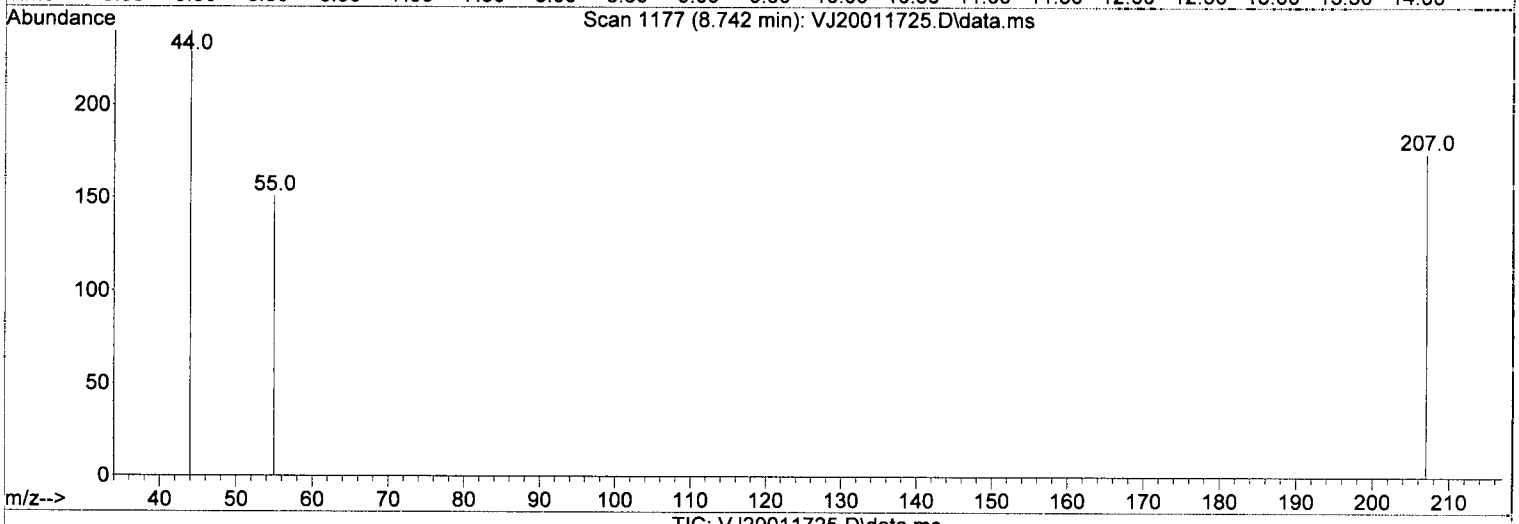
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011725.D
Acq On : 17 Jan 2020 8:15 pm
Operator : IMA
Sample : 0010545-BS1
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 20 16:40:11 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011725.D\data.ms

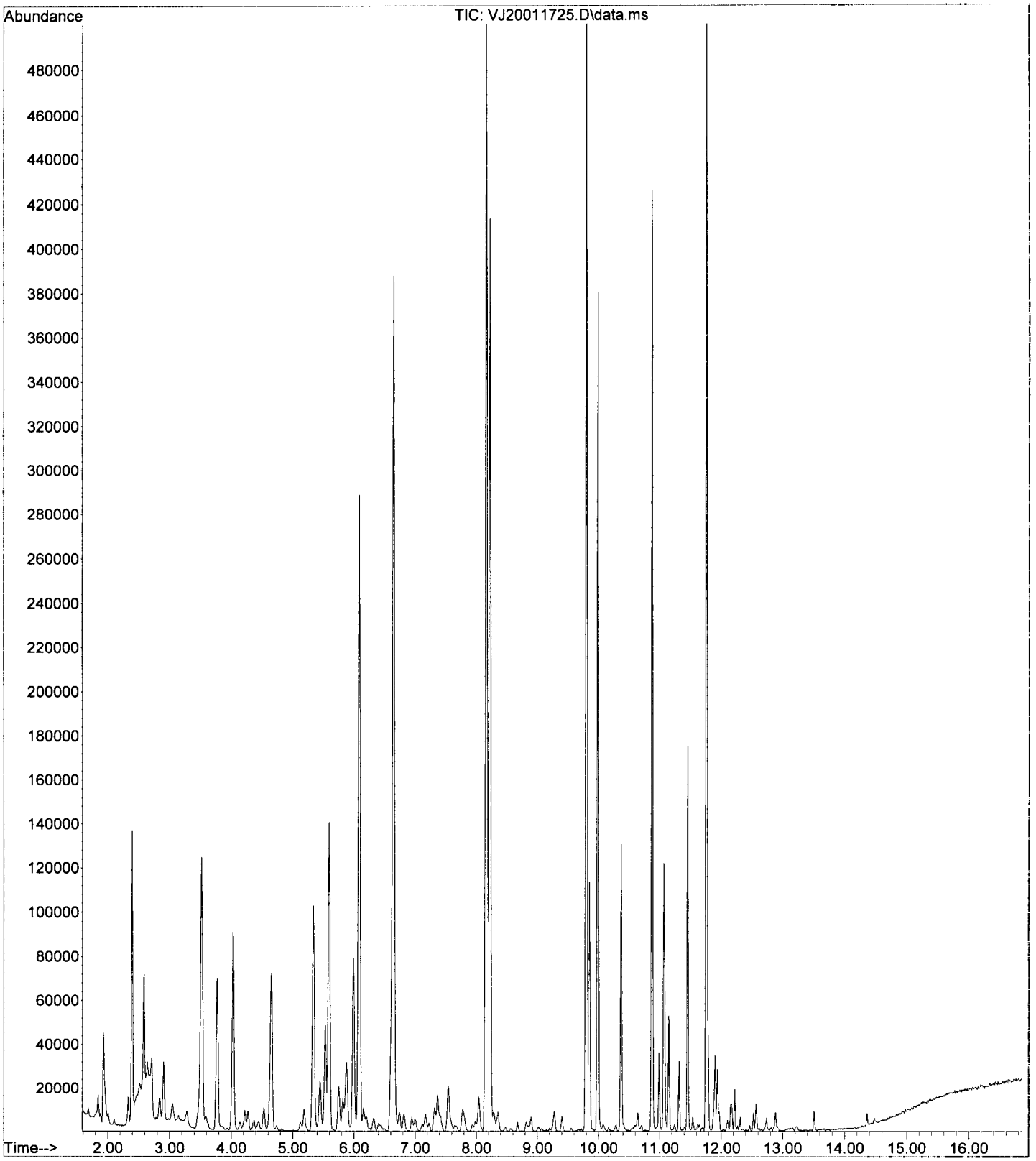
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 417.55 ug/L m

response 3521758

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\2020-01\0A17017\VJ20011725.D
Operator : IMA
Acquired : 17 Jan 2020 8:15 pm using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010545-BS1
Misc Info : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 25



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011726.D
Acq On : 17 Jan 2020 8:42 pm
Operator : IMA
Sample : 0010545-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 26 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:40:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 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 (IS)	50.000	50.000	0.0	118	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	47.023	6.0	111	-0.01
3	S	4-Bromofluorobenzene (Sur)	50.000	49.146	1.7	118	0.00
4	H	NWTPH-Gx (TPH)	500.000	416.969	16.6	104	0.00
5	H	TPHg (C5-C9)	500.000	383.578	23.3	99	0.00
6	H	TPHg (C6-C10)	500.000	405.922	18.8	100	0.00
7	H	CA-LUFT (C5-C12)	500.000	390.334	21.9	100	0.00
8		Benzene (NR)	-1.000	0.000	0.0	109	-0.01
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	106	-0.01
10		Toluene (NR)	-1.000	0.000	0.0	107	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	110	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	117	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	113	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011726.D
Acq On : 17 Jan 2020 8:42 pm
Operator : IMA
Sample : 0010545-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 26 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:40:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

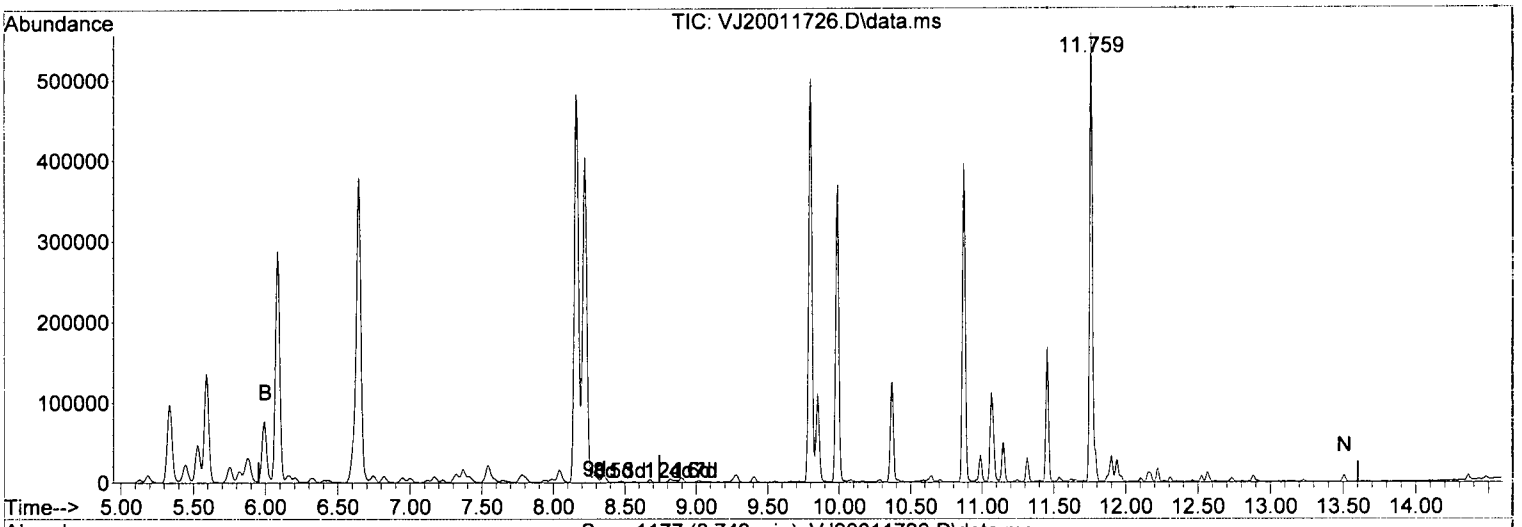
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	227886	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.643	114	345492	47.02	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.877	174	106070	49.15	ug/L	0.00
9) Toluene-d8 (NR)	8.158	98	381542	0.00	ug/L	-0.01
11) Chlorobenzene-d5 (NR)	9.800	117	282712	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	206706	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3430019m	416.97	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4557486m	383.58	ug/L	
6) TPHg (C6-C10)	9.239	TIC	3934479m	405.92	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5433143m	390.33	ug/L	

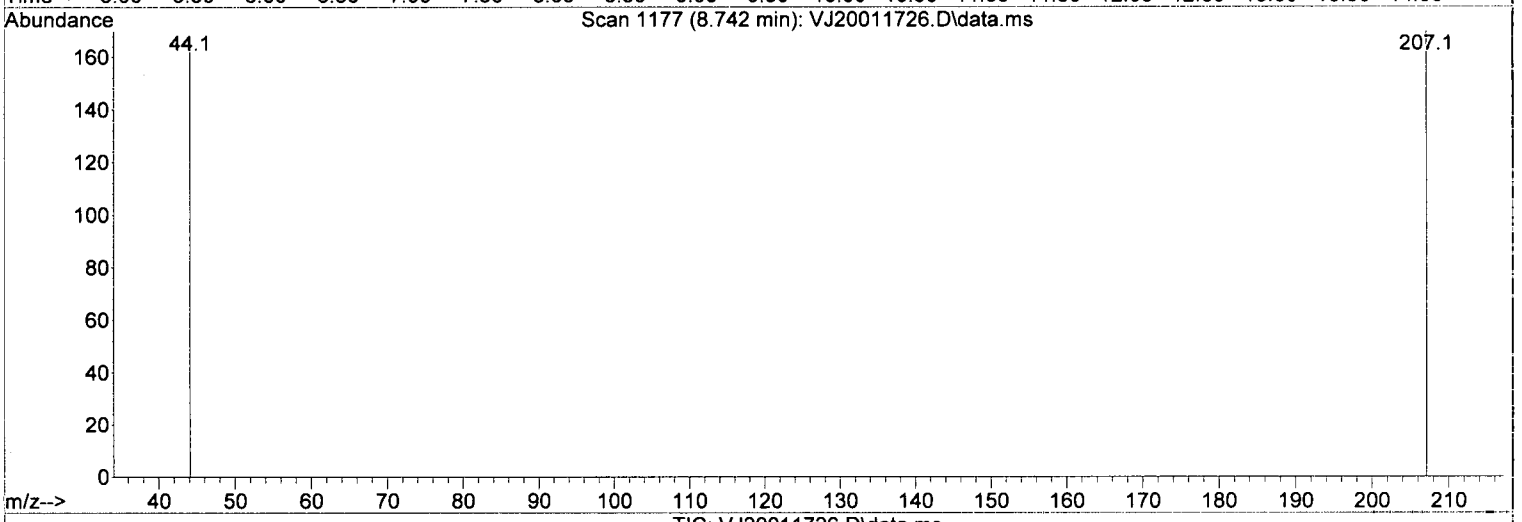
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011726.D
Acq On : 17 Jan 2020 8:42 pm
Operator : IMA
Sample : 0010545-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 20 16:40:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011726.D\data.ms

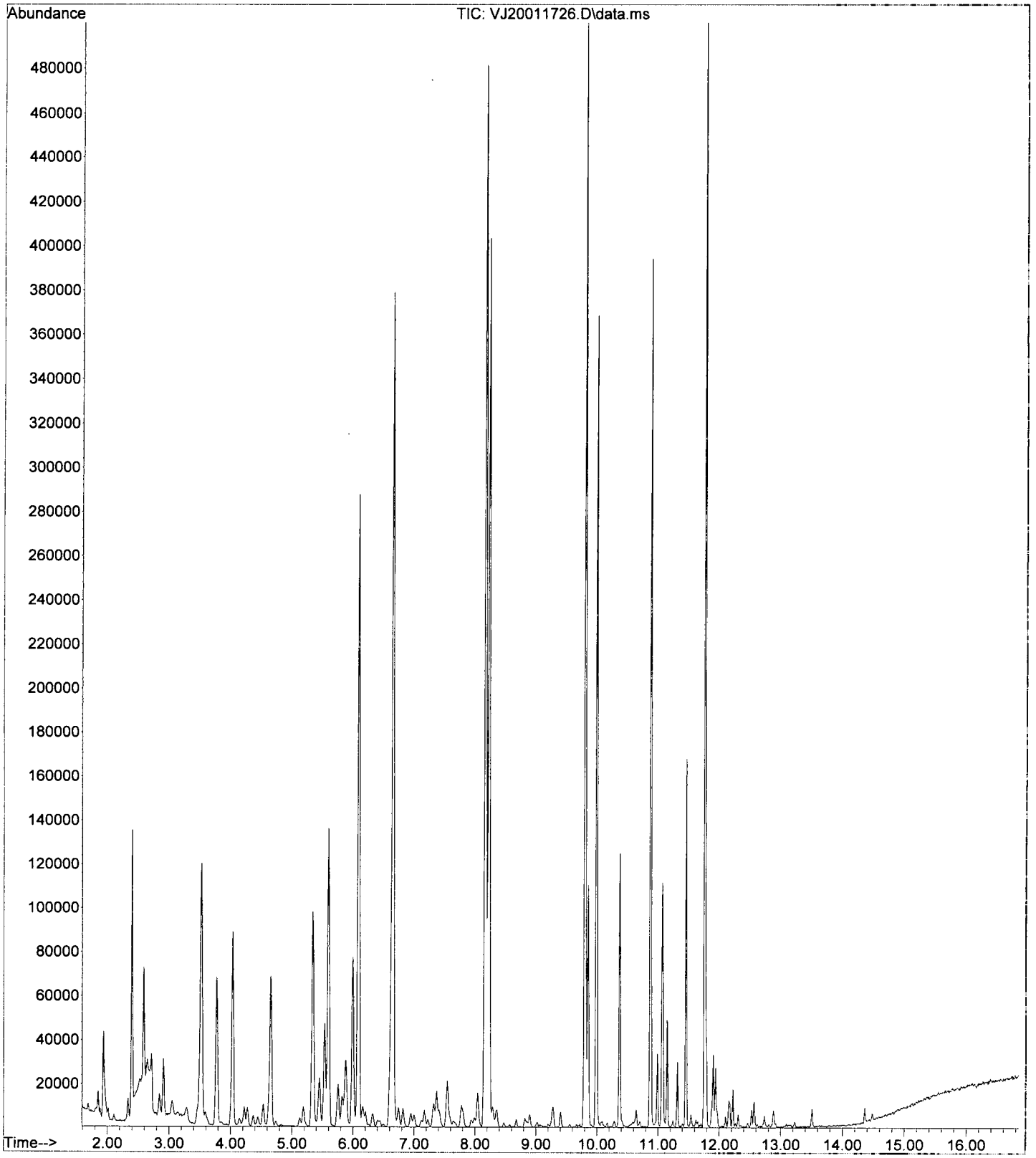
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 416.97 ug/L m

response 3430019

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\2020-01\0A17017\VJ20011726.D
Operator : IMA
Acquired : 17 Jan 2020 8:42 pm using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010545-BS2
Misc Info : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 26



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011727.D
Acq On : 17 Jan 2020 9:09 pm
Operator : IMA
Sample : 0010545-BS3
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 20 16:40:57 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

IMA
1/20/20

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 (IS)	50.000	50.000	0.0	119	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	47.136	5.7	112	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	50.012	-0.0	121	0.00
4	H	NWTPH-Gx (TPH)	500.000	430.637	13.9	108	0.00
5	H	TPHg (C5-C9)	500.000	400.533	19.9	104	0.00
6	H	TPHg (C6-C10)	500.000	426.424	14.7	106	0.00
7	H	CA-LUFT (C5-C12)	500.000	404.863	19.0	105	0.00
8		Benzene (NR)	-1.000	0.000	0.0	108	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	109	0.00
10		Toluene (NR)	-1.000	0.000	0.0	109	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	113	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	119	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	114	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011727.D
Acq On : 17 Jan 2020 9:09 pm
Operator : IMA
Sample : 0010545-BS3
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 27 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:40:57 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

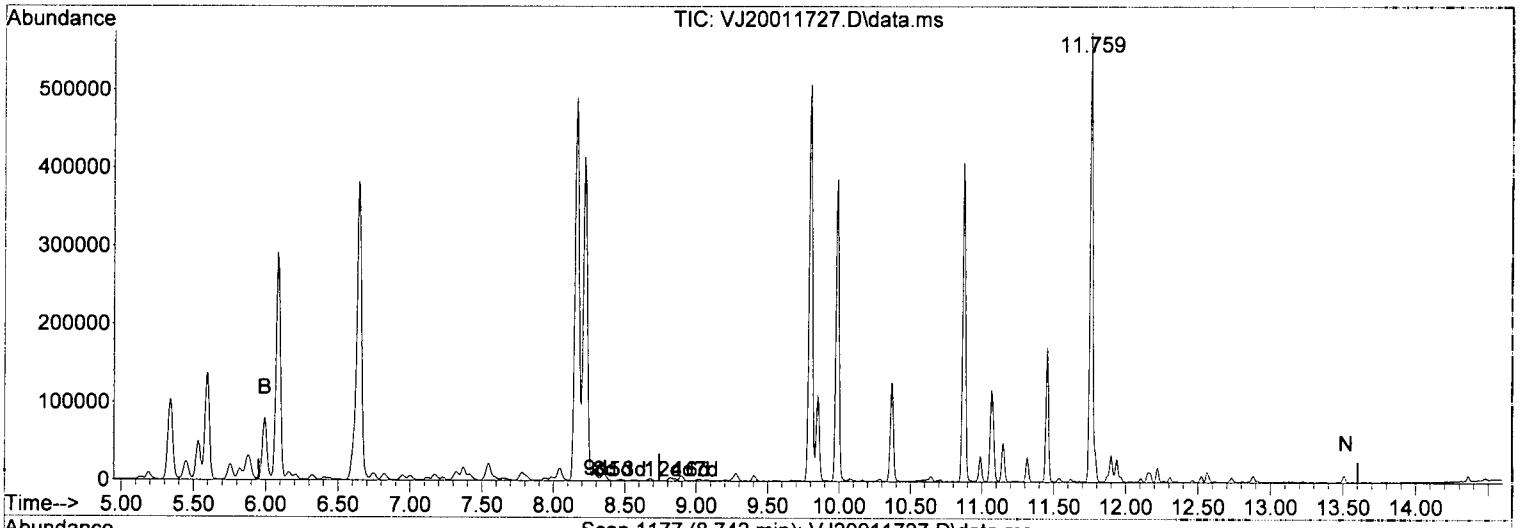
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	229890	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	349366	47.14	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	108889	50.01	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	389487	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	288350	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	210745	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3579073m	430.64	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4778624m	400.53	ug/L	
6) TPHg (C6-C10)	9.239	TIC	4159613m	426.42	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5668804m	404.86	ug/L	

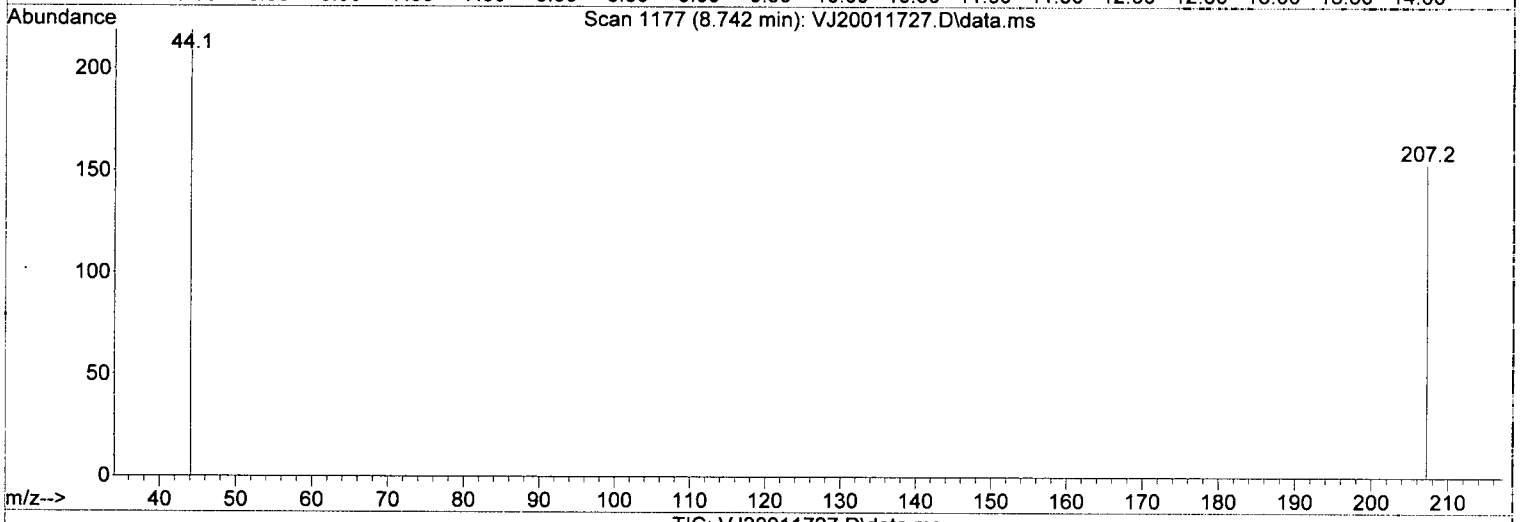
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011727.D
Acq On : 17 Jan 2020 9:09 pm
Operator : IMA
Sample : 0010545-BS3
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 20 16:40:57 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011727.D\data.ms

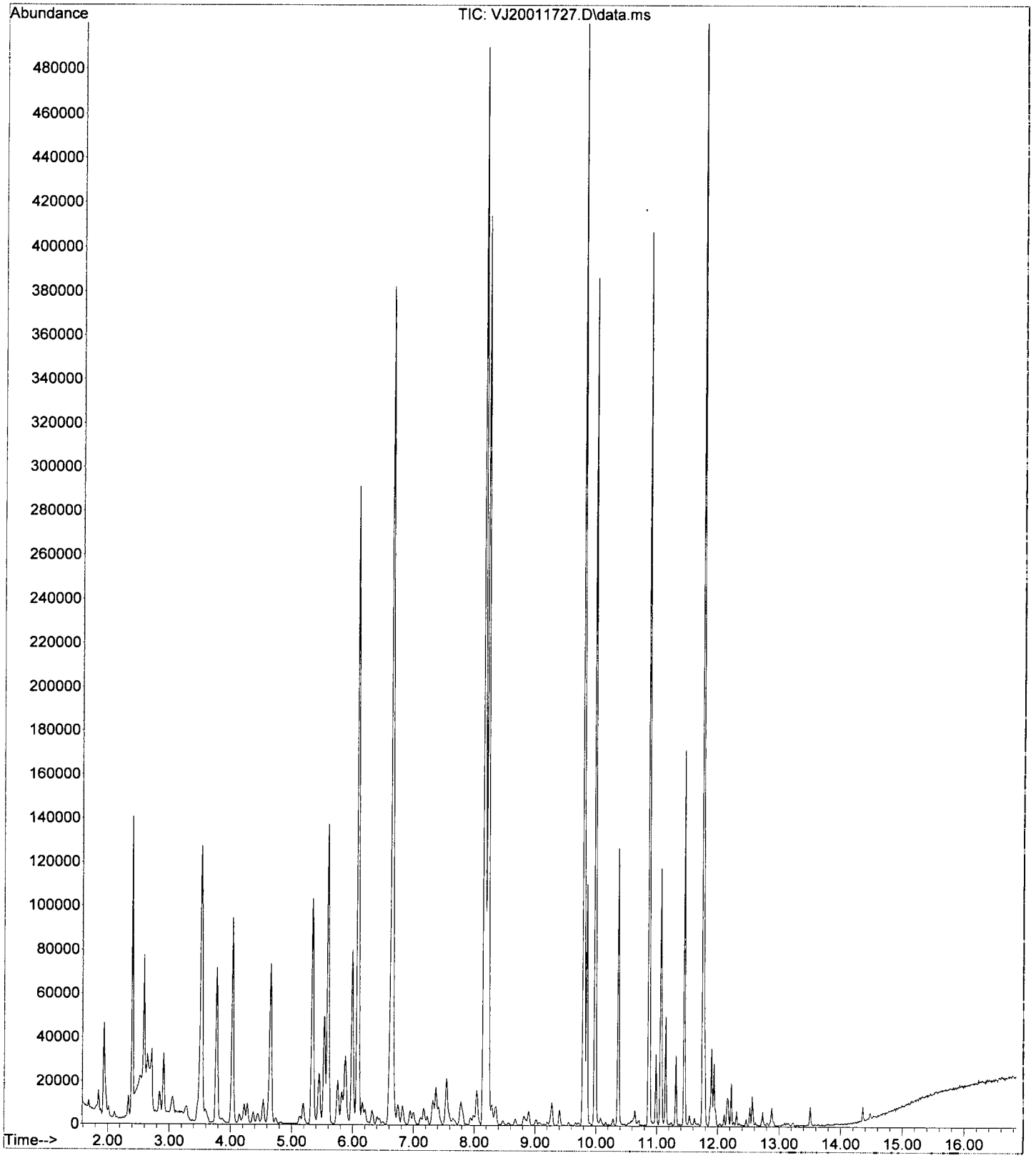
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 430.64 ug/L m

response 3579073

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\2020-01\0A17017\VJ20011727.D
Operator : IMA
Acquired : 17 Jan 2020 9:09 pm using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010545-BS3
Misc Info : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 27



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011728.D
Acq On : 17 Jan 2020 9:36 pm
Operator : IMA
Sample : 0010545-BS4
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 28 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:41:22 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 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 (IS)	50.000	50.000	0.0	118	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	47.496	5.0	112	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	52.102	-4.2	124	-0.01
4	H	NWTPH-Gx (TPH)	500.000	421.758	15.6	105	0.00
5	H	TPHg (C5-C9)	500.000	412.135	17.6	105	0.00
6	H	TPHg (C6-C10)	500.000	418.838	16.2	103	0.00
7	H	CA-LUFT (C5-C12)	500.000	411.513	17.7	105	0.00
8		Benzene (NR)	-1.000	0.000	0.0	105	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	107	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	114	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	122	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	114	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011728.D
Acq On : 17 Jan 2020 9:36 pm
Operator : IMA
Sample : 0010545-BS4
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 28 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:41:22 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

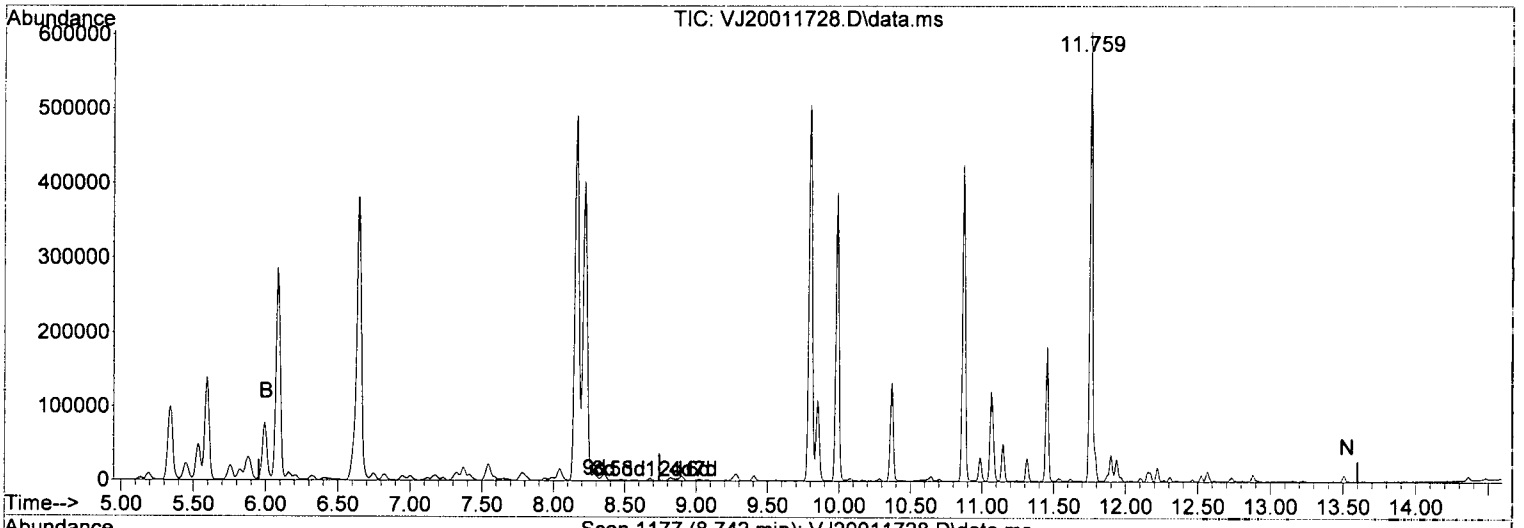
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	226760	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	347245	47.50	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.871	174	111895	52.10	ug/L	-0.01
9) Toluene-d8 (NR)	8.164	98	388498	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	291459	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	216746	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3454156m	421.76	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4835781m	412.14	ug/L	
6) TPHg (C6-C10)	9.239	TIC	4033441m	418.84	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5676446m	411.51	ug/L	

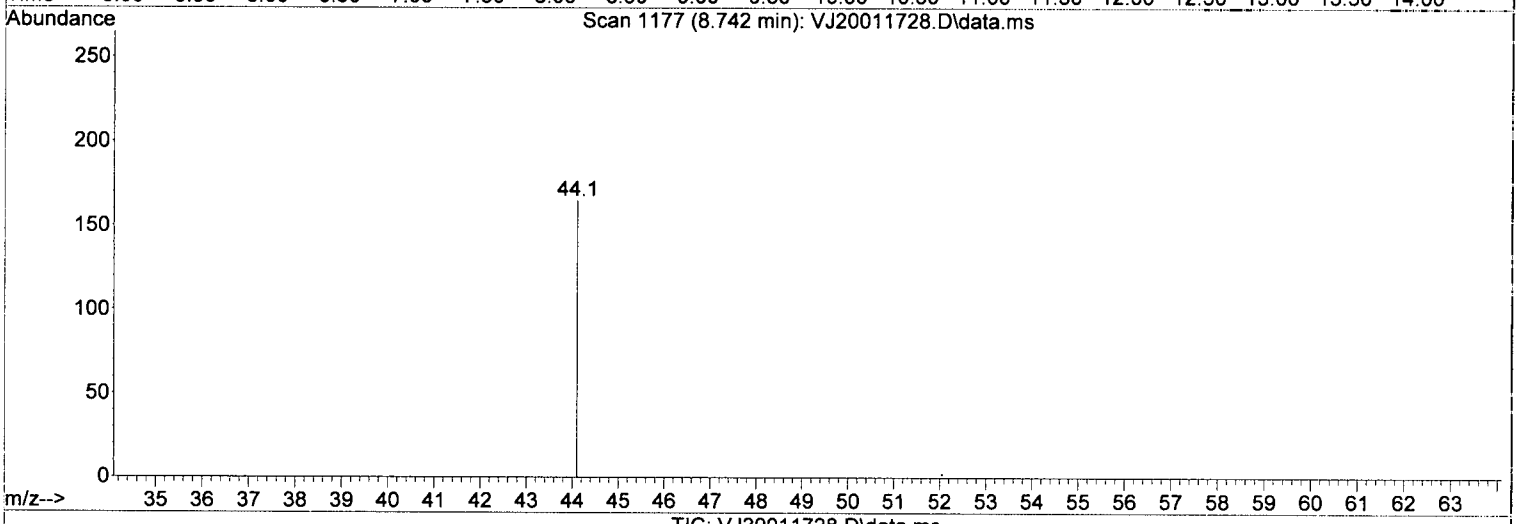
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011728.D
Acq On : 17 Jan 2020 9:36 pm
Operator : IMA
Sample : 0010545-BS4
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 20 16:41:22 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011728.D\data.ms

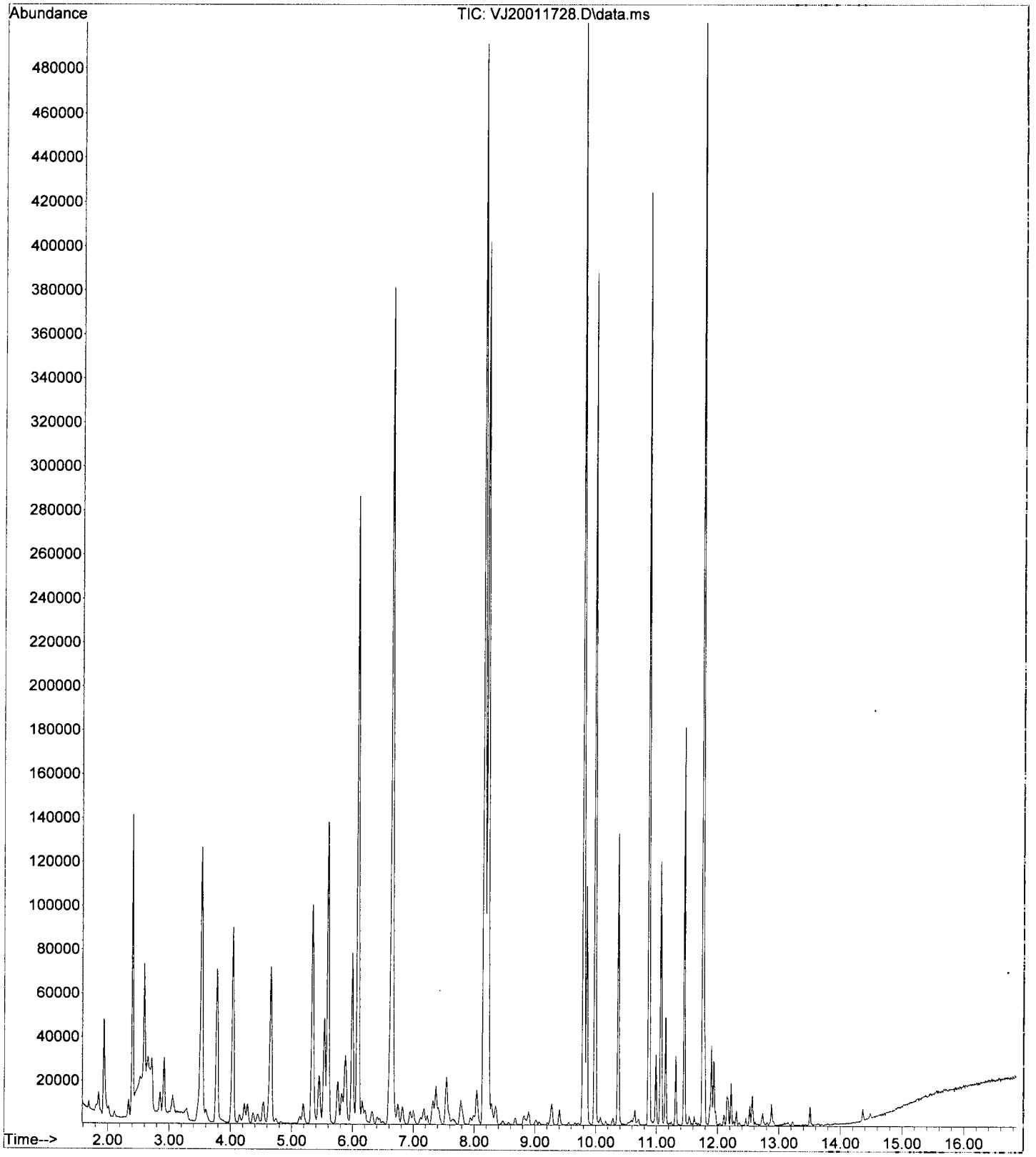
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 421.76 ug/L m

response 3454156

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\2020-01\0A17017\VJ20011728.D
Operator : IMA
Acquired : 17 Jan 2020 9:36 pm using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010545-BS4
Misc Info : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 28



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

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx
Calibration Data

Sequence 0A06051 (Cal ID A0A0801) VOA-GCMS10

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **0A06051** Instrument: **VOA-GCMS10**

Date: **01/06/20 15:15** Calibration: **A0A0801**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A06051-IBL1	Soil	QC	QC			A19L200	
2	0A06051-TUN1	Soil	QC	QC			A19L200	
3	0A06051-ICB1	Soil	QC	QC			A19L200	
4	0A06051-CAL1	Soil	QC	QC			A19L200	A19L304
5	0A06051-CAL2	Soil	QC	QC			A19L200	A19L305
6	0A06051-CAL3	Soil	QC	QC			A19L200	A19L306
7	0A06051-CAL4	Soil	QC	QC			A19L200	A19L307
8	0A06051-CAL5	Soil	QC	QC			A19L200	A19L308
9	0A06051-CAL6	Soil	QC	QC			A19L200	A19L309
10	0A06051-CAL7	Soil	QC	QC			A19L200	A19L310
11	0A06051-CAL8	Soil	QC	QC			A19L200	A19L311
12	0A06051-CAL9	Soil	QC	QC			A19L200	A19L312
13	0A06051-IBL2	Soil	QC	QC			A19L200	
14	0A06051-CALA	Soil	QC	QC			A19L200	A19L313
15	0A06051-IBL3	Soil	QC	QC			A19L200	
16	0A06051-CALB	Soil	QC	QC			A19L200	A19L314
17	0A06051-IBL4	Soil	QC	QC			A19L200	
18	0A06051-IBL5	Soil	QC	QC			A19L200	
19	0A06051-ICV1	Soil	QC	QC			A19L200	A19L250
20	0A06051-IBL6	Soil	QC	QC			A19L200	
21	0A06051-TUN2	Soil	QC	QC			A19L200	
22	0A06051-IBL7	Soil	QC	QC			A19L200	
23	0A06051-ICB2	Soil	QC	QC			A19L200	
24	0A06051-CALC	Soil	QC	QC			A19L200	A20A115
25	0A06051-CALD	Soil	QC	QC			A19L200	A20A116
26	0A06051-CALE	Soil	QC	QC			A19L200	A20A117
27	0A06051-CALF	Soil	QC	QC			A19L200	A20A118
28	0A06051-CALG	Soil	QC	QC			A19L200	A20A119
29	0A06051-CALH	Soil	QC	QC			A19L200	A20A120
30	0A06051-CALI	Soil	QC	QC			A19L200	A20A121
31	0A06051-CALJ	Soil	QC	QC			A19L200	A20A122
32	0A06051-IBL8	Soil	QC	QC			A19L200	
33	0A06051-IBL9	Soil	QC	QC			A19L200	
34	0A06051-ICV2	Soil	QC	QC			A19L200	A19G350
35	0A06051-IBLA	Soil	QC	QC			A19L200	

VOC CAL

GX CAL

Data Entered By: 1/8/20

Data Reviewed By: 1/9/20

Comments: Iodomethane EOS (ICV ↑)

Calibration Status Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Tue Jan 07 15:08:13 2020
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	-1	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010614.D
2	2	0	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010615.D
3	3	0	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010616.D
4	4	1	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010617.D
5	5	2	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010618.D
6	6	5	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010619.D
7	7	10	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010620.D
8	8	20	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010621.D
9	9	50	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010622.D
10	10	100	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010624.D
11	1a	200	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010626.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jan 07 15:08 2020	Jan 07 14:46 2020	6 Jan 2020 5:12 pm
2	2	Jan 07 15:08 2020	Jan 07 14:49 2020	6 Jan 2020 5:39 pm
3	3	Jan 07 15:08 2020	Jan 07 14:51 2020	6 Jan 2020 6:05 pm
4	4	Jan 07 15:08 2020	Jan 07 14:52 2020	6 Jan 2020 6:32 pm
5	5	Jan 07 15:08 2020	Jan 07 11:53 2020	6 Jan 2020 6:59 pm
6	6	Jan 07 15:08 2020	Jan 07 11:53 2020	6 Jan 2020 7:26 pm
7	7	Jan 07 15:08 2020	Jan 07 14:57 2020	6 Jan 2020 7:53 pm
8	8	Jan 07 15:08 2020	Jan 07 15:00 2020	6 Jan 2020 8:20 pm
9	9	Jan 07 15:08 2020	Jan 07 15:01 2020	6 Jan 2020 8:47 pm
10	10	Jan 07 15:08 2020	Jan 07 15:04 2020	6 Jan 2020 9:41 pm
11	1a	Jan 07 15:08 2020	Jan 07 15:06 2020	6 Jan 2020 10:34 pm

VJ200106S.M Wed Jan 08 12:25:41 2020

A0A06051

MW 1/9/20

Response Factor Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Tue Jan 07 15:08:13 2020
Response Via : Initial Calibration

Calibration Files
1 =VJ20010614.D 2 =VJ20010615.D 3 =VJ20010616.D 4 =VJ20010617.D 5 =VJ20010618.D 6 =VJ20010619.D
7 =VJ20010620.D 8 =VJ20010621.D 9 =VJ20010622.D 10 =VJ20010624.D 1a =VJ20010626.D

		Compound	1	2	3	4	5	6	7	8	9	10	1a	Avg	%RSD
1)	I	Pentafluorobenzene...	ISTD												
2)		Dichlorodifluo...			0.853	0.960	0.898	0.885	0.912	0.887	1.215	1.176		0.973	14.47
3)	P	Chloromethane					1.543	1.402	1.347	1.336	1.520	1.459		1.434	6.08
4)	C	Vinyl Chloride			0.968	1.053	1.055	1.049	1.058	1.071	1.222	1.179		1.082	7.43
5)		Bromomethane				2.081	1.225	0.856	0.672	0.568	0.511	0.461		0.911	63.53
6)		Chloroethane					0.263	0.244	0.243	0.235	0.278	0.297		0.260	9.16
7)		Trichlorofluor...			0.323	0.403	0.374	0.383	0.388	0.372	0.415	0.412		0.384	7.69
8)		Ethanol				0.059	0.042	0.037	0.030	0.030	0.031	0.026		0.037	30.60
9)	C	1,1-Dichloroet...		1.282	1.275	1.241	1.235	1.188	1.190	1.169	1.229	1.169	1.168	1.215	3.59
10)		Carbon Disulfide		2.347	2.359	2.272	2.109	2.040	2.073	2.047	2.224	2.162	2.190	2.182	5.38
11)		Freon 113			0.834	0.883	0.919	0.897	0.916	0.912	0.942	0.913	0.907	0.903	3.34
12)		Iodomethane					0.204	0.165	0.168	0.184	0.265	0.337		0.220	30.79
13)		Methylene Chlo...				2.004	1.472	1.167	1.086	1.000	1.002	0.968	0.936	1.204	30.39
14)		Acetone						0.736	0.623	0.580	0.650	0.599	0.606	0.632	8.87
15)		t-1,2-Dichloro...		1.512	1.486	1.552	1.460	1.461	1.495	1.463	1.506	1.471	1.472	1.488	1.98
16)		n-Hexane				0.192	0.208	0.197	0.222	0.236	0.260	0.253	0.254	0.228	11.78
17)		Methyl-tert-bu...		3.765	3.730	3.706	3.396	3.430	3.580	3.636	3.799	3.781	3.819	3.664	4.14
18)		tert-Butanol (...			0.253	0.267	0.265	0.281	0.290	0.299	0.302	0.306		0.283	6.91
19)		Diisopropyl et...			3.161	3.123	3.109	3.086	3.363	3.455	3.264	3.548		3.264	5.35
20)	P	1,1-Dichloroet...		1.374	1.719	1.801	1.748	1.720	1.775	1.717	1.811	1.780	1.708	1.715	7.32
21)		Acrylonitrile				0.582	0.556	0.620	0.654	0.667	0.694	0.696	0.684	0.644	8.21
22)		Ethyl-tert-but...				2.895	2.869	3.022	3.255	3.391	3.073	3.226		3.104	6.26
23)		c-1,2-Dichloro...		1.027	1.352	1.380	1.373	1.380	1.456	1.435	1.490	1.492	1.460	1.385	9.79
24)		2,2-Dichloropr...		1.588	1.564	1.615	1.536	1.548	1.579	1.587	1.623	1.588	1.575	1.580	1.70
25)		Bromochloromet...			0.798	0.878	0.901	0.860	0.900	0.863	0.877	0.833	0.797	0.856	4.58
26)	C	Chloroform		1.678	1.908	1.997	1.890	1.902	1.935	1.882	1.930	1.889	1.835	1.885	4.45
27)		Carbon Tetrach...				1.132	1.245	1.257	1.339	1.366	1.483	1.482	1.532	1.354	10.27
28)		Tetrahydrofuran			0.530	0.616	0.601	0.591	0.595	0.614	0.650	0.660	0.658	0.613	6.68
29)		1,1,1-Trichlor...		1.434	1.519	1.753	1.767	1.764	1.794	1.793	1.853	1.842	1.842	1.736	8.22
30)	S	Dibromofluorom...	0.804	0.773	0.825	0.823	0.821	0.817	0.819	0.786	0.801	0.802	0.814	0.808	2.04
31)		1,1-Dichloropr...			1.213	1.319	1.337	1.368	1.419	1.497	1.574	1.581	1.579	1.432	9.32
32)		2-Butanone (MEK)					1.219	0.984	0.943	0.925	0.968	0.961	0.944	0.992	10.28
33)		Benzene	4.531	4.598	4.602	4.529	4.443	4.535	4.569	4.601	4.722	4.633	4.621	4.580	1.57
34)		tert-Amyl meth...				3.133	3.257	2.879	2.947	2.871	2.811	2.930		2.975	5.39
35)		1,2-Dichloroet...		1.345	1.626	1.694	1.691	1.676	1.675	1.639	1.661	1.622	1.601	1.623	6.33
36)		iso-Butyl Alcohol				0.121	0.098	0.094	0.098	0.102	0.114	0.116	0.115	0.107	9.64
37)	S	1,4-Difluorobe...	2.950	2.870	2.956	2.908	2.907	2.924	2.886	2.874	2.941	2.909	2.959	2.917	1.10
38)		Trichloroethen...		0.727	1.003	1.147	1.081	1.074	1.104	1.113	1.158	1.178	1.186	1.077	12.51
39)		tert-Amyl ethy...				1.910	2.037	1.936	2.054	2.103	2.098	2.285		2.060	6.03
40)		Dibromomethane			0.513	0.671	0.632	0.664	0.659	0.659	0.680	0.665	0.649	0.644	7.90

Method Path : C:\msdchem\1\methods\
Method File : VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds

41)	C	1,2-Dichloropr...			0.946	1.116	1.034	1.072	1.067	1.072	1.130	1.132	1.127	1.077	5.59
42)		Bromodichlorom...			0.975	1.130	1.196	1.261	1.262	1.314	1.422	1.439	1.478	1.275	12.66
43)		Chlorobenzene-d5 (I)	----------ISTD----------												
44)		c-1,3-Dichloro...			0.543	0.540	0.540	0.585	0.620	0.675	0.680	0.709	0.728	0.625	12.13
45)	S	Toluene-d8 (S)	1.396	1.429	1.366	1.352	1.356	1.375	1.391	1.409	1.392	1.387	1.393	1.386	1.65
46)	C	Toluene	2.133	2.016	1.860	1.977	1.865	1.870	1.931	1.968	2.002	1.973	1.952	1.959	4.07
47)		Tetrachloroeth...			0.353	0.464	0.420	0.449	0.463	0.479	0.489	0.487	0.485	0.454	9.69
48)		4-Methyl-2-Pen...						0.474	0.516	0.584	0.636	0.657	0.643	0.585	12.82
49)		t-1,3-Dichloro...		0.507	0.490	0.537	0.520	0.575	0.604	0.659	0.691	0.690	0.685	0.596	13.55
50)		1,1,2-Trichlor...			0.383	0.405	0.404	0.400	0.404	0.410	0.413	0.409	0.406	0.404	2.16
51)		Dibromochlorom...				0.318	0.337	0.334	0.352	0.375	0.409	0.426	0.439	0.374	12.32
52)		1,3-Dichloropr...		0.565	0.624	0.680	0.697	0.700	0.704	0.714	0.750	0.738	0.732	0.690	8.18
53)		1,2-Dibromoeth...			0.381	0.347	0.373	0.387	0.397	0.411	0.437	0.442	0.445	0.402	8.43
54)		2-Hexanone			0.217	0.268	0.267	0.304	0.361	0.421	0.484	0.510	0.514	0.372	30.79
55)	P	Chlorobenzene		1.156	1.178	1.259	1.160	1.188	1.173	1.191	1.200	1.187	1.169	1.186	2.46
56)	C	Ethylbenzene	2.015	1.794	1.856	1.890	1.827	1.930	2.012	2.070	2.146	2.136	2.093	1.979	6.38
57)		1,1,1,2-Tetrac...			0.356	0.394	0.364	0.390	0.407	0.401	0.424	0.421	0.418	0.397	6.11
58)		m,p-Xylenes (2)	1.242	1.262	1.200	1.234	1.240	1.344	1.462	1.536	1.598	1.602	1.569	1.390	11.82
59)		o-Xylene	1.078	1.077	1.022	1.127	1.155	1.234	1.315	1.440	1.559	1.604	1.590	1.291	17.22
60)		Styrene		0.562	0.614	0.695	0.697	0.811	0.919	1.025	1.159	1.215	1.227	0.892	28.35
61)	P	Bromoform				0.228	0.216	0.219	0.246	0.268	0.299	0.322	0.332	0.266	17.39
62)		Isopropylbenzene				1.313	1.330	1.503	1.692	1.823	1.969	2.003	1.969	1.700	16.89
63)	I	1,4-Dichlorobenzen...	----------ISTD----------												
64)	S	4-Bromofluorob...	0.776	0.774	0.794	0.797	0.787	0.784	0.751	0.772	0.771	0.752	0.732	0.772	2.58
65)		Bromobenzene	0.831	0.808	0.903	1.050	1.002	0.969	0.946	0.973	0.984	0.966	0.938	0.943	7.58
66)		n-Propylbenzene	4.544	4.079	4.021	4.356	4.093	4.288	4.377	4.652	4.705	4.545	4.329	4.363	5.34
67)	P	1,1,2,2-Tetrac...		0.864	1.008	1.152	1.143	1.096	1.147	1.193	1.167	1.159	1.129	1.106	8.95
68)		2-Chlorotoluene			0.635	0.783	0.794	0.796	0.834	0.890	0.894	0.886	0.859	0.819	9.97
69)		1,3,5-Trimethy...	2.749	2.400	2.558	2.709	2.684	3.000	3.107	3.345	3.380	3.266	3.078	2.934	11.34
70)		1,2,3-Trichlor...			0.302	0.474	0.437	0.416	0.421	0.440	0.438	0.421	0.409	0.418	11.35
71)		t-1,4-Dichloro...						0.149	0.159	0.181	0.198	0.196	0.196	0.180	11.70
72)		4-Chlorotoluene		1.884	2.201	2.407	2.503	2.560	2.654	2.743	2.773	2.732	2.633	2.509	11.19
73)		tert-Butylbenzene		1.508	1.417	1.512	1.494	1.594	1.645	1.781	1.829	1.786	1.728	1.629	8.93
74)		1,2,4-Trimethy...	3.026	2.256	2.436	2.616	2.623	2.916	3.104	3.354	3.374	3.291	3.123	2.920	13.15
75)		sec-Butylbenzene	3.205	2.833	3.141	3.257	3.243	3.585	3.711	3.970	4.030	3.957	3.766	3.518	11.42
76)		4-Isopropyltol...	2.702	2.406	2.341	2.416	2.550	2.834	3.027	3.305	3.467	3.370	3.242	2.878	14.71
77)		1,3-Dichlorobe...	1.368	1.577	1.643	1.723	1.702	1.754	1.744	1.811	1.770	1.757	1.691	1.685	7.32
78)		1,4-Dichlorobe...	1.662	2.086	1.976	1.911	1.806	1.818	1.759	1.788	1.785	1.759	1.711	1.824	6.71
79)		n-Butylbenzene	2.540	2.763	2.500	2.510	2.498	2.606	2.673	2.847	2.972	2.907	2.766	2.689	6.42
80)		1,2-Dichlorobe...	1.266	1.293	1.567	1.573	1.537	1.550	1.556	1.658	1.659	1.645	1.612	1.538	8.78
81)		1,2-Dibromo-3-...				0.217	0.241	0.252	0.266	0.296	0.321	0.344	0.360	0.287	17.92
82)		Hexachlorobuta...			0.186	0.222	0.265	0.263	0.245	0.266	0.266	0.268	0.259	0.249	11.22
83)		1,2,4-Trichlor...			0.806	0.858	0.815	0.850	0.909	1.008	1.076	1.114	1.119	0.951	13.61
84)		Naphthalene	2.749	2.327	2.221	2.403	2.339	2.592	2.944	3.512	3.883	3.971	4.001	2.995	23.78
85)		1,2,3-Trichlor...			0.768	0.825	0.833	0.893	0.974	1.062	1.103	1.110	1.112	0.964	14.31

(#) = Out of Range

Compound List Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Tue Jan 07 15:08:13 2020
Response Via : Initial Calibration

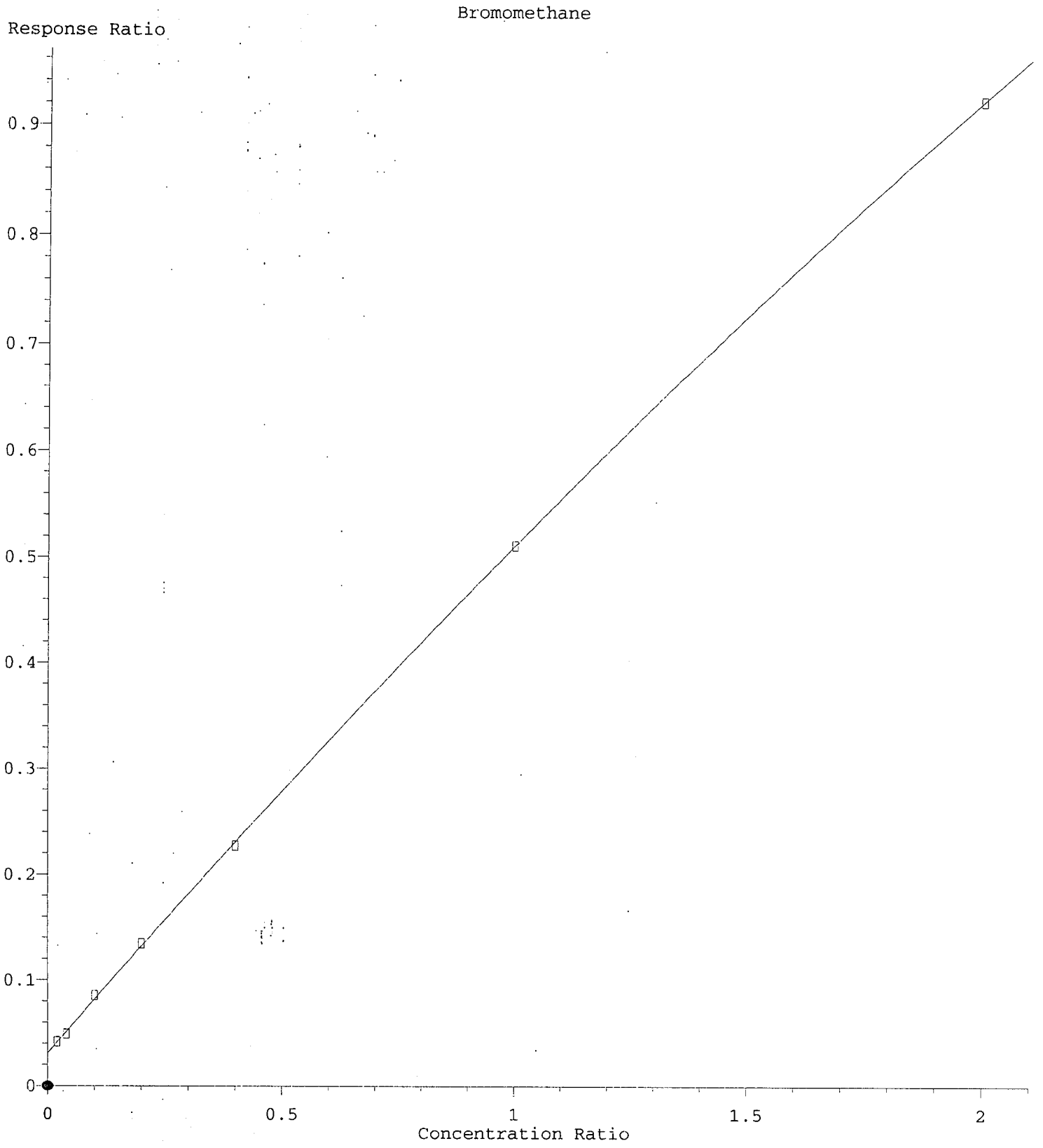
Total Cpnds : 85

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Pentafluorobenzene (I)	99	6.089	1.000	A	2	A	R
2		Dichlorodifluoromethane	85	1.696	0.279	A	2	A	R
3	P	Chloromethane	50	1.898	0.312	A	2	A	R
4	C	Vinyl Chloride	62	2.001	0.329	A	2	A	R
5		Bromomethane	96	2.341	0.384	Q	2	A	R
6		Chloroethane	64	2.463	0.404	A	2	A	R
7		Trichlorofluoromethane	101	2.597	0.427	A	2	A	R
8		Ethanol	45	3.266	0.536	Q	1	A	R
9	C	1,1-Dichloroethene	61	3.150	0.517	A	2	A	R
10		Carbon Disulfide	76	3.163	0.519	A	2	A	R
11		Freon 113	101	3.206	0.526	A	2	A	R
12		Iodomethane	142	3.302	0.542	Q	2	A	R
13		Methylene Chloride	84	3.783	0.621	Q	2	A	R
14		Acetone	43	3.868	0.635	A	1	A	R
15		t-1,2-Dichloroethene	61	3.948	0.648	A	2	A	R
16		n-Hexane	86	4.045	0.664	A	3	A	R
17		Methyl-tert-butyl-ether	73	4.106	0.674	A	3	A	R
18		tert-Butanol (TBA)	59	4.258	0.699	A	1	A	R
19		Diisopropyl ether (DIPE)	45	4.501	0.739	A	2	A	R
20	P	1,1-Dichloroethane	63	4.581	0.752	A	2	A	R
21		Acrylonitrile	53	4.635	0.761	A	2	A	R
22		Ethyl-tert-butyl ether (ETBE)	59	4.866	0.799	A	2	A	R
23		c-1,2-Dichloroethene	61	5.128	0.842	A	2	A	R
24		2,2-Dichloropropane	77	5.238	0.860	A	2	A	R
25		Bromochloromethane	49	5.329	0.875	A	2	A	R
26	C	Chloroform	83	5.414	0.889	A	2	A	R
27		Carbon Tetrachloride	117	5.554	0.912	A	2	A	R
28		Tetrahydrofuran	42	5.584	0.917	A	2	A	R
29		1,1,1-Trichloroethane	97	5.621	0.923	A	2	A	R
30	S	Dibromofluoromethane (S)	111	5.596	0.919	A	2	A	R
31		1,1-Dichloropropene	75	5.749	0.944	A	2	A	R
32		2-Butanone (MEK)	43	5.730	0.941	A	2	A	R
33		Benzene	78	5.998	0.985	A	2	A	R
34		tert-Amyl methyl ether (TAME)	73	6.150	1.010	A	2	A	R
35		1,2-Dichloroethane (EDC)	62	6.205	1.019	A	2	A	R
36		iso-Butyl Alcohol	43	6.272	1.030	A	2	A	R
37	S	1,4-Difluorobenzene (S)	114	6.649	1.092	A	2	A	R
38		Trichloroethene (TCE)	130	6.619	1.087	A	2	A	R
39		tert-Amyl ethyl ether (TAEE)	59	6.898	1.133	A	2	A	R
40		Dibromomethane	93	7.057	1.159	A	2	A	R
41	C	1,2-Dichloropropane	63	7.166	1.177	A	2	A	R
42		Bromodichloromethane	83	7.245	1.190	A	2	A	R
43	I	Chlorobenzene-d5 (I)	117	9.800	1.000	A	2	A	R
44		c-1,3-Dichloropropene	75	7.950	0.811	A	2	A	R
45	S	Toluene-d8 (S)	98	8.164	0.833	A	2	A	R
46	C	Toluene	91	8.225	0.839	A	2	A	R
47		Tetrachloroethene (PCE)	166	8.675	0.885	A	2	A	R
48		4-Methyl-2-Pentanone (MIBK)	43	8.663	0.884	A	2	A	R
49		t-1,3-Dichloropropene	75	8.699	0.888	A	2	A	R
50		1,1,2-Trichloroethane	97	8.869	0.905	A	2	A	R
51		Dibromochloromethane	129	9.058	0.924	A	2	A	R
52		1,3-Dichloropropane	76	9.155	0.934	A	2	A	R
53		1,2-Dibromoethane (EDB)	107	9.295	0.948	A	2	A	R
54		2-Hexanone	43	9.295	0.948	Q	2	A	R

55	P	Chlorobenzene	112	9.818	1.002	A	2	A	R
56	C	Ethylbenzene	91	9.855	1.006	A	2	A	R
57		1,1,1,2-Tetrachloroethane	131	9.879	1.008	A	2	A	R
58		m,p-Xylenes (2)	91	9.988	1.019	A	2	A	R
59		o-Xylene	91	10.372	1.058	A	2	A	R
60		Styrene	104	10.414	1.063	Q 1/a	2	A	R
61	P	Bromoform	173	10.432	1.064	Q 1/a²	2	A	R
62		Isopropylbenzene	105	10.645	1.086	A	2	A	R
63	I	1,4-Dichlorobenzene-d4 (I)	152	11.759	1.000	A	2	A	R
64	S	4-Bromofluorobenzene (S)	174	10.877	0.925	A	2	A	R
65		Bromobenzene	156	10.962	0.932	A	2	A	R
66		n-Propylbenzene	91	10.993	0.935	A	2	A	R
67	P	1,1,2,2-Tetrachloroethane	83	11.041	0.939	A	2	A	R
68		2-Chlorotoluene	126	11.114	0.945	A	2	A	R
69		1,3,5-Trimethylbenzene	105	11.150	0.948	A	2	A	R
70		1,2,3-Trichloropropane	110	11.145	0.948	A	2	A	R
71		t-1,4-Dichloro-2-butene	88	11.181	0.951	A	3	A	R
72		4-Chlorotoluene	91	11.242	0.956	A	2	A	R
73		tert-Butylbenzene	91	11.400	0.969	A	2	A	R
74		1,2,4-Trimethylbenzene	105	11.454	0.974	A	2	A	R
75		sec-Butylbenzene	105	11.540	0.981	A	2	A	R
76		4-Isopropyltoluene	119	11.649	0.991	A	2	A	R
77		1,3-Dichlorobenzene	146	11.704	0.995	A	2	A	R
78		1,4-Dichlorobenzene	146	11.771	1.001	A	2	A	R
79		n-Butylbenzene	91	11.972	1.018	A	2	A	R
80		1,2-Dichlorobenzene	146	12.088	1.028	A	2	A	R
81		1,2-Dibromo-3-Chloropropane	157	12.689	1.079	Q 1/m	2	A	R
82		Hexachlorobutadiene	223	13.213	1.124	A	3	A	R
83		1,2,4-Trichlorobenzene	180	13.237	1.126	A	2	A	R
84		Naphthalene	128	13.511	1.149	Q 1/a	2	A	R
85		1,2,3-Trichlorobenzene	180	13.669	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

VJ200106S.M Wed Jan 08 11:46:18 2020



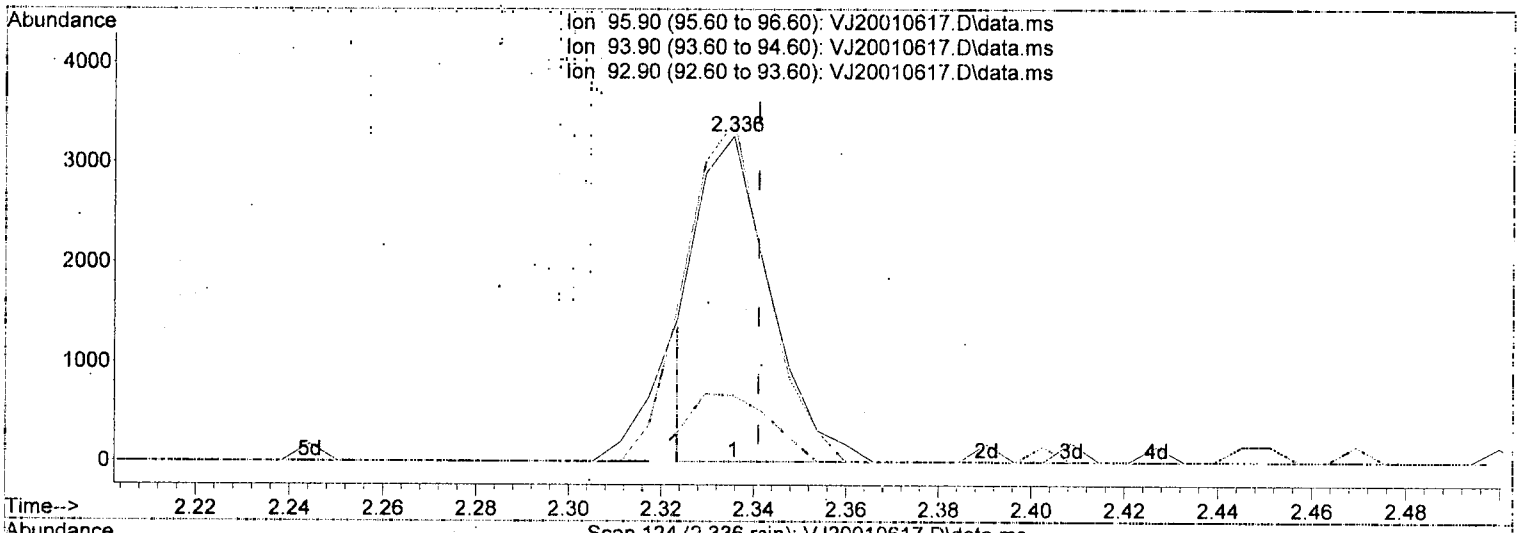
Int =(-)

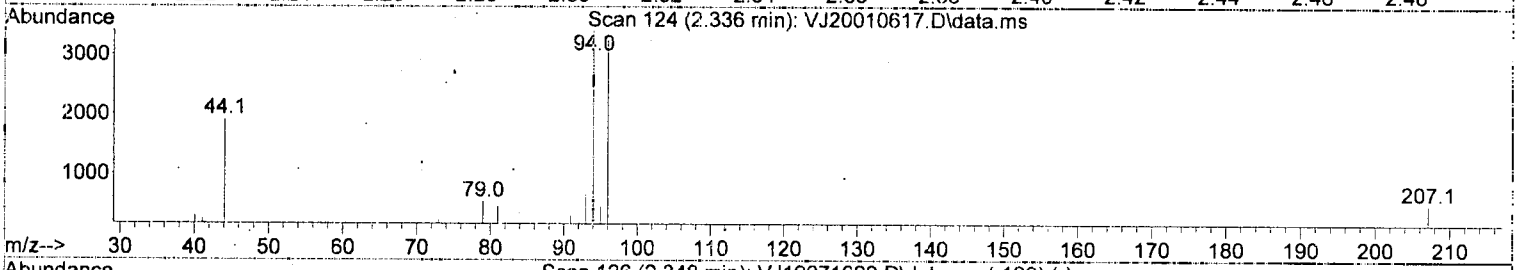
R = -3.37e-002 A*A + 5.13e-001 A + 3.09e-002
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\VJ2001065.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

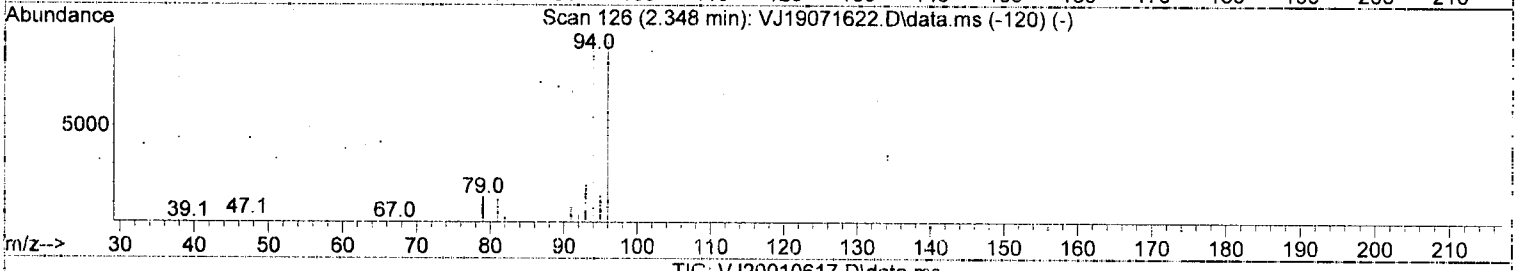
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







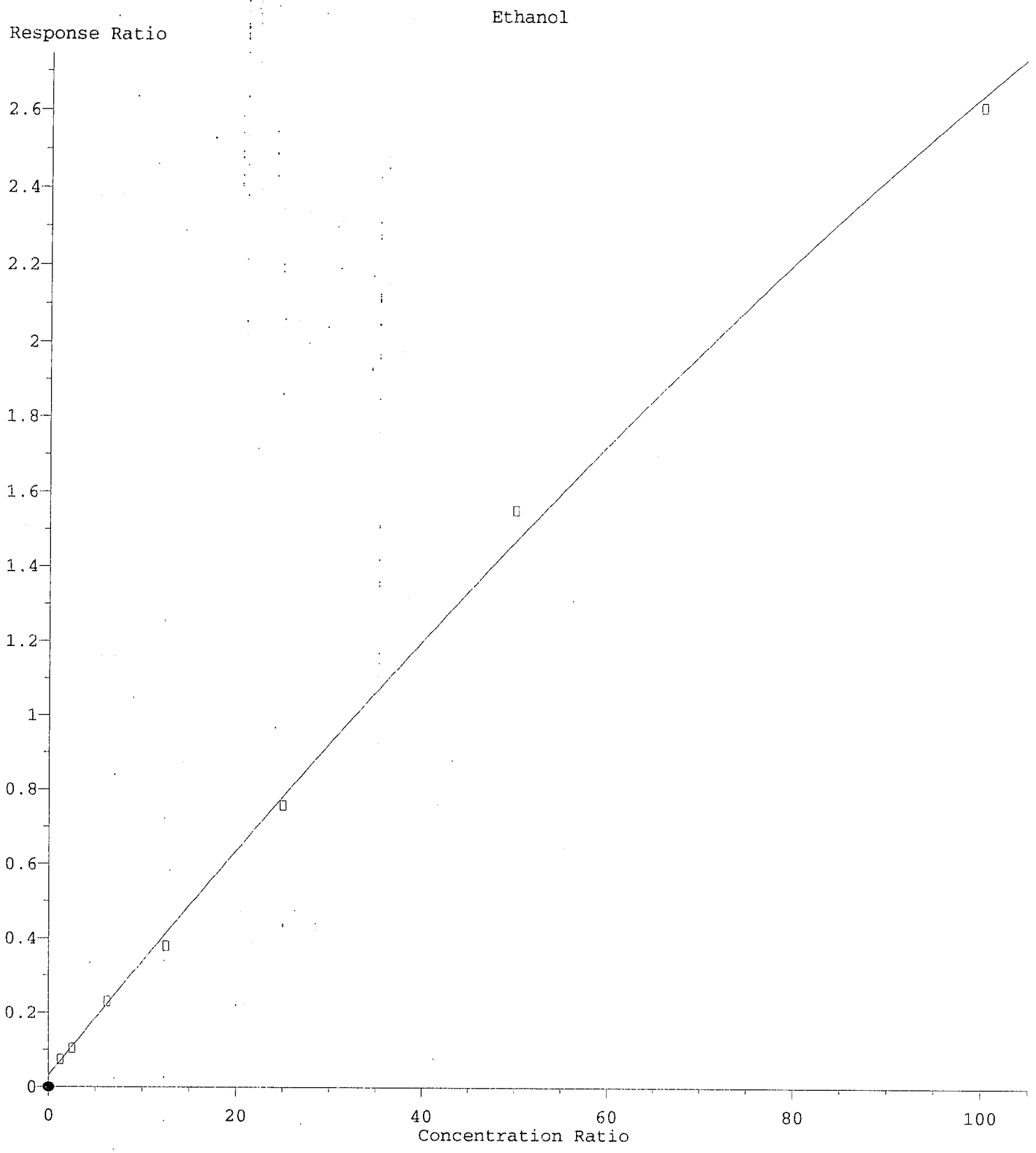
TIC: VJ20010617.D\data.ms

(5) Bromomethane

2.336min (-0.005) 0.27 ug/L m

response 3512

Ion	Exp%	Act%
95.90	100.00	100.00
93.90	106.80	104.54
92.90	22.80	20.37
0.00	0.00	0.00



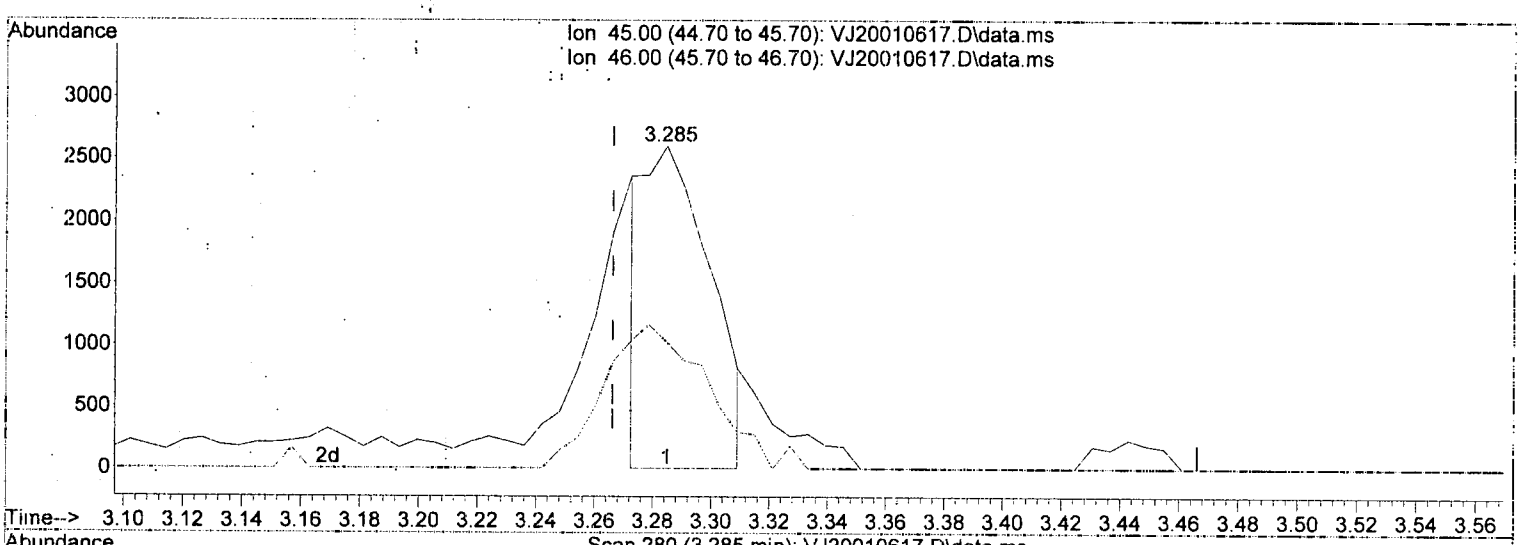
Int = (-)

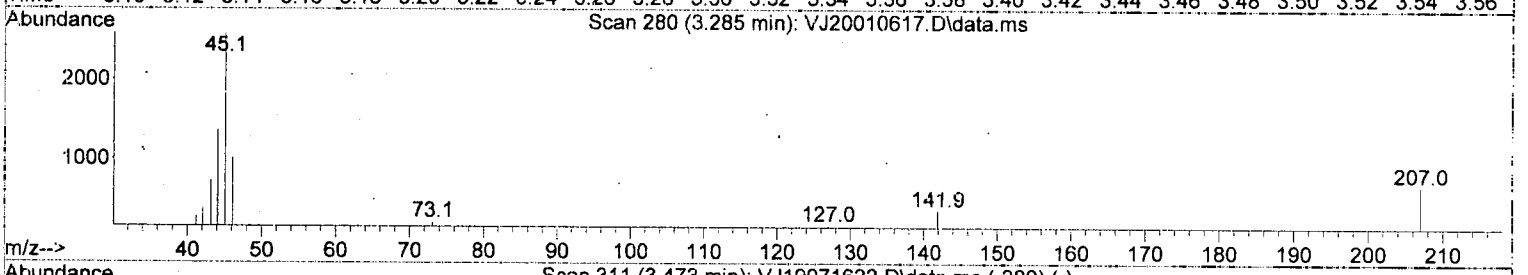
R = -5.18e-005 A*A + 3.13e-002 A + 3.10e-002
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ2001065.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

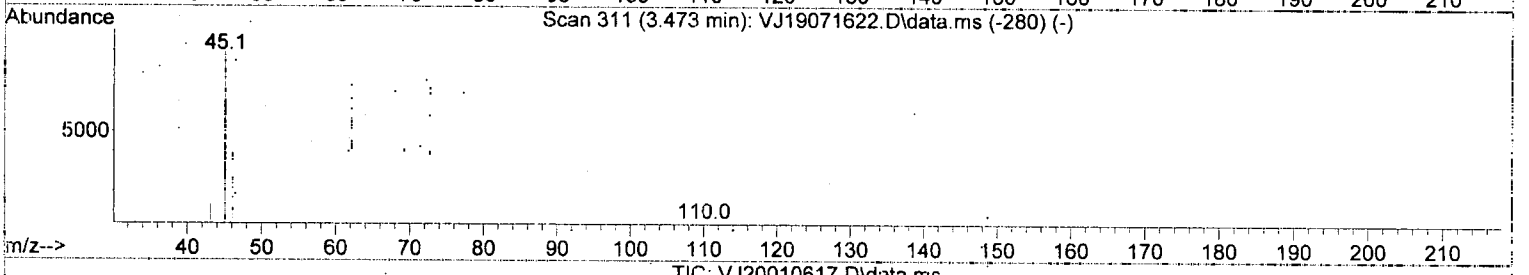
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







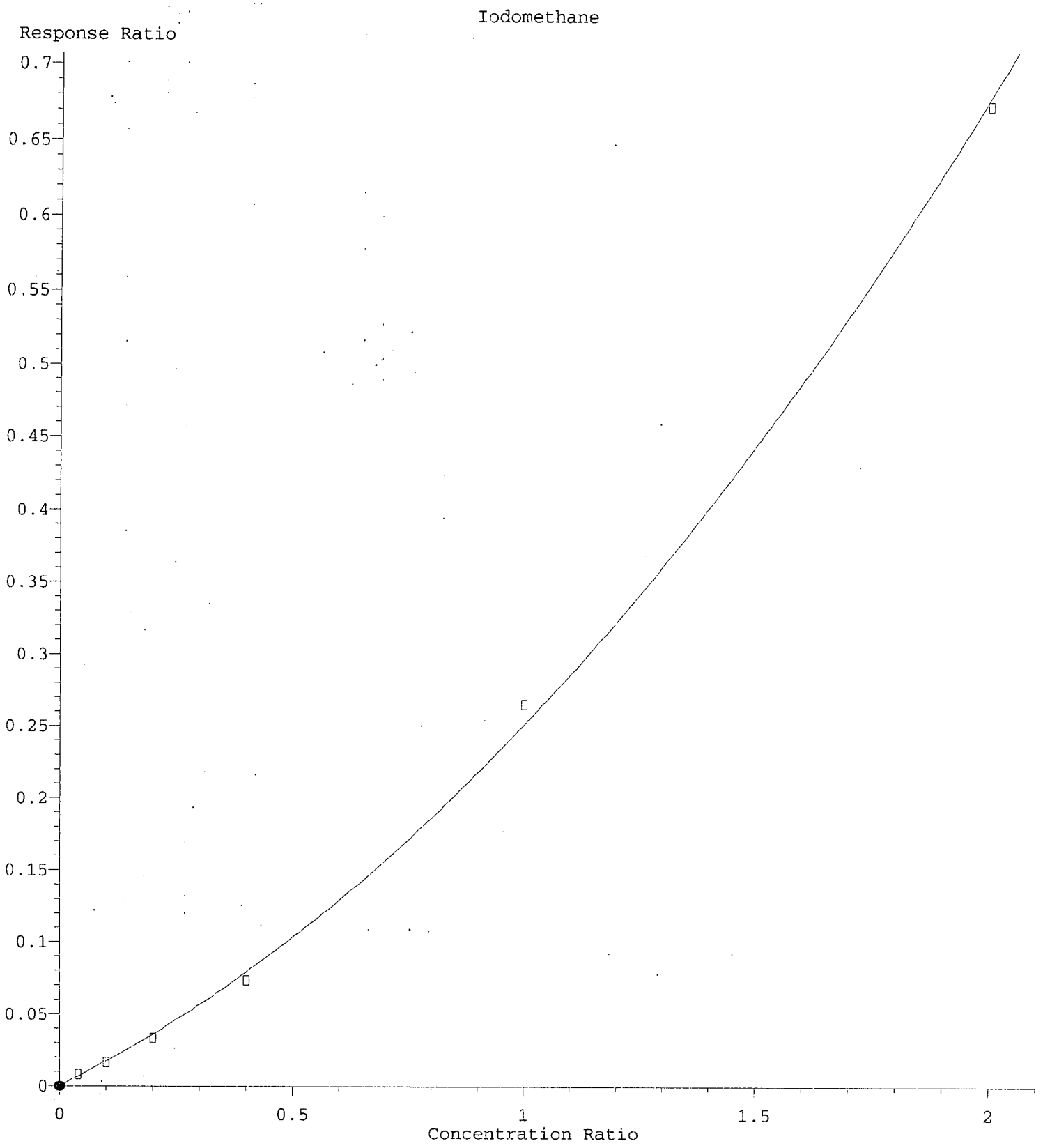
TIC: VJ20010617.D\data.ms

(8) Ethanol

3.285min (+ 0.019) 13.25 ug/L m

response 4099

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



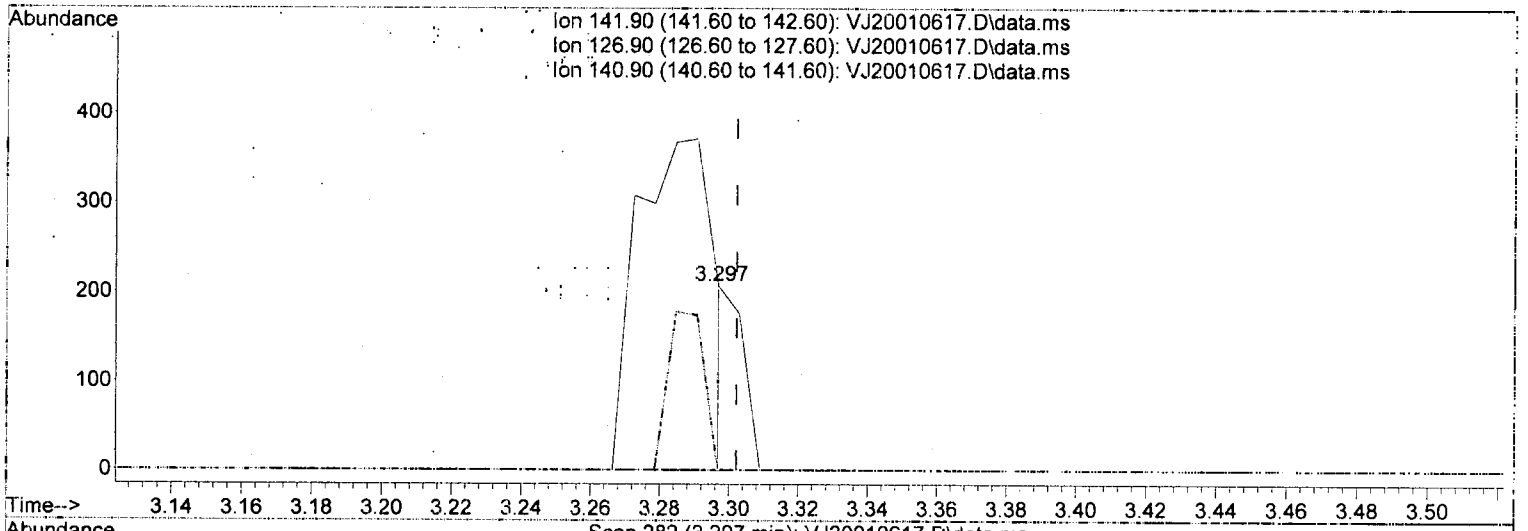
Int = 0.05

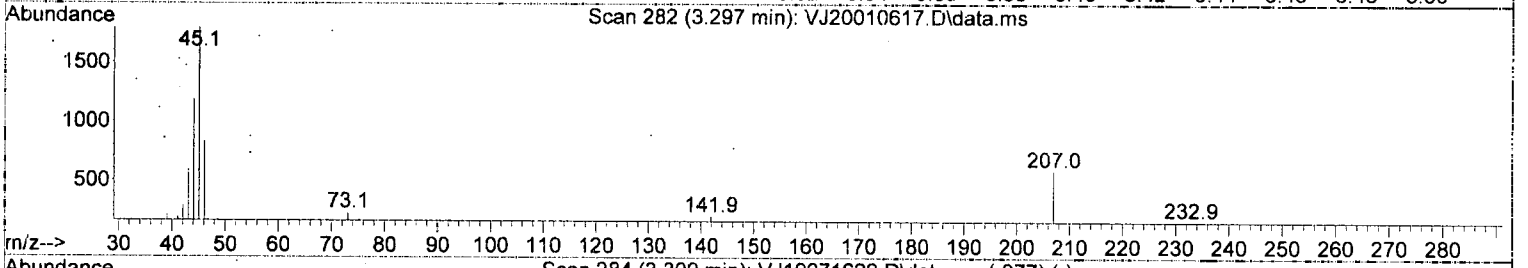
R = 8.89e-002 A*A + 1.62e-001 A + 4.55e-004
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ2001065.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

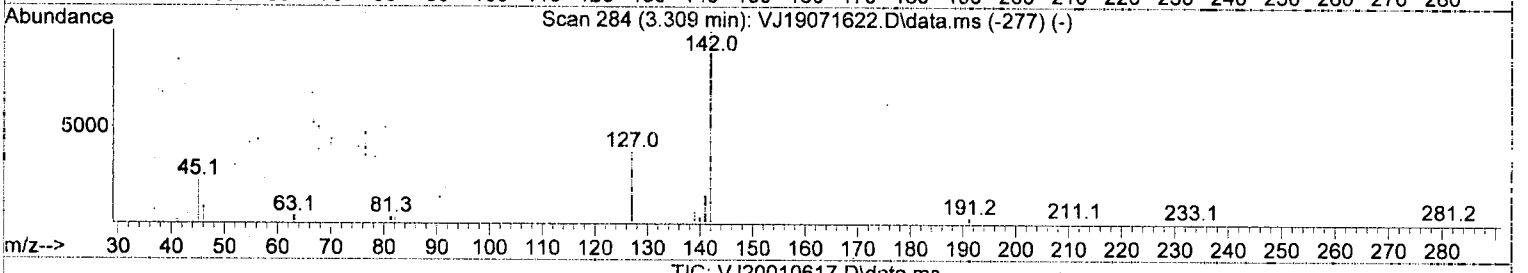
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration





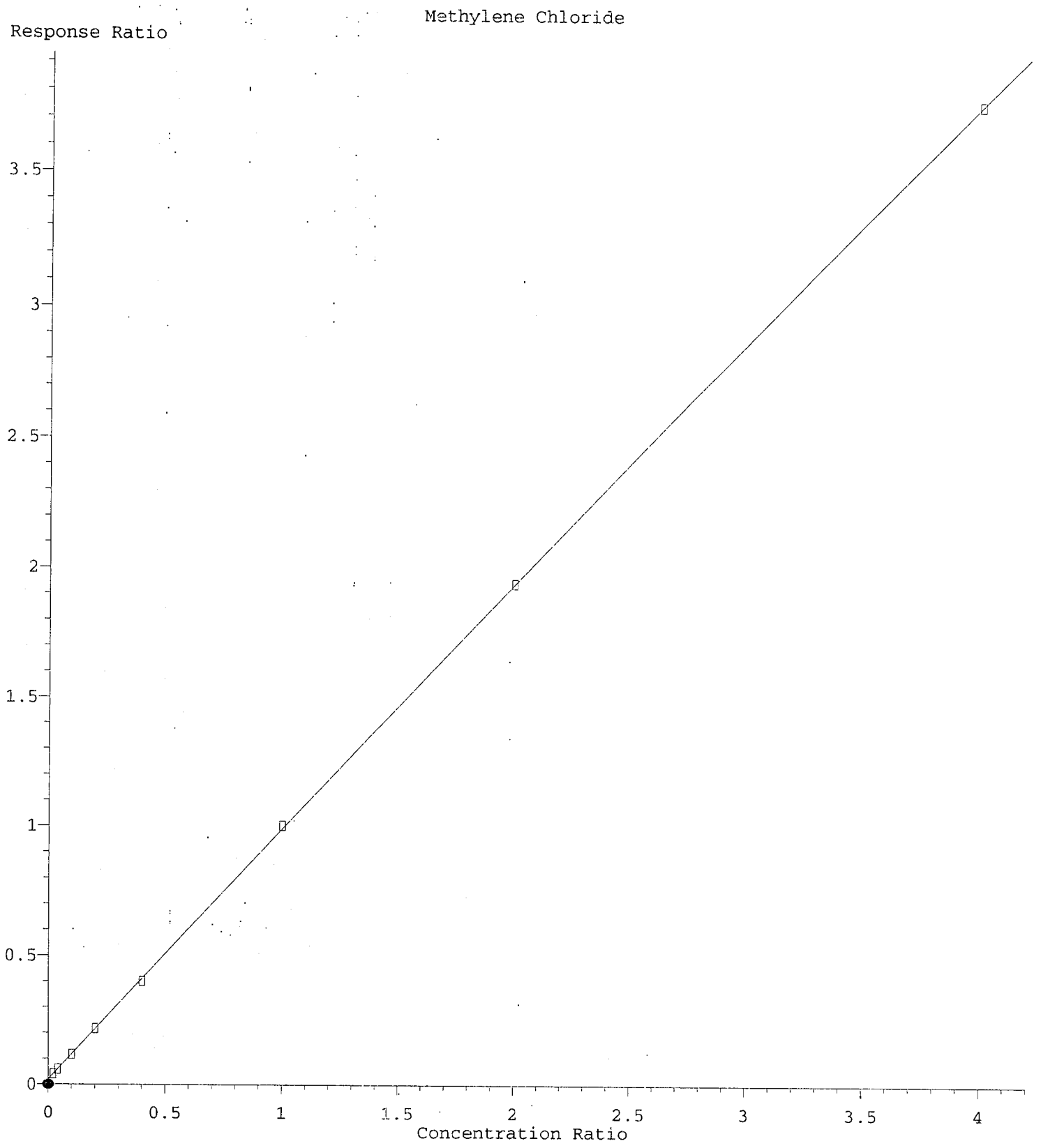


(12) Iodomethane

3.297min (-0.005) 0.05 ug/L m

response 64

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



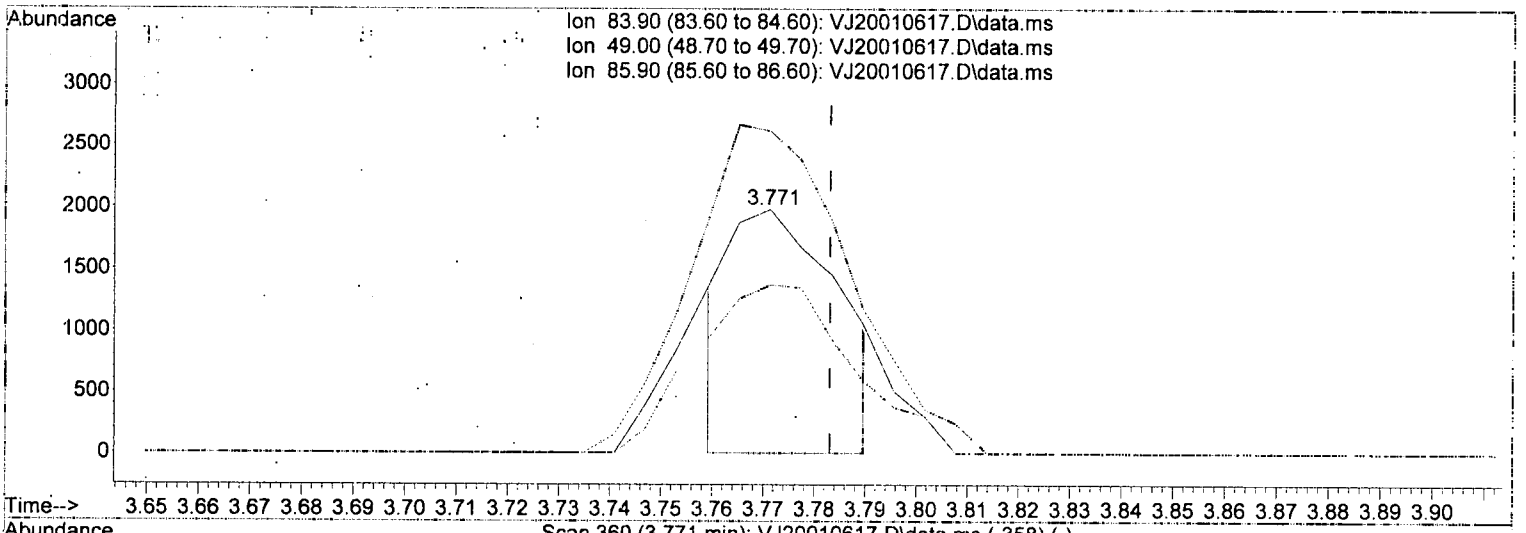
Int = (—) 0.42 11/8/20

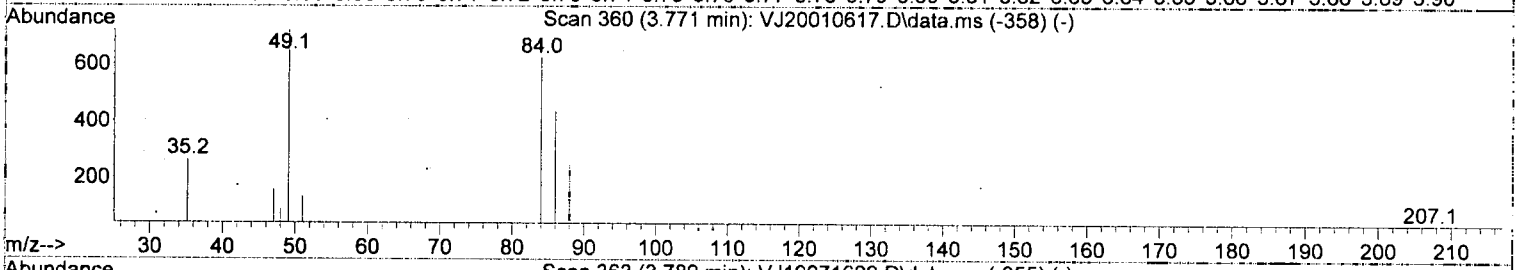
R = -1.30e-002 A*A + 9.83e-001 A + 1.98e-002
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj200106s.m
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

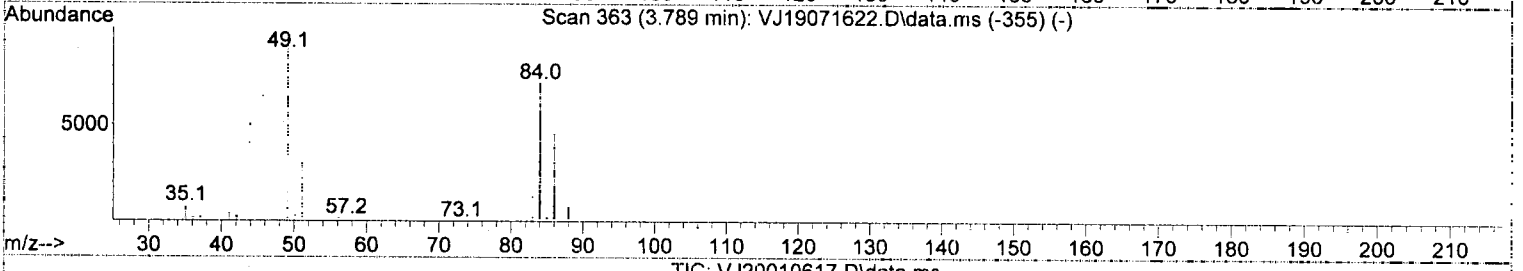
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







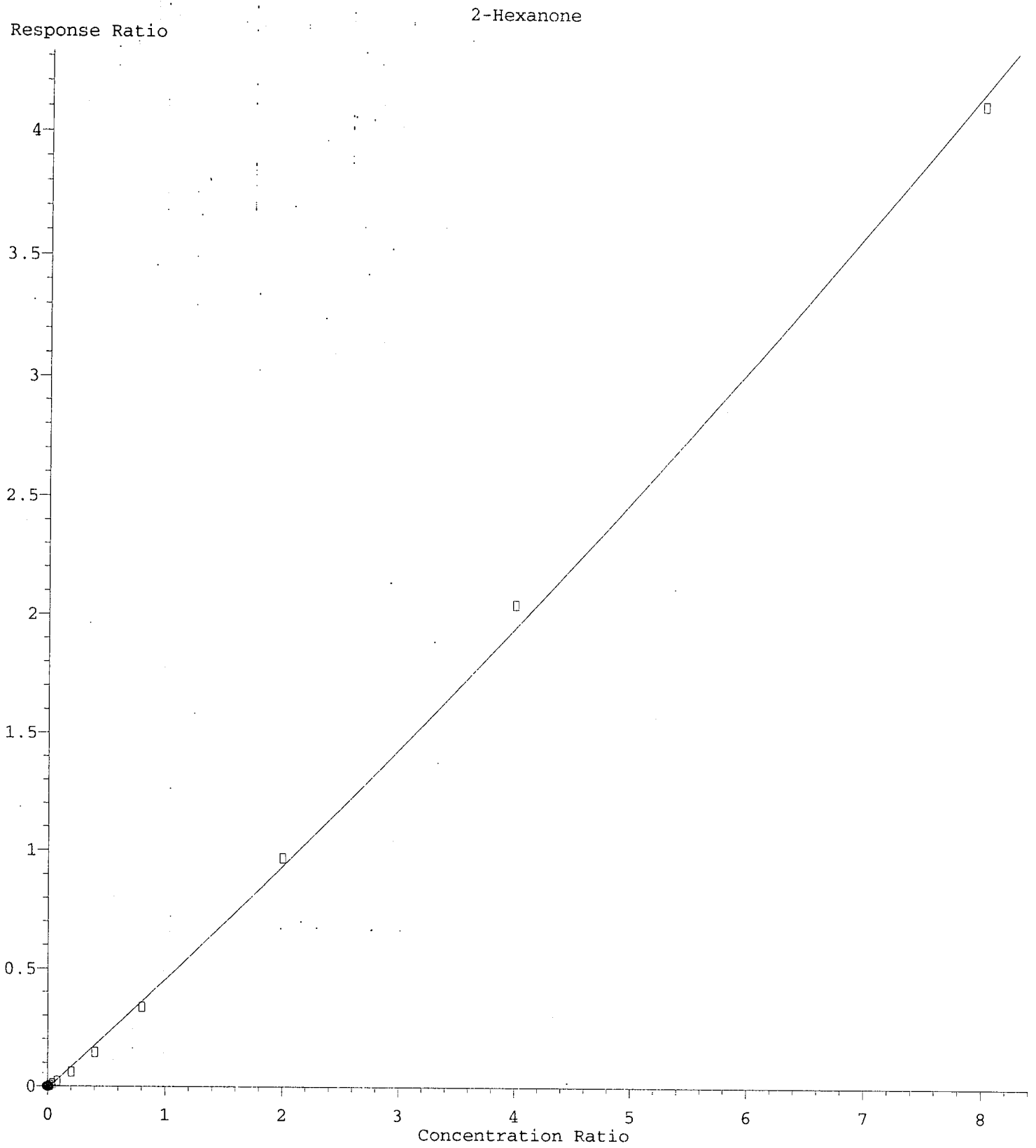
TIC: VJ20010617.D\data.ms

(13) Methylene Chloride

3.771min (-0.012) 0.42 ug/L m

response 2936

Ion	Exp%	Act%
83.90	100.00	100.00
49.00	123.30	131.82
85.90	63.90	69.19
0.00	0.00	0.00



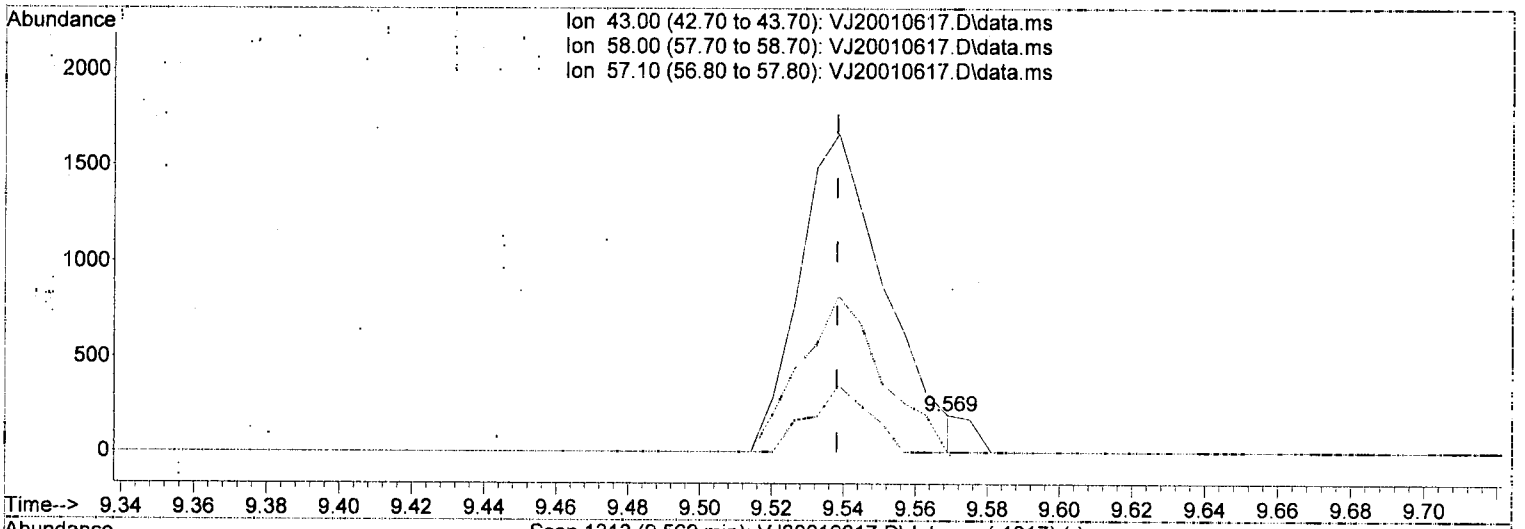
Int = 0.90

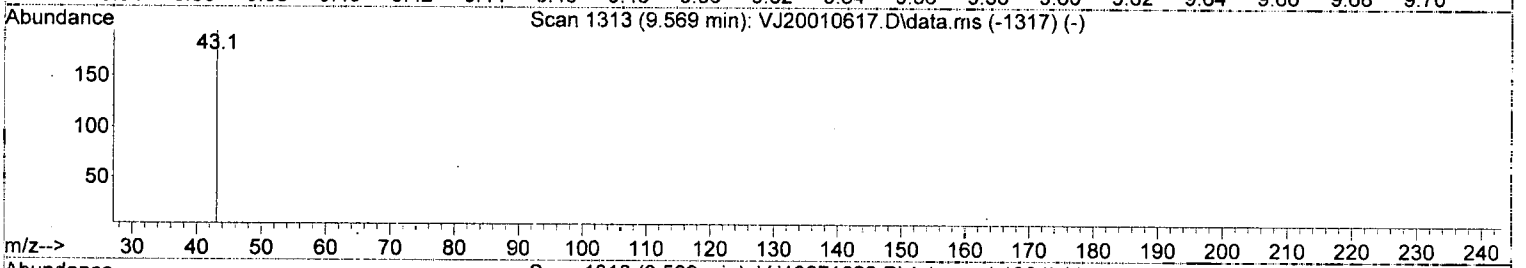
R = 8.50e-003 A*A + 4.54e-001 A - 7.94e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj200103.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

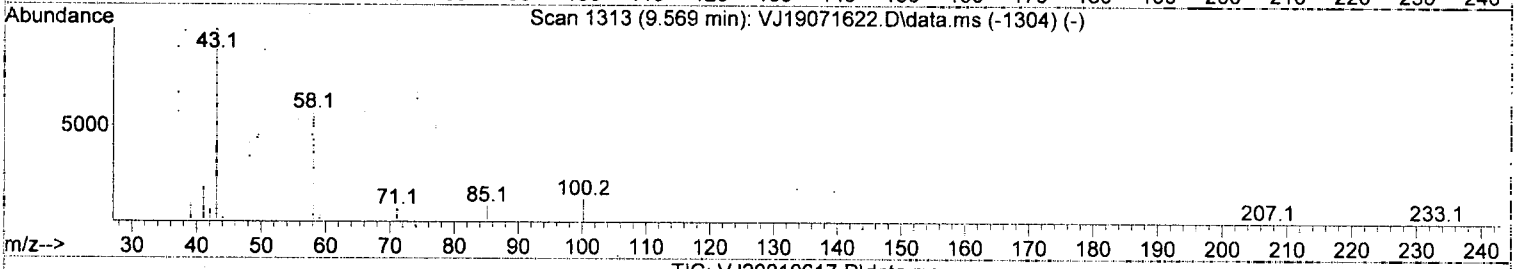
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X ; 5mL ; 1ppb ; DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







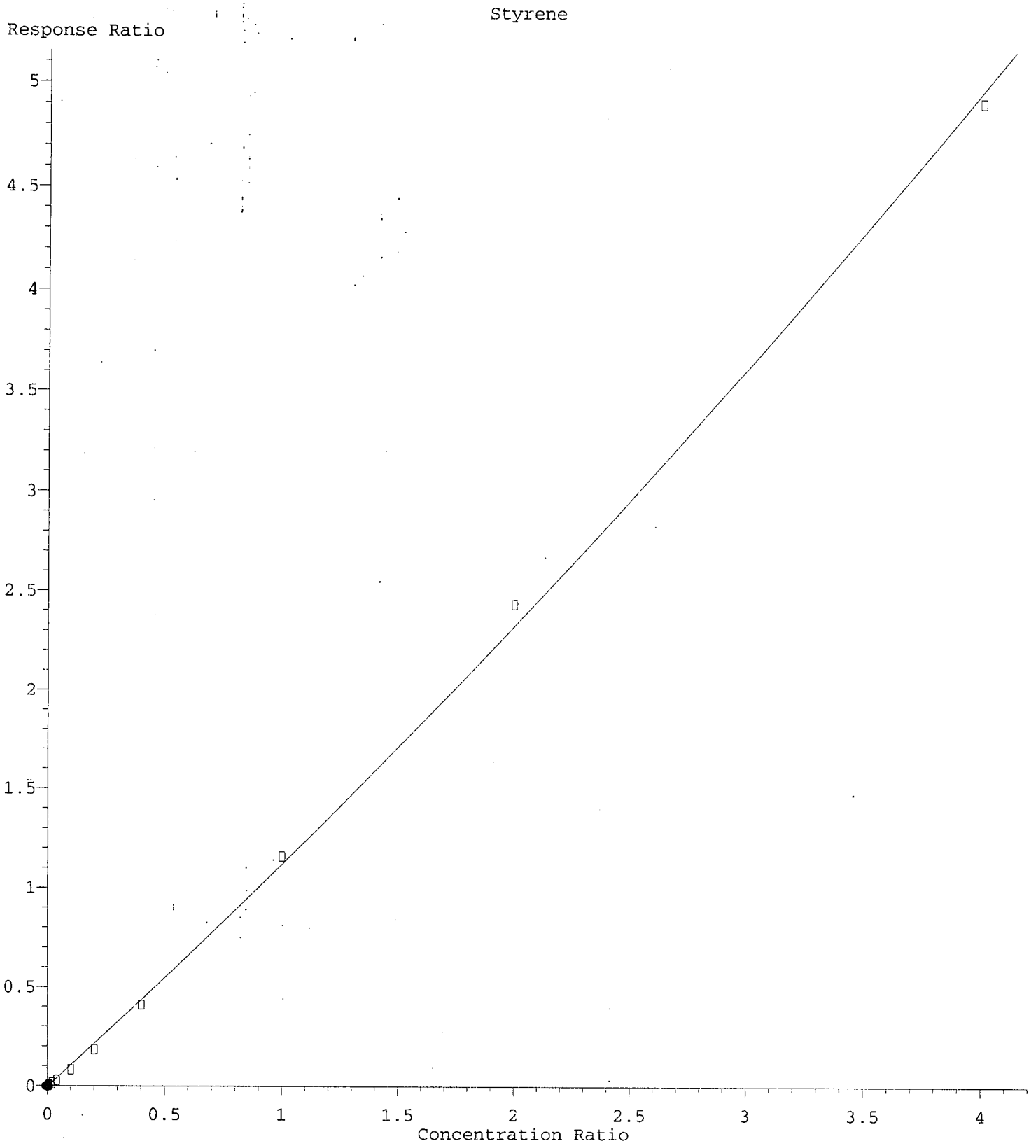
TIC: VJ20010617.D\data.ms

(54) 2-Hexanone

9.569min (+ 0.031) 0.90 ug/L m

response 64

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	55.80	0.00#
57.10	18.50	0.00
0.00	0.00	0.00



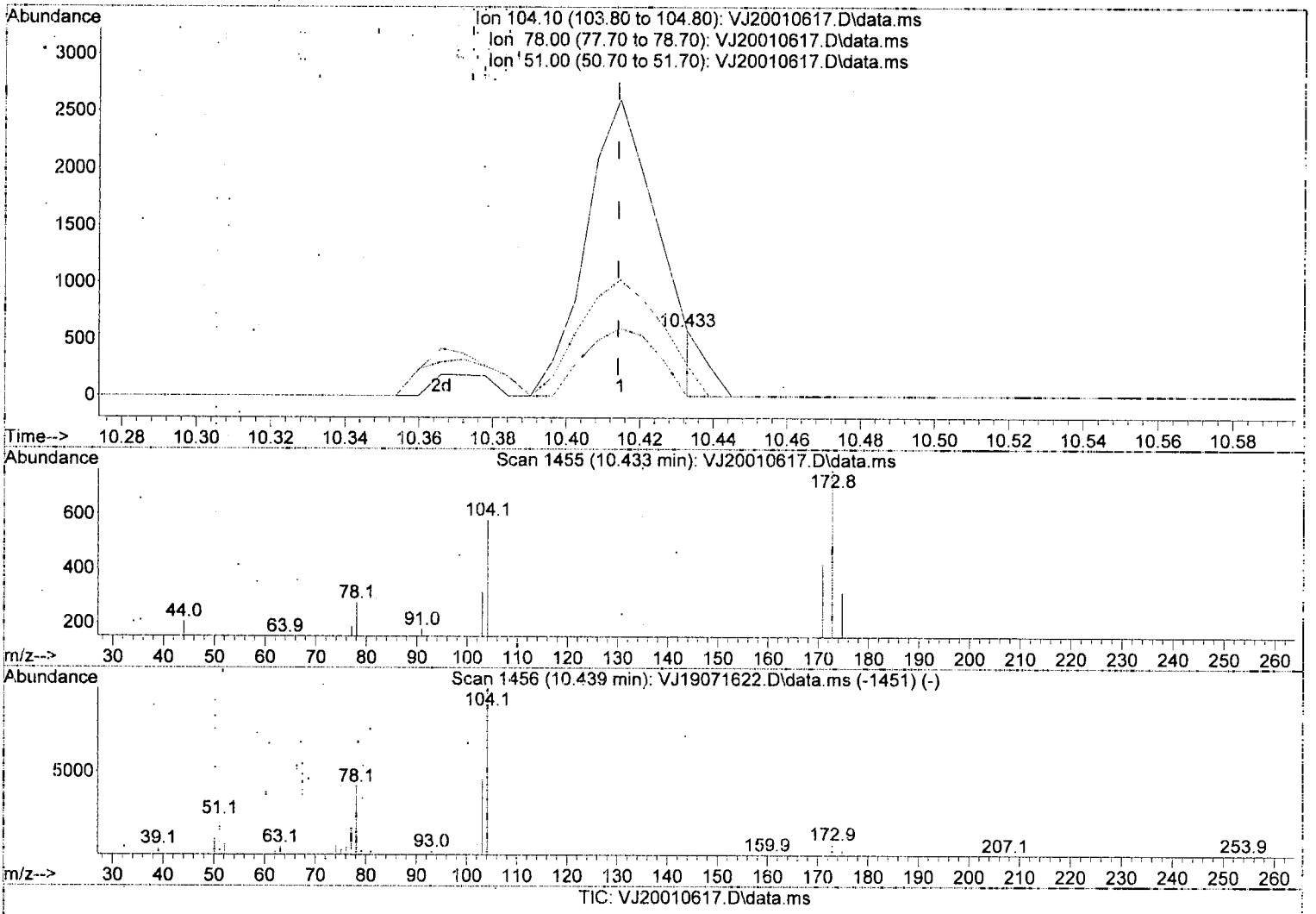
Int = 0.24

R = 3.96e-002 A*A + 1.08e+000 A - 4.75e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ2001065.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



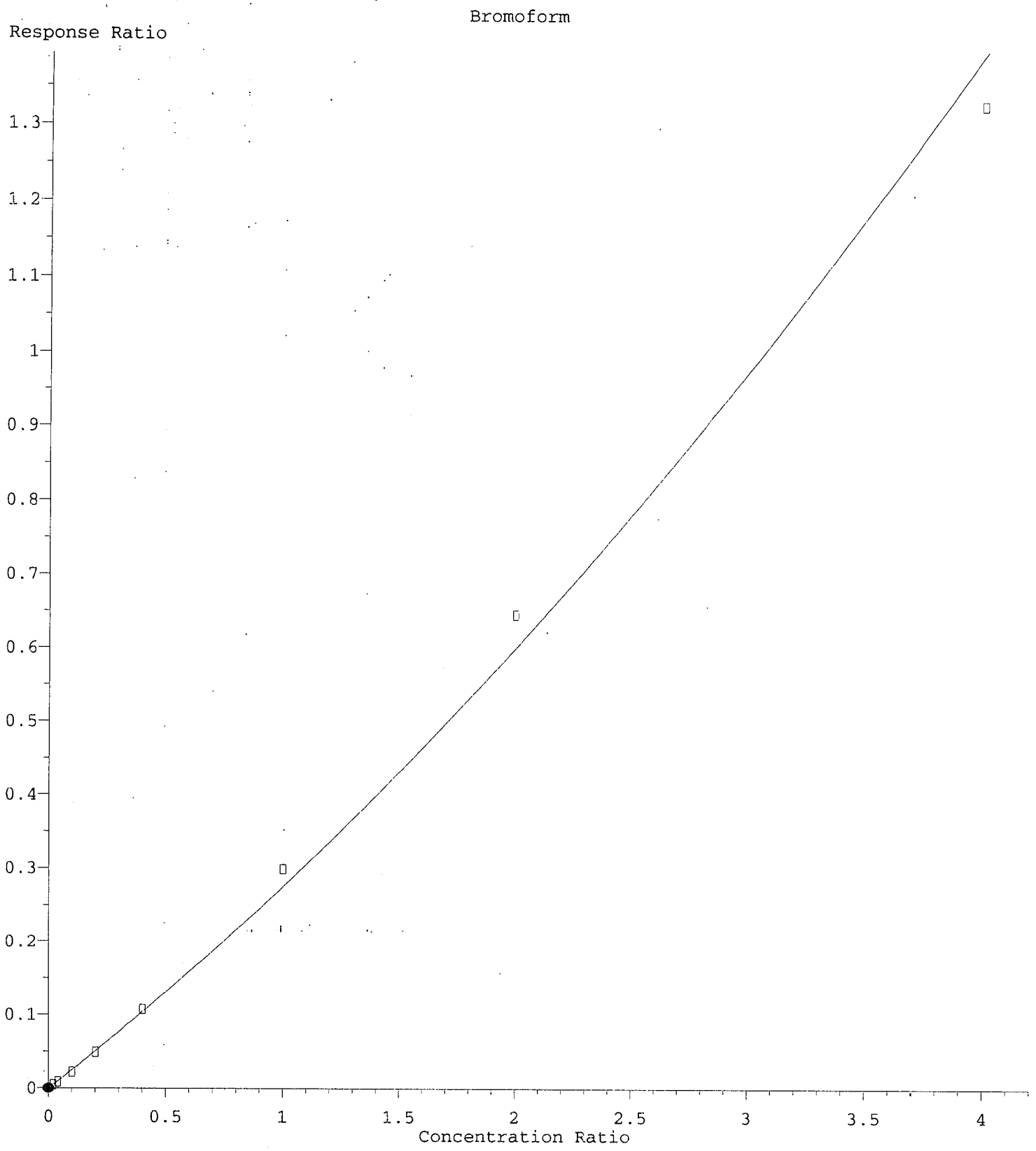
TIC: VJ20010617.D\data.ms

(60) Styrene

10.433min (+ 0.019) 0.24 ug/L m

response 99

Ion	Exp%	Act%
104.10	100.00	100.00
78.00	42.20	47.59
51.00	24.70	0.00
0.00	0.00	0.00



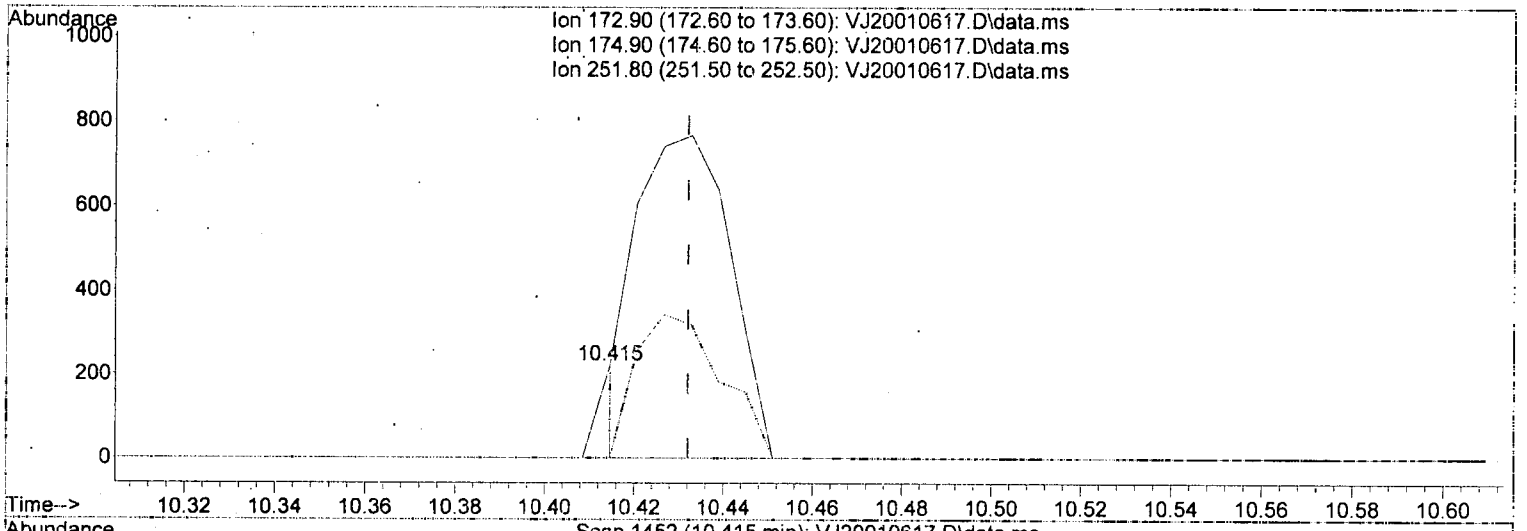
Int = 0.21

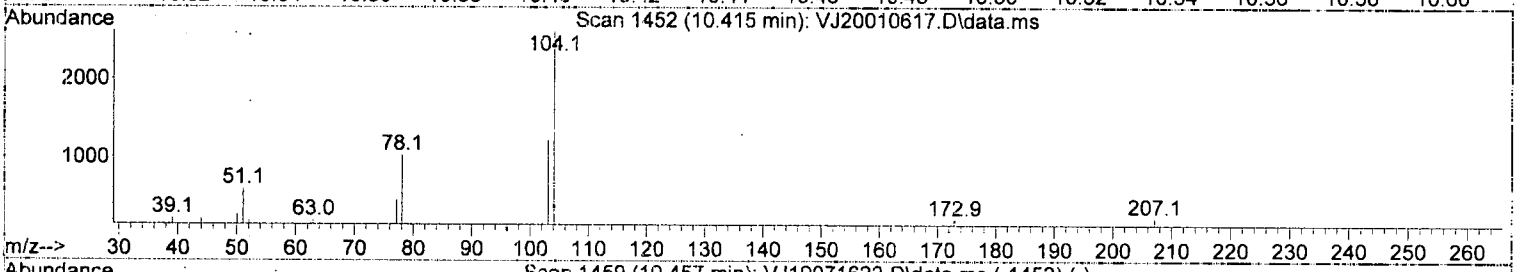
R = 2.42e-002 A*A + 2.52e-001 A - 7.58e-004
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msd2\2020\1\mer0FA.LV\Gasc1PreRDMDG 2019 - 4c. Waste Characterization Page 614 of 1555
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

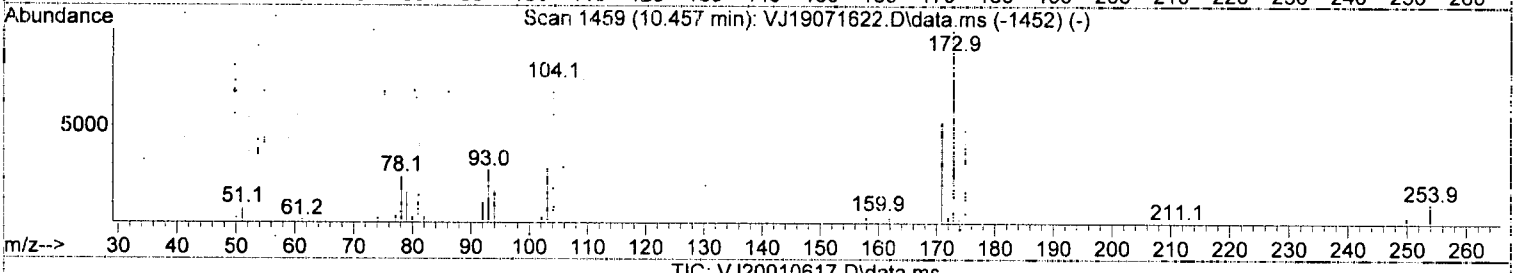
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







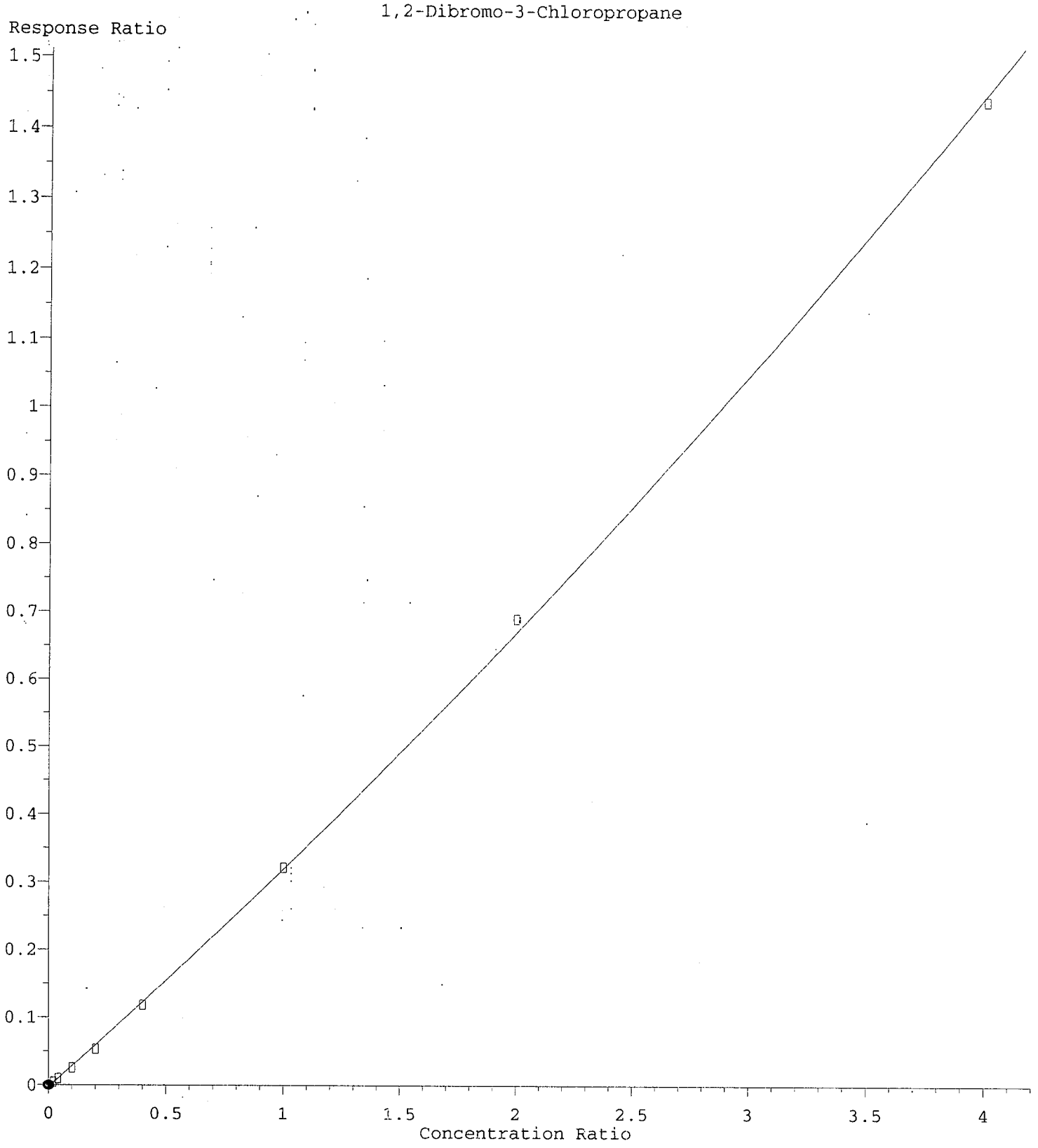
TIC: VJ20010617.D\data.ms

(61) Bromoform (P)

10.415min (-0.017) 0.21 ug/L m

response 81

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



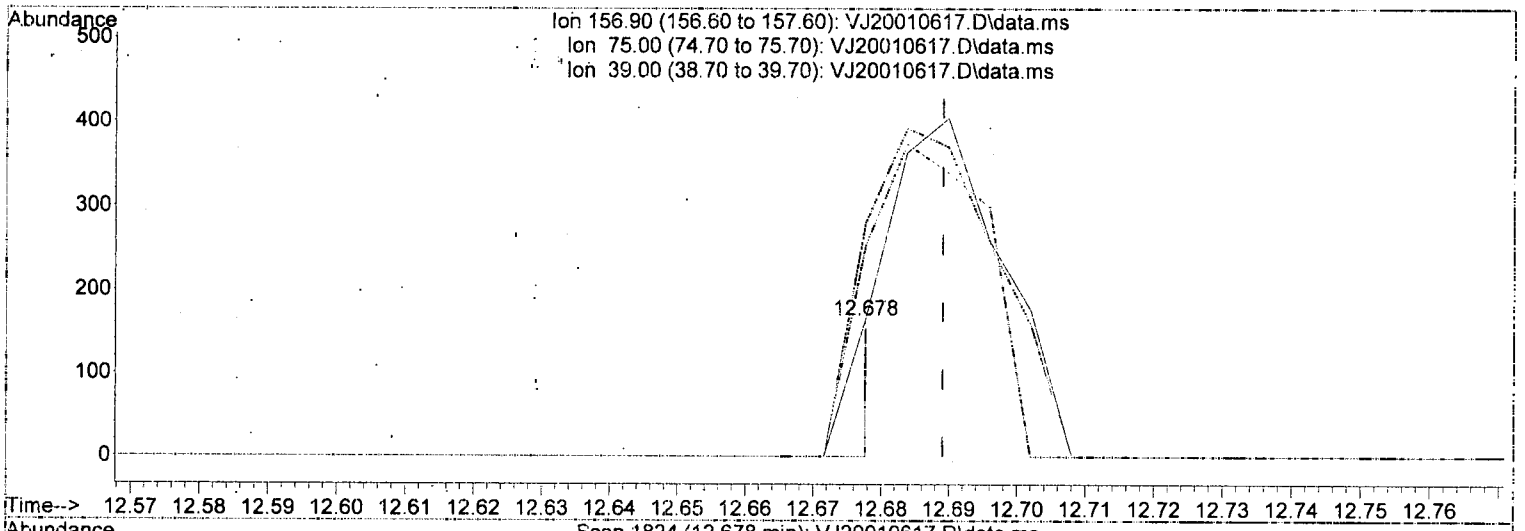
Int = 0.56

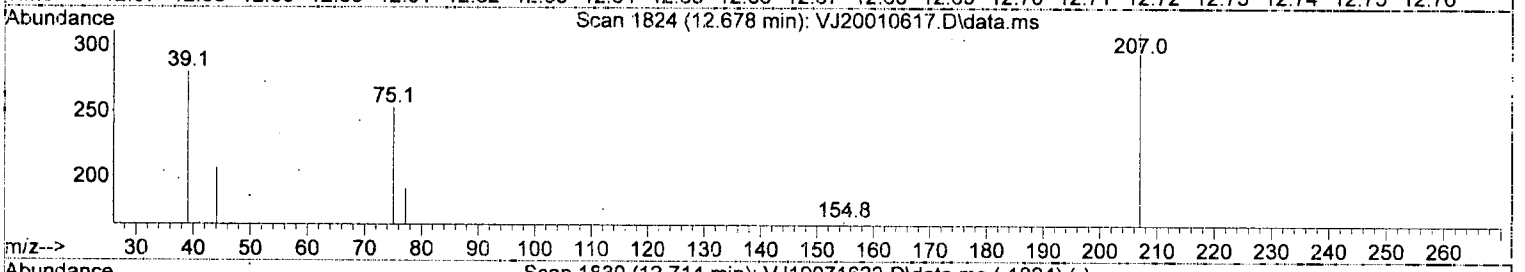
R = 1.35e-002 A*A + 3.09e-001 A - 2.96e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ2001065.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

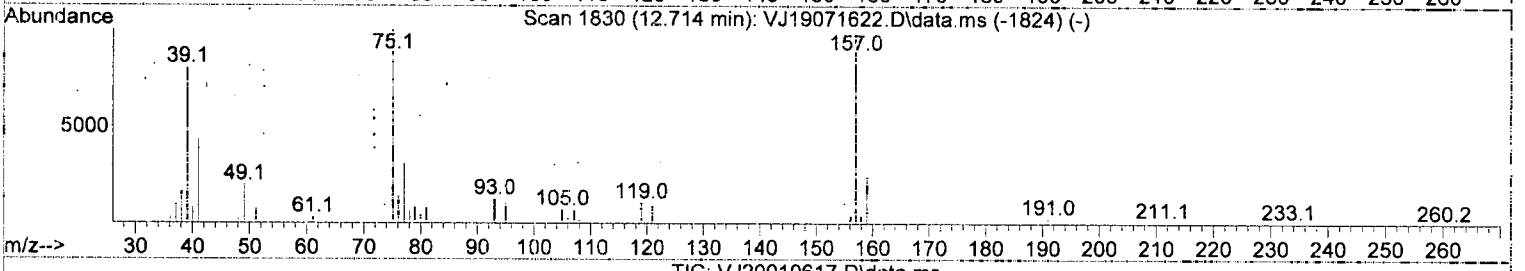
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







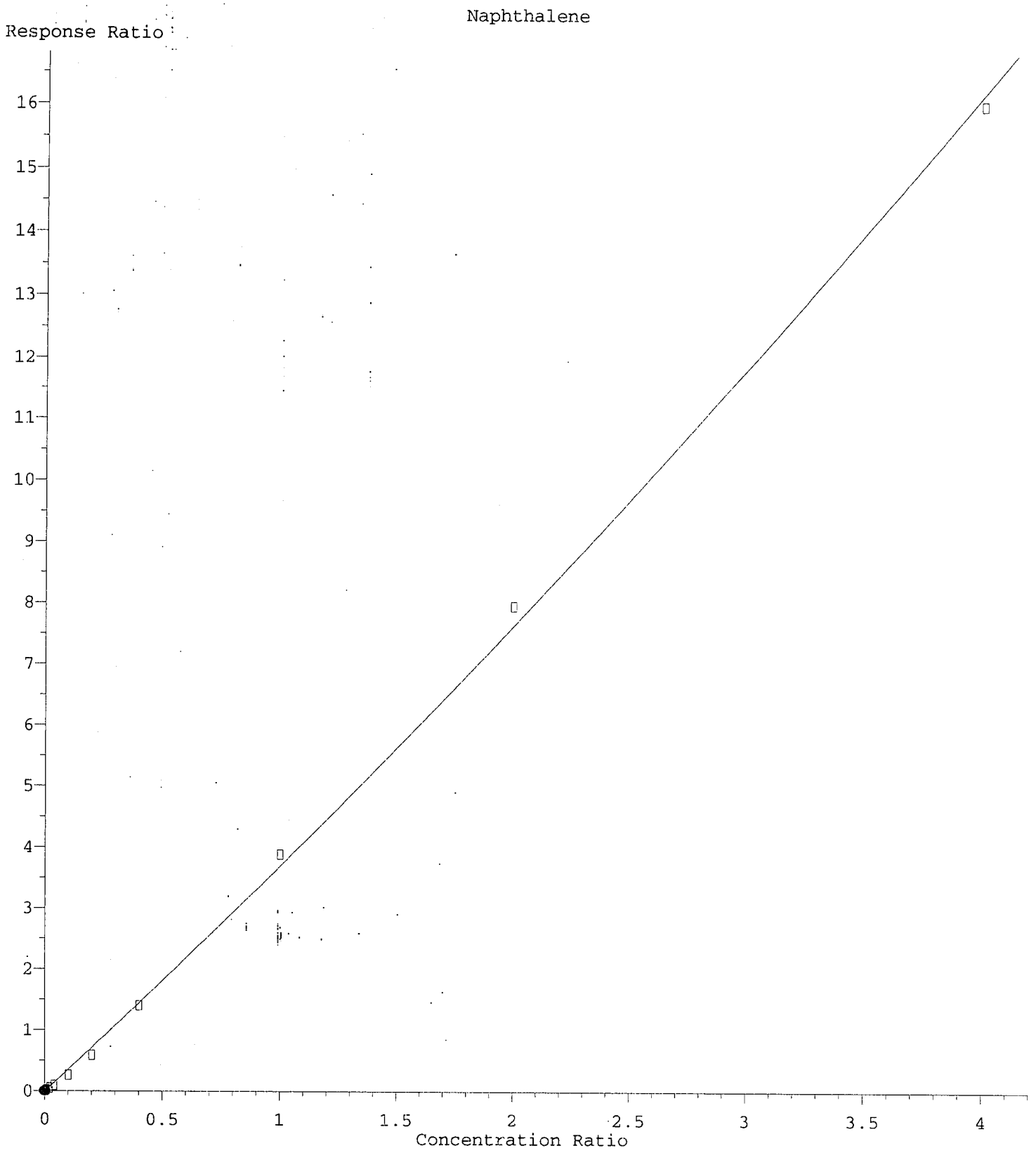
TIC: VJ20010617.D\data.ms

(81) 1,2-Dibromo-3-Chloropropane

12.678min (-0.011) 0.56 ug/L m

response 60

Ion	Exp%	Act%
156.90	100.00	100.00
75.00	73.10	154.27#
39.00	54.70	170.73#
0.00	0.00	0.00



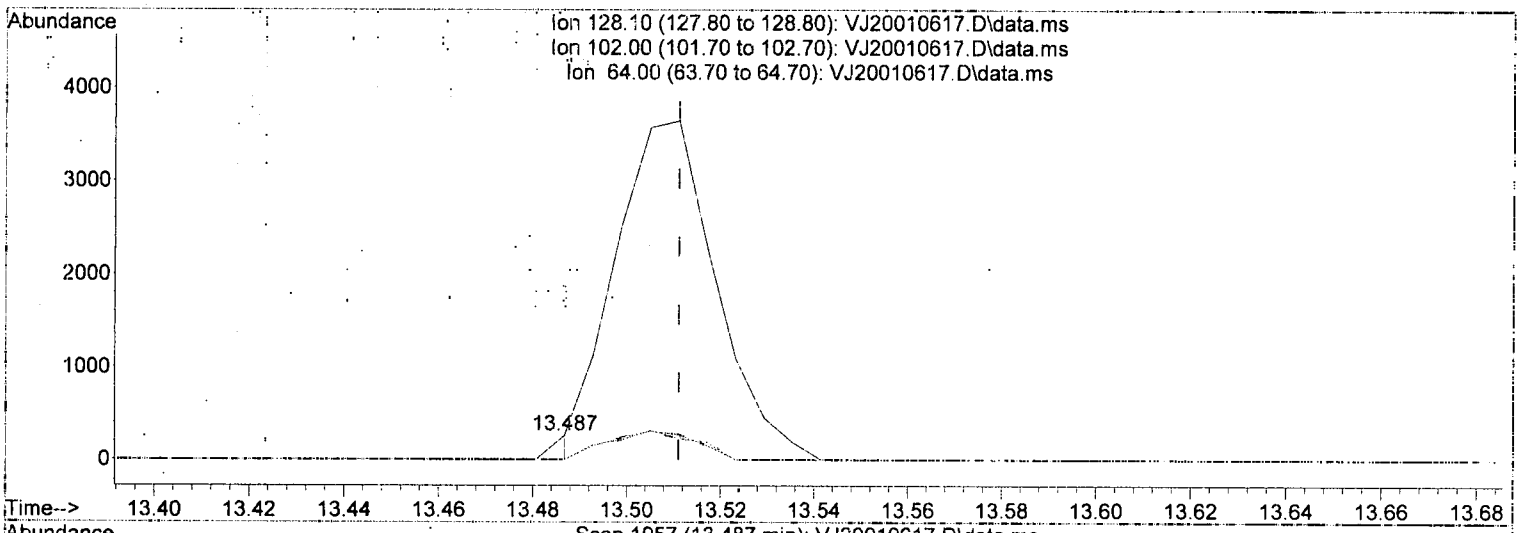
Int = 0.12

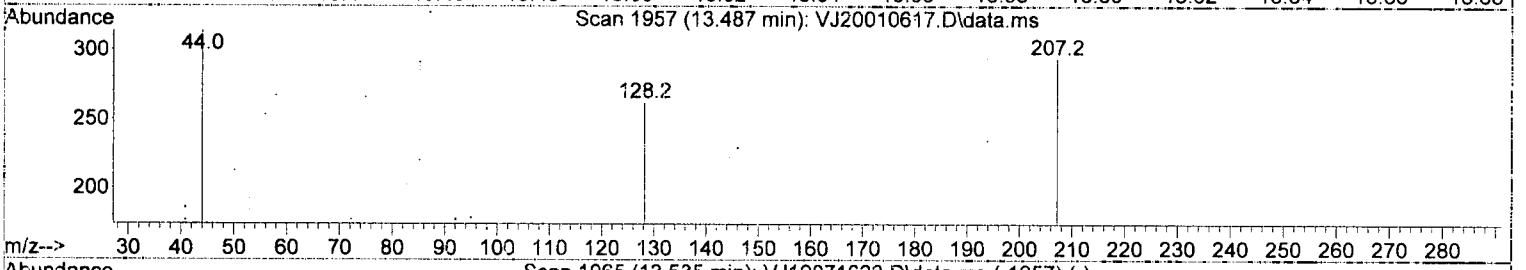
R = 1.16e-001 A*A + 3.59e+000 A - 7.64e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj2e01165.m
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

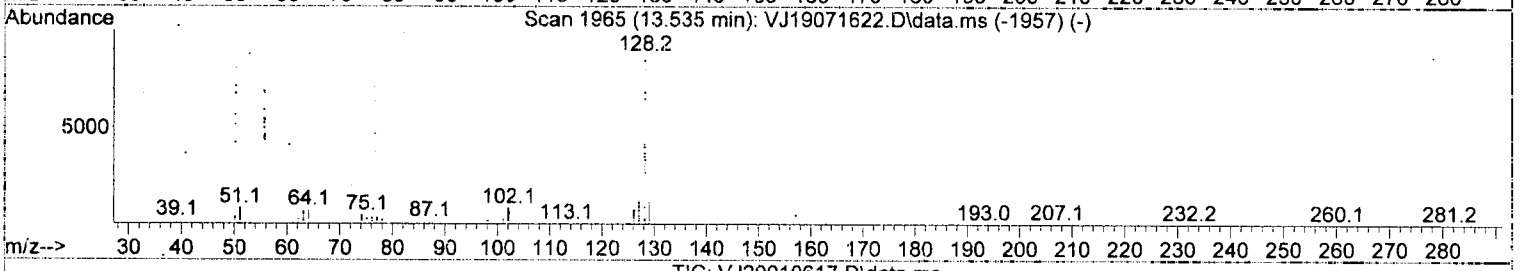
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20010617.D\data.ms

(84) Naphthalene

13.487min (-0.024) 0.12 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 SEQUENCE REVIEW SHEET

SEQUENCE: 0A06051

Analysis Included
8260C Full List
8260C Iodomethane Add On
8260C Oxygenates

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
0A06051-TUN1	MS Tune	Soil		A19L200	1/6/2020 4:18:00PM
0A06051-ICB1	Initial Cal Blank	Soil		A19L200	1/6/2020 4:45:00PM
0A06051-CAL1	Cal Standard	Soil	A19L304	"	1/6/2020 5:12:00PM
0A06051-CAL2	Cal Standard	Soil	A19L305	"	1/6/2020 5:39:00PM
0A06051-CAL3	Cal Standard	Soil	A19L306	"	1/6/2020 6:05:00PM
0A06051-CAL4	Cal Standard	Soil	A19L307	"	1/6/2020 6:32:00PM
0A06051-CAL5	Cal Standard	Soil	A19L308	"	1/6/2020 6:59:00PM
0A06051-CAL6	Cal Standard	Soil	A19L309	"	1/6/2020 7:26:00PM
0A06051-CAL7	Cal Standard	Soil	A19L310	"	1/6/2020 7:53:00PM
0A06051-CAL8	Cal Standard	Soil	A19L311	"	1/6/2020 8:20:00PM
0A06051-CAL9	Cal Standard	Soil	A19L312	"	1/6/2020 8:47:00PM
0A06051-CALA	Cal Standard	Soil	A19L313	"	1/6/2020 9:41:00PM
0A06051-CALB	Cal Standard	Soil	A19L314	"	1/6/2020 10:34:00PM
0A06051-ICV1	Initial Cal Check	Soil	A19L250	"	1/6/2020 11:55:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: A0A0801 Instrument: VOA-GCMS10

8260C Full List Sequence: 0A06051 Matrix: Soil

0A06051-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CALB	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0A06051

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: **A0A0801** Instrument: **VOA-GCMS10**

8260C Full List Sequence: **0A06051** Matrix: **Soil**

0A06051-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual
Iodomethane	20	20.0	**33.02**	165	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\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:56:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

1/8/20

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	103	0.00
2		Dichlorodifluoromethane	20.000	16.825	15.9	95	-0.01
3	P	Chloromethane	20.000	19.971	0.1	111	-0.01
4	C	Vinyl Chloride	20.000	19.741	1.3	103	-0.01
5		Bromomethane	20.000	17.303	13.5	93	0.00
6		Chloroethane	20.000	18.365	8.2	105	0.00
7		Trichlorofluoromethane	20.000	19.025	4.9	101	-0.01
8		Ethanol	1250.000	1376.369	-10.1	116	0.01
9	C	1,1-Dichloroethene	20.000	21.273	-6.4	114	-0.02
10		Carbon Disulfide	20.000	20.931	-4.7	115	-0.02
11		Freon 113	20.000	20.117	-0.6	103	-0.02
12		Iodomethane	20.000	33.022	-65.1#	205	-0.02
13		Methylene Chloride	20.000	20.369	-1.8	108	-0.01
14		Acetone	40.000	39.798	0.5	112	0.00
15		t-1,2-Dichloroethene	20.000	20.708	-3.5	109	-0.01
16		n-Hexane	20.000	20.451	-2.3	102	-0.02
17		Methyl-tert-butyl-ether	20.000	19.367	3.2	101	0.00
18		tert-Butanol (TBA)	1250.000	1391.067	-11.3	109	0.00
19		Diisopropyl ether (DIPE)	5.000	5.306	-6.1	103	0.00
20	P	1,1-Dichloroethane	20.000	21.452	-7.3	111	0.00
21		Acrylonitrile	20.000	19.804	1.0	99	0.00
22		Ethyl-tert-butyl ether (ETB	5.000	5.150	-3.0	97	0.00
23		c-1,2-Dichloroethene	20.000	21.146	-5.7	105	0.00
24		2,2-Dichloropropane	20.000	18.268	8.7	94	0.00
25		Bromochloromethane	20.000	19.423	2.9	99	0.00
26	C	Chloroform	20.000	19.943	0.3	103	0.00
27		Carbon Tetrachloride	20.000	20.620	-3.1	106	0.00
28		Tetrahydrofuran	20.000	19.257	3.7	99	0.00
29		1,1,1-Trichloroethane	20.000	20.547	-2.7	103	0.00
30	S	Dibromofluoromethane (S)	50.000	48.775	2.5	103	0.00
31		1,1-Dichloropropene	20.000	20.616	-3.1	102	0.00
32		2-Butanone (MEK)	40.000	35.763	10.6	99	0.00
33		Benzene	20.000	20.180	-0.9	104	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.899	2.0	105	0.00
35		1,2-Dichloroethane (EDC)	20.000	19.924	0.4	102	0.00
36		iso-Butyl Alcohol	500.000	489.041	2.2	106	0.02
37	S	1,4-Difluorobenzene (S)	50.000	50.498	-1.0	106	0.00
38		Trichloroethene (TCE)	20.000	21.034	-5.2	105	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	5.197	-3.9	105	0.00
40		Dibromomethane	20.000	19.844	0.8	100	0.00
41	C	1,2-Dichloropropane	20.000	20.247	-1.2	105	0.00
42		Bromodichloromethane	20.000	19.867	0.7	100	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	105	0.00
44		c-1,3-Dichloropropene	20.000	19.066	4.7	93	0.00
45	S	Toluene-d8 (S)	50.000	49.990	0.0	103	0.00
46	C	Toluene	20.000	19.708	1.5	103	0.00
47		Tetrachloroethene (PCE)	20.000	20.983	-4.9	105	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	36.362	9.1	96	0.00
49		t-1,3-Dichloropropene	20.000	21.468	-7.3	102	0.00
50		1,1,2-Trichloroethane	20.000	19.822	0.9	103	0.00

-E05

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:56:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	19.417	2.9	102	0.00
52		1,3-Dichloropropane	20.000	20.140	-0.7	102	0.00
53		1,2-Dibromoethane (EDB)	20.000	20.031	-0.2	103	0.00
54		2-Hexanone	40.000	34.814	13.0	98	0.00
55	P	Chlorobenzene	20.000	19.583	2.1	103	0.00
56	C	Ethylbenzene	20.000	20.607	-3.0	104	0.00
57		1,1,1,2-Tetrachloroethane	20.000	19.985	0.1	104	0.00
58		m,p-Xylenes (2)	40.000	43.550	-8.9	104	0.00
59		o-Xylene	20.000	21.686	-8.4	102	0.00
60		Styrene	20.000	18.539	7.3	103	0.00
61	P	Bromoform	20.000	19.935	0.3	101	0.00
62		Isopropylbenzene	20.000	20.847	-4.2	102	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	108	0.00
64	S	4-Bromofluorobenzene (S)	50.000	48.963	2.1	106	0.00
65		Bromobenzene	20.000	19.868	0.7	104	0.00
66		n-Propylbenzene	20.000	19.889	0.6	101	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	20.274	-1.4	101	0.00
68		2-Chlorotoluene	20.000	20.458	-2.3	102	0.00
69		1,3,5-Trimethylbenzene	20.000	21.832	-9.2	103	0.00
70		1,2,3-Trichloropropane	20.000	19.869	0.7	102	0.00
71		t-1,4-Dichloro-2-butene	20.000	16.882	15.6	91	0.00
72		4-Chlorotoluene	20.000	20.735	-3.7	102	0.00
73		tert-Butylbenzene	20.000	20.904	-4.5	103	0.00
74		1,2,4-Trimethylbenzene	20.000	21.578	-7.9	101	0.00
75		sec-Butylbenzene	20.000	21.438	-7.2	102	0.00
76		4-Isopropyltoluene	20.000	22.010	-10.1	103	0.00
77		1,3-Dichlorobenzene	20.000	20.593	-3.0	103	0.00
78		1,4-Dichlorobenzene	20.000	19.188	4.1	105	0.00
79		n-Butylbenzene	20.000	20.378	-1.9	104	0.00
80		1,2-Dichlorobenzene	20.000	20.586	-2.9	103	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	18.077	9.6	101	0.00
82		Hexachlorobutadiene	20.000	20.802	-4.0	105	0.00
83		1,2,4-Trichlorobenzene	20.000	20.122	-0.6	102	0.00
84		Naphthalene	20.000	18.450	7.8	102	0.00
85		1,2,3-Trichlorobenzene	20.000	21.038	-5.2	103	0.00

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

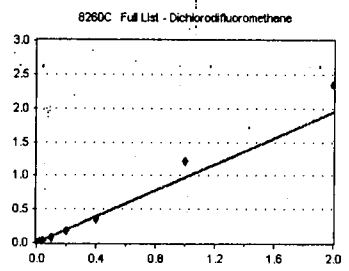
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Dichlorodifluoromethane

Curve Fit: **AVERAGE RF**

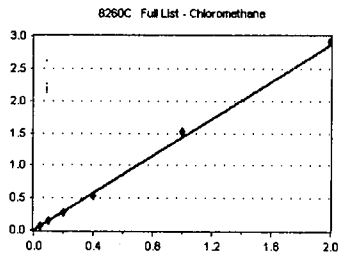


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	732	0.853	1.69
0A06051-CAL4	1	2002	0.960	1.69
0A06051-CAL5	2	3864	0.898	1.69
0A06051-CAL6	5	9676	0.885	1.69
0A06051-CAL7	10	19171	0.912	1.69
0A06051-CAL8	20	38529	0.887	1.69
0A06051-CAL9	50	133544	1.215	1.69
0A06051-CALA	100	260818	1.176	1.70
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **0.973** RF RSD **14.47** AVE RT **1.69**

Chloromethane

Curve Fit: **AVERAGE RF**

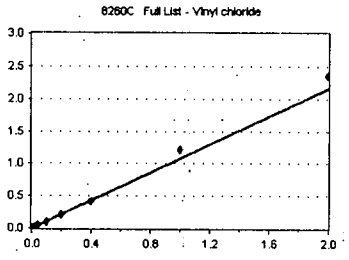


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~1721~~	~~8.089~~	~~1.89~~
~~0A06051-CAL2~~	~~0.2~~	~~2258~~	~~5.052~~	~~1.90~~
~~0A06051-CAL3~~	~~0.4~~	~~2494~~	~~2.907~~	~~1.89~~
~~0A06051-CAL4~~	~~1~~	~~4191~~	~~2.009~~	~~1.89~~
0A06051-CAL5	2	6640	1.543	1.89
0A06051-CAL6	5	15325	1.402	1.89
0A06051-CAL7	10	28319	1.347	1.89
0A06051-CAL8	20	58016	1.336	1.89
0A06051-CAL9	50	167097	1.520	1.89
0A06051-CALA	100	323609	1.459	1.90
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **1.434** RF RSD **6.08** AVE RT **1.89**

Vinyl chloride

Curve Fit: **AVERAGE RF**

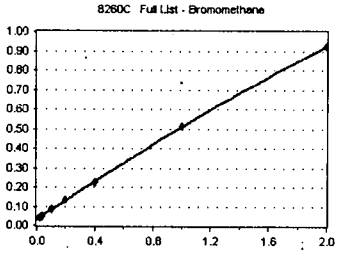


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	831	0.968	1.99
0A06051-CAL4	1	2198	1.053	1.99
0A06051-CAL5	2	4540	1.055	2.00
0A06051-CAL6	5	11467	1.049	1.99
0A06051-CAL7	10	22243	1.058	2.00
0A06051-CAL8	20	46537	1.071	1.99
0A06051-CAL9	50	134342	1.222	1.99
0A06051-CALA	100	261456	1.179	2.00
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **1.082** RF RSD **7.43** AVE RT **1.99**

Bromomethane

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~3306~~	~~15.539~~	~~2.34~~
~~0A06051-CAL2~~	~~0.2~~	~~4152~~	~~9.289~~	~~2.34~~
~~0A06051-CAL3~~	~~0.4~~	~~3494~~	~~4.072~~	~~2.34~~
0A06051-CAL4	1	4342	2.081	2.34
0A06051-CAL5	2	5274	1.225	2.34
0A06051-CAL6	5	9353	0.856	2.34
0A06051-CAL7	10	14130	0.672	2.34
0A06051-CAL8	20	24661	0.568	2.33
0A06051-CAL9	50	56169	0.511	2.34
0A06051-CALA	100	102308	0.461	2.34
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **0.911** RF RSD **63.53** AVE RT **2.34**

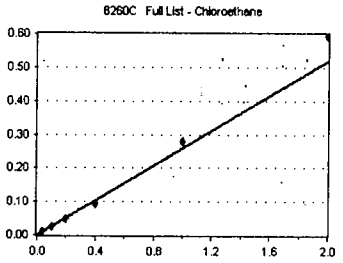
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Chloroethane

Curve Fit: **AVERAGE RF**

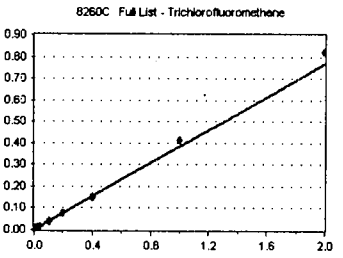


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL4~~	~~1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL5	2	1133	0.263	2.46
0A06051-CAL6	5	2663	0.244	2.46
0A06051-CAL7	10	5109	0.243	2.46
0A06051-CAL8	20	10213	0.235	2.46
0A06051-CAL9	50	30532	0.278	2.46
0A06051-CALA	100	65757	0.297	2.47
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **0.260** RF RSD **9.16** AVE RT **2.46**

Trichlorofluoromethane

Curve Fit: **AVERAGE RF**

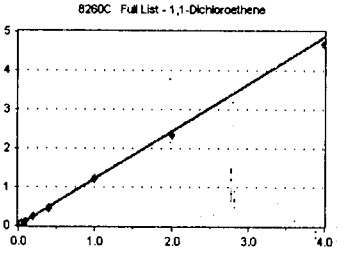


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	277	0.323	2.58
0A06051-CAL4	1	841	0.403	2.59
0A06051-CAL5	2	1611	0.374	2.59
0A06051-CAL6	5	4190	0.383	2.59
0A06051-CAL7	10	8153	0.388	2.59
0A06051-CAL8	20	16168	0.372	2.59
0A06051-CAL9	50	45598	0.415	2.59
0A06051-CALA	100	91399	0.412	2.59
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **0.384** RF RSD **7.69** AVE RT **2.59**

1,1-Dichloroethene

Curve Fit: **AVERAGE RF**

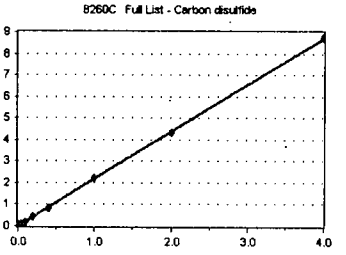


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	573	1.282	3.15
0A06051-CAL3	0.4	1094	1.275	3.13
0A06051-CAL4	1	2590	1.241	3.13
0A06051-CAL5	2	5315	1.235	3.14
0A06051-CAL6	5	12989	1.188	3.13
0A06051-CAL7	10	25020	1.190	3.14
0A06051-CAL8	20	50753	1.169	3.13
0A06051-CAL9	50	135159	1.229	3.13
0A06051-CALA	100	259216	1.169	3.15
0A06051-CALB	200	532160	1.168	3.13

AVE RF **1.215** RF RSD **3.59** AVE RT **3.14**

Carbon disulfide

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	1049	2.347	3.15
0A06051-CAL3	0.4	2024	2.359	3.15
0A06051-CAL4	1	4740	2.272	3.15
0A06051-CAL5	2	9078	2.109	3.15
0A06051-CAL6	5	22304	2.040	3.15
0A06051-CAL7	10	43573	2.073	3.15
0A06051-CAL8	20	88914	2.047	3.15
0A06051-CAL9	50	244493	2.224	3.15
0A06051-CALA	100	479467	2.162	3.16
0A06051-CALB	200	997437	2.190	3.15

AVE RF **2.182** RF RSD **5.38** AVE RT **3.15**

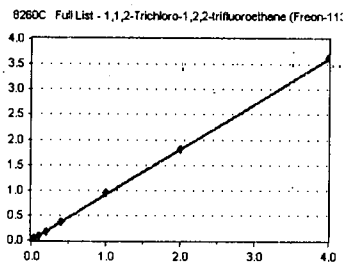
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

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

Curve Fit: **AVERAGE RF**

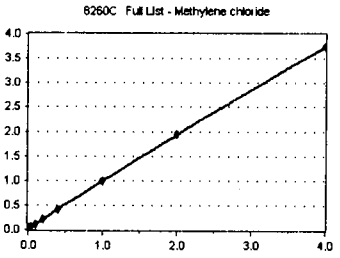


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	716	0.834	3.19
0A06051-CAL4	1	1843	0.883	3.19
0A06051-CAL5	2	3954	0.919	3.19
0A06051-CAL6	5	9807	0.897	3.19
0A06051-CAL7	10	19246	0.916	3.19
0A06051-CAL8	20	39592	0.912	3.19
0A06051-CAL9	50	103618	0.942	3.19
0A06051-CALA	100	202415	0.913	3.20
0A06051-CALB	200	413088	0.907	3.19

AVE RF **0.903** RF RSD **3.34** AVE RT **3.19**

Methylene chloride

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

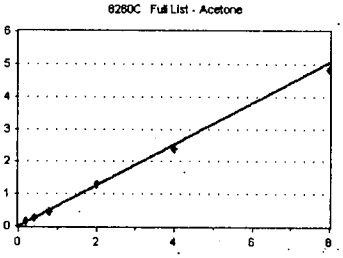


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~2558~~	~~12.023~~	~~3.77~~
~~0A06051-CAL2~~	~~0.2~~	~~2700~~	~~6.041~~	~~3.78~~
~~0A06051-CAL3~~	~~0.4~~	~~3164~~	~~3.687~~	~~3.77~~
0A06051-CAL4	1	4182	2.004	3.77
0A06051-CAL5	2	6338	1.472	3.78
0A06051-CAL6	5	12754	1.167	3.77
0A06051-CAL7	10	22826	1.086	3.77
0A06051-CAL8	20	43446	1.000	3.77
0A06051-CAL9	50	110204	1.002	3.77
0A06051-CALA	100	214594	0.968	3.78
0A06051-CALB	200	426237	0.936	3.77

AVE RF **1.204** RF RSD **30.39** AVE RT **3.77**

Acetone

Curve Fit: **AVERAGE RF**

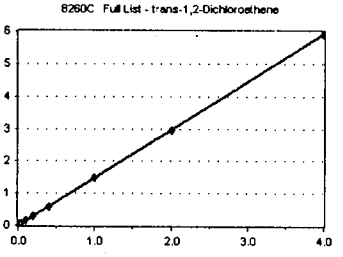


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.8~~	~~3011~~	~~1.755~~	~~3.87~~
~~0A06051-CAL4~~	~~2~~	~~4711~~	~~1.129~~	~~3.86~~
~~0A06051-CAL5~~	~~4~~	~~7670~~	~~0.891~~	~~3.87~~
0A06051-CAL6	10	16091	0.736	3.86
0A06051-CAL7	20	26202	0.623	3.86
0A06051-CAL8	40	50344	0.580	3.86
0A06051-CAL9	100	142899	0.650	3.86
0A06051-CALA	200	265824	0.599	3.86
0A06051-CALB	400	551814	0.606	3.86

AVE RF **0.632** RF RSD **8.87** AVE RT **3.86**

trans-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	676	1.512	3.94
0A06051-CAL3	0.4	1275	1.486	3.93
0A06051-CAL4	1	3238	1.552	3.94
0A06051-CAL5	2	6284	1.460	3.94
0A06051-CAL6	5	15967	1.461	3.94
0A06051-CAL7	10	31429	1.495	3.94
0A06051-CAL8	20	63531	1.463	3.94
0A06051-CAL9	50	165597	1.506	3.94
0A06051-CALA	100	326255	1.471	3.95
0A06051-CALB	200	670587	1.472	3.94

AVE RF **1.488** RF RSD **1.98** AVE RT **3.94**

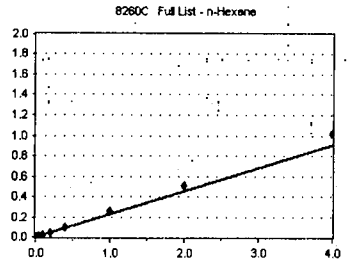
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

n-Hexane

Curve Fit: **AVERAGE RF**

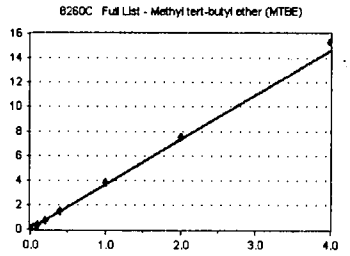


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL4	1	401	0.192	4.03
0A06051-CAL5	2	894	0.208	4.04
0A06051-CAL6	5	2157	0.197	4.03
0A06051-CAL7	10	4668	0.222	4.03
0A06051-CAL8	20	10258	0.236	4.03
0A06051-CAL9	50	28595	0.260	4.03
0A06051-CALA	100	56002	0.253	4.04
0A06051-CALB	200	115656	0.254	4.03

AVE RF **0.228** RF RSD **11.78** AVE RT **4.03**

Methyl tert-butyl ether (MTBE)

Curve Fit: **AVERAGE RF**

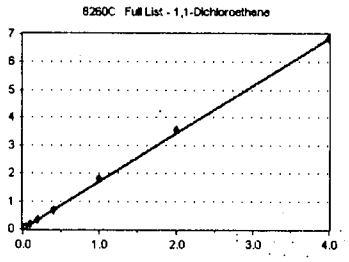


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	1683	3.765	4.11
0A06051-CAL3	0.4	3201	3.730	4.10
0A06051-CAL4	1	7733	3.706	4.10
0A06051-CAL5	2	14619	3.396	4.11
0A06051-CAL6	5	37490	3.430	4.10
0A06051-CAL7	10	75246	3.580	4.10
0A06051-CAL8	20	157914	3.636	4.10
0A06051-CAL9	50	417641	3.799	4.10
0A06051-CALA	100	838469	3.781	4.10
0A06051-CALB	200	1739636	3.819	4.09

AVE RF **3.664** RF RSD **4.14** AVE RT **4.10**

1,1-Dichloroethane

Curve Fit: **AVERAGE RF**

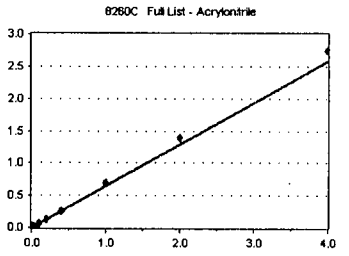


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	614	1.374	4.57
0A06051-CAL3	0.4	1475	1.719	4.58
0A06051-CAL4	1	3757	1.801	4.57
0A06051-CAL5	2	7524	1.748	4.57
0A06051-CAL6	5	18804	1.720	4.57
0A06051-CAL7	10	37310	1.775	4.58
0A06051-CAL8	20	74578	1.717	4.58
0A06051-CAL9	50	199104	1.811	4.57
0A06051-CALA	100	394635	1.780	4.57
0A06051-CALB	200	778036	1.708	4.57

AVE RF **1.715** RF RSD **7.32** AVE RT **4.57**

Acrylonitrile

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~267~~	~~0.311~~	~~4.64~~
0A06051-CAL4	1	1215	0.582	4.63
0A06051-CAL5	2	2393	0.556	4.63
0A06051-CAL6	5	6774	0.620	4.63
0A06051-CAL7	10	13757	0.654	4.62
0A06051-CAL8	20	28955	0.667	4.63
0A06051-CAL9	50	76346	0.694	4.62
0A06051-CALA	100	154316	0.696	4.63
0A06051-CALB	200	311398	0.684	4.62

AVE RF **0.644** RF RSD **8.21** AVE RT **4.63**

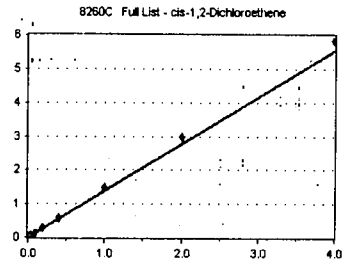
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

cis-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**

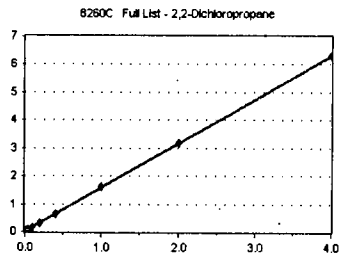


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	459	1.027	5.13
0A06051-CAL3	0.4	1160	1.352	5.12
0A06051-CAL4	1	2879	1.380	5.12
0A06051-CAL5	2	5912	1.373	5.12
0A06051-CAL6	5	15089	1.380	5.12
0A06051-CAL7	10	30607	1.456	5.13
0A06051-CAL8	20	62311	1.435	5.12
0A06051-CAL9	50	163860	1.490	5.12
0A06051-CALA	100	330862	1.492	5.13
0A06051-CALB	200	665136	1.460	5.12

AVE RF **1.385** RF RSD **9.79** AVE RT **5.12**

2,2-Dichloropropane

Curve Fit: **AVERAGE RF**

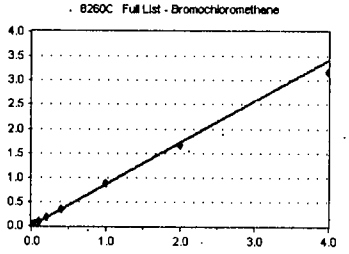


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	710	1.588	5.24
0A06051-CAL3	0.4	1342	1.564	5.23
0A06051-CAL4	1	3369	1.615	5.23
0A06051-CAL5	2	6612	1.536	5.24
0A06051-CAL6	5	16923	1.548	5.23
0A06051-CAL7	10	33201	1.579	5.23
0A06051-CAL8	20	68911	1.587	5.23
0A06051-CAL9	50	178479	1.623	5.23
0A06051-CALA	100	352081	1.588	5.24
0A06051-CALB	200	717593	1.575	5.23

AVE RF **1.580** RF RSD **1.70** AVE RT **5.23**

Bromochloromethane

Curve Fit: **AVERAGE RF**

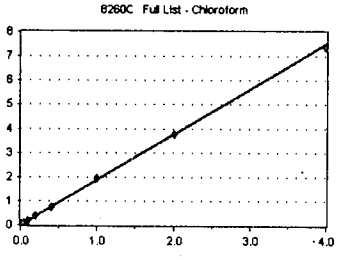


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	685	0.798	5.32
0A06051-CAL4	1	1832	0.878	5.32
0A06051-CAL5	2	3877	0.901	5.32
0A06051-CAL6	5	9397	0.860	5.32
0A06051-CAL7	10	18916	0.900	5.32
0A06051-CAL8	20	37485	0.863	5.32
0A06051-CAL9	50	96440	0.877	5.32
0A06051-CALA	100	184637	0.833	5.32
0A06051-CALB	200	362865	0.797	5.32

AVE RF **0.856** RF RSD **4.58** AVE RT **5.32**

Chloroform

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	750	1.678	5.41
0A06051-CAL3	0.4	1637	1.908	5.41
0A06051-CAL4	1	4167	1.997	5.41
0A06051-CAL5	2	8134	1.890	5.41
0A06051-CAL6	5	20786	1.902	5.41
0A06051-CAL7	10	40679	1.935	5.41
0A06051-CAL8	20	81758	1.882	5.41
0A06051-CAL9	50	212235	1.930	5.41
0A06051-CALA	100	418939	1.889	5.41
0A06051-CALB	200	835972	1.835	5.41

AVE RF **1.885** RF RSD **4.45** AVE RT **5.41**

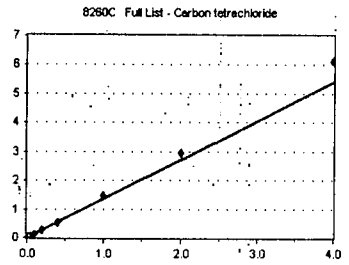
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Carbon tetrachloride

Curve Fit: **AVERAGE RF**

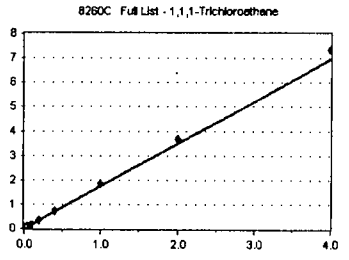


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~762~~	~~0.888~~	~~5.55~~
0A06051-CAL4	1	2362	1.132	5.55
0A06051-CAL5	2	5361	1.245	5.54
0A06051-CAL6	5	13736	1.257	5.54
0A06051-CAL7	10	28141	1.339	5.55
0A06051-CAL8	20	59324	1.366	5.55
0A06051-CAL9	50	163003	1.483	5.55
0A06051-CALA	100	328646	1.482	5.55
0A06051-CALB	200	697816	1.532	5.55

AVE RF **1.354** RF RSD **10.27** AVE RT **5.55**

1,1,1-Trichloroethane

Curve Fit: **AVERAGE RF**

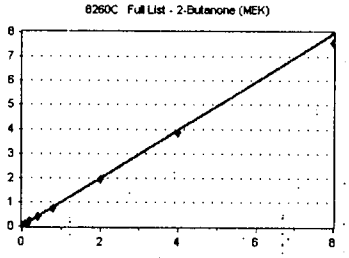


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	641	1.434	5.62
0A06051-CAL3	0.4	1303	1.519	5.62
0A06051-CAL4	1	3658	1.753	5.61
0A06051-CAL5	2	7608	1.767	5.62
0A06051-CAL6	5	19285	1.764	5.62
0A06051-CAL7	10	37707	1.794	5.62
0A06051-CAL8	20	77869	1.793	5.62
0A06051-CAL9	50	203751	1.853	5.62
0A06051-CALA	100	408532	1.842	5.62
0A06051-CALB	200	839286	1.842	5.62

AVE RF **1.736** RF RSD **8.22** AVE RT **5.62**

2-Butanone (MEK)

Curve Fit: **AVERAGE RF**

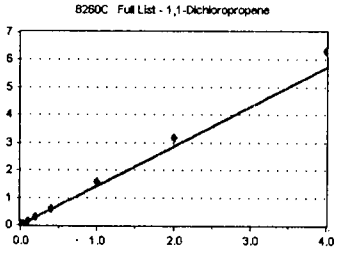


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.2~~	~~3330~~	~~7.826~~	~~5.73~~
~~0A06051-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.6~~	~~4185~~	~~2.439~~	~~5.73~~
~~0A06051-CAL4~~	~~2~~	~~6120~~	~~1.467~~	~~5.74~~
0A06051-CAL5	4	10497	1.219	5.73
0A06051-CAL6	10	21516	0.984	5.73
0A06051-CAL7	20	39626	0.943	5.72
0A06051-CAL8	40	80360	0.925	5.72
0A06051-CAL9	100	212809	0.968	5.72
0A06051-CALA	200	426227	0.961	5.72
0A06051-CALB	400	860392	0.944	5.72

AVE RF **0.992** RF RSD **10.28** AVE RT **5.73**

1,1-Dichloropropene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	1041	1.213	5.74
0A06051-CAL4	1	2751	1.319	5.74
0A06051-CAL5	2	5753	1.337	5.75
0A06051-CAL6	5	14954	1.368	5.74
0A06051-CAL7	10	29838	1.419	5.74
0A06051-CAL8	20	65020	1.497	5.74
0A06051-CAL9	50	173054	1.574	5.74
0A06051-CALA	100	350616	1.581	5.74
0A06051-CALB	200	719241	1.579	5.74

AVE RF **1.432** RF RSD **9.32** AVE RT **5.74**

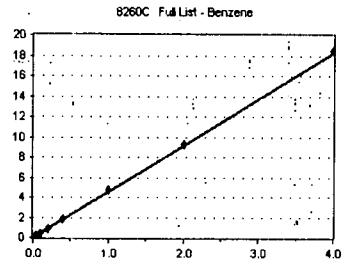
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Benzene

Curve Fit: **AVERAGE RF**

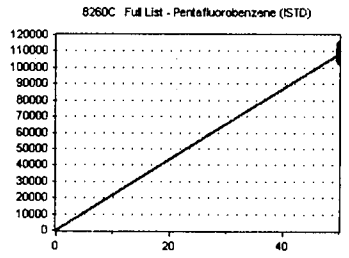


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	964	4.531	6.00
0A06051-CAL2	0.2	2055	4.598	6.00
0A06051-CAL3	0.4	3949	4.602	6.00
0A06051-CAL4	1	9450	4.529	5.99
0A06051-CAL5	2	19123	4.443	6.00
0A06051-CAL6	5	49577	4.535	5.99
0A06051-CAL7	10	96046	4.569	6.00
0A06051-CAL8	20	199822	4.601	6.00
0A06051-CAL9	50	519107	4.722	6.00
0A06051-CALA	100	1027410	4.633	6.00
0A06051-CALB	200	2104798	4.621	5.99

AVE RF **4.580** RF RSD **1.57** AVE RT **6.00**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

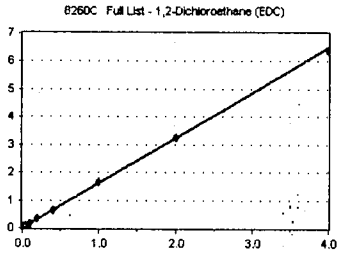


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	106379	2127.580	6.08
0A06051-CAL2	50	111744	2234.880	6.09
0A06051-CAL3	50	107259	2145.180	6.08
0A06051-CAL4	50	104320	2086.400	6.08
0A06051-CAL5	50	107612	2152.240	6.08
0A06051-CAL6	50	109312	2186.240	6.08
0A06051-CAL7	50	105104	2102.080	6.08
0A06051-CAL8	50	108585	2171.700	6.08
0A06051-CAL9	50	109944	2198.880	6.08
0A06051-CALA	50	110868	2217.360	6.08
0A06051-CALB	50	113880	2277.600	6.08

AVE RF **2172.740** RF RSD **2.66** AVE RT **6.08**

1,2-Dichloroethane (EDC)

Curve Fit: **AVERAGE RF**

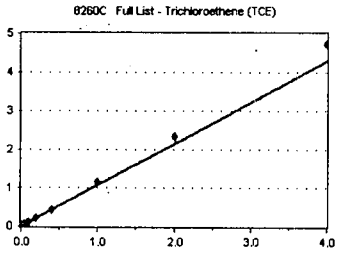


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	601	1.345	6.21
0A06051-CAL3	0.4	1395	1.626	6.20
0A06051-CAL4	1	3535	1.694	6.21
0A06051-CAL5	2	7281	1.691	6.21
0A06051-CAL6	5	18324	1.676	6.20
0A06051-CAL7	10	35220	1.675	6.20
0A06051-CAL8	20	71205	1.639	6.20
0A06051-CAL9	50	182611	1.661	6.20
0A06051-CALA	100	359673	1.622	6.21
0A06051-CALB	200	729497	1.601	6.20

AVE RF **1.623** RF RSD **6.33** AVE RT **6.20**

Trichloroethene (TCE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	325	0.727	6.61
0A06051-CAL3	0.4	861	1.003	6.61
0A06051-CAL4	1	2393	1.147	6.62
0A06051-CAL5	2	4651	1.081	6.62
0A06051-CAL6	5	11743	1.074	6.62
0A06051-CAL7	10	23199	1.104	6.61
0A06051-CAL8	20	48339	1.113	6.61
0A06051-CAL9	50	127363	1.158	6.61
0A06051-CALA	100	261248	1.178	6.62
0A06051-CALB	200	540121	1.186	6.61

AVE RF **1.077** RF RSD **12.51** AVE RT **6.61**

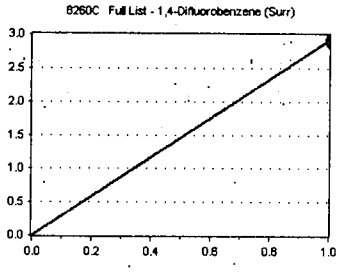
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

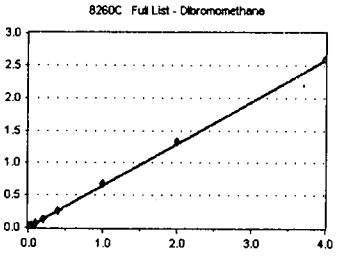


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	313857	2.950	6.64
0A06051-CAL2	50	320717	2.870	6.65
0A06051-CAL3	50	317056	2.956	6.64
0A06051-CAL4	50	303345	2.908	6.64
0A06051-CAL5	50	312825	2.907	6.65
0A06051-CAL6	50	319667	2.924	6.64
0A06051-CAL7	50	303283	2.886	6.65
0A06051-CAL8	50	312074	2.874	6.64
0A06051-CAL9	50	323337	2.941	6.64
0A06051-CALA	50	322488	2.909	6.65
0A06051-CALB	50	336999	2.959	6.64

AVE RF **2.917** RF RSD **1.10** AVE RT **6.65**

Dibromomethane

Curve Fit: **AVERAGE RF**

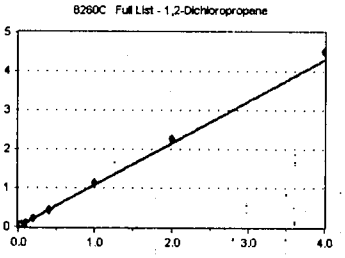


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	440	0.513	7.05
0A06051-CAL4	1	1401	0.671	7.05
0A06051-CAL5	2	2722	0.632	7.06
0A06051-CAL6	5	7254	0.664	7.06
0A06051-CAL7	10	13851	0.659	7.05
0A06051-CAL8	20	28602	0.659	7.06
0A06051-CAL9	50	74740	0.680	7.06
0A06051-CALA	100	147470	0.665	7.06
0A06051-CALB	200	295836	0.649	7.06

AVE RF **0.644** RF RSD **7.90** AVE RT **7.05**

1,2-Dichloropropane

Curve Fit: **AVERAGE RF**

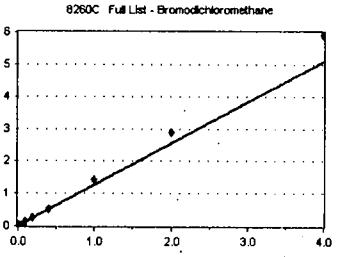


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	812	0.946	7.17
0A06051-CAL4	1	2329	1.116	7.17
0A06051-CAL5	2	4450	1.034	7.17
0A06051-CAL6	5	11716	1.072	7.17
0A06051-CAL7	10	22439	1.067	7.17
0A06051-CAL8	20	46552	1.072	7.17
0A06051-CAL9	50	124220	1.130	7.17
0A06051-CALA	100	251031	1.132	7.17
0A06051-CALB	200	513536	1.127	7.17

AVE RF **1.077** RF RSD **5.59** AVE RT **7.17**

Bromodichloromethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	837	0.975	7.23
0A06051-CAL4	1	2358	1.130	7.24
0A06051-CAL5	2	5147	1.196	7.24
0A06051-CAL6	5	13785	1.261	7.25
0A06051-CAL7	10	26524	1.262	7.24
0A06051-CAL8	20	57072	1.314	7.24
0A06051-CAL9	50	156309	1.422	7.24
0A06051-CALA	100	319153	1.439	7.25
0A06051-CALB	200	673068	1.478	7.24

AVE RF **1.275** RF RSD **12.66** AVE RT **7.24**

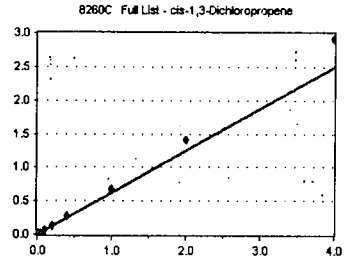
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

cis-1,3-Dichloropropene

Curve Fit: **AVERAGE RF**

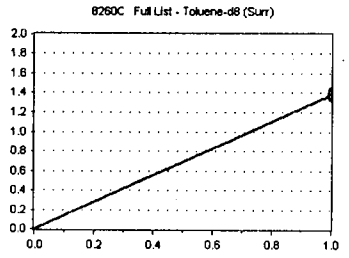


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	1184	0.543	7.94
0A06051-CAL4	1	2826	0.540	7.94
0A06051-CAL5	2	5846	0.540	7.95
0A06051-CAL6	5	15807	0.585	7.95
0A06051-CAL7	10	31802	0.620	7.95
0A06051-CAL8	20	69513	0.675	7.95
0A06051-CAL9	50	179213	0.680	7.95
0A06051-CALA	100	375031	0.709	7.95
0A06051-CALB	200	788701	0.728	7.95

AVE RF **0.625** RF RSD **12.13** AVE RT **7.94**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**

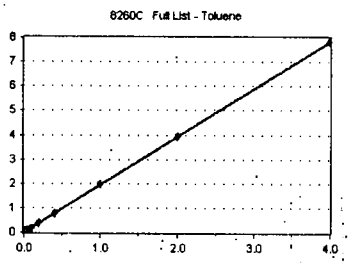


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	365118	1.396	8.16
0A06051-CAL2	50	371366	1.429	8.16
0A06051-CAL3	50	372287	1.366	8.16
0A06051-CAL4	50	353415	1.352	8.16
0A06051-CAL5	50	366801	1.356	8.16
0A06051-CAL6	50	371403	1.375	8.16
0A06051-CAL7	50	357128	1.391	8.16
0A06051-CAL8	50	363051	1.409	8.16
0A06051-CAL9	50	366647	1.392	8.16
0A06051-CALA	50	366947	1.387	8.16
0A06051-CALB	50	377155	1.393	8.16

AVE RF **1.386** RF RSD **1.65** AVE RT **8.16**

Toluene

Curve Fit: **AVERAGE RF**

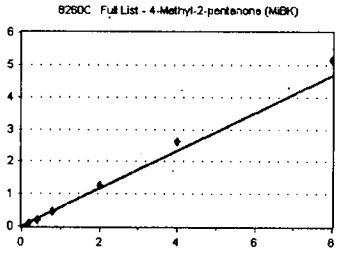


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	1116	2.133	8.23
0A06051-CAL2	0.2	2095	2.016	8.23
0A06051-CAL3	0.4	4056	1.860	8.22
0A06051-CAL4	1	10340	1.977	8.22
0A06051-CAL5	2	20173	1.865	8.22
0A06051-CAL6	5	50497	1.870	8.22
0A06051-CAL7	10	99117	1.931	8.22
0A06051-CAL8	20	202797	1.968	8.22
0A06051-CAL9	50	527429	2.002	8.22
0A06051-CALA	100	1043895	1.973	8.23
0A06051-CALB	200	2113193	1.952	8.22

AVE RF **1.959** RF RSD **4.07** AVE RT **8.22**

4-Methyl-2-pentanone (MiBK)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.8~~	~~1816~~	~~0.416~~	~~8.67~~
~~0A06051-CAL4~~	~~2~~	~~4709~~	~~0.450~~	~~8.66~~
~~0A06051-CAL5~~	~~4~~	~~9202~~	~~0.425~~	~~8.66~~
0A06051-CAL6	10	25616	0.474	8.66
0A06051-CAL7	20	52984	0.516	8.66
0A06051-CAL8	40	120371	0.584	8.66
0A06051-CAL9	100	335118	0.636	8.66
0A06051-CALA	200	694774	0.657	8.66
0A06051-CALB	400	1392617	0.643	8.66

AVE RF **0.585** RF RSD **12.82** AVE RT **8.66**

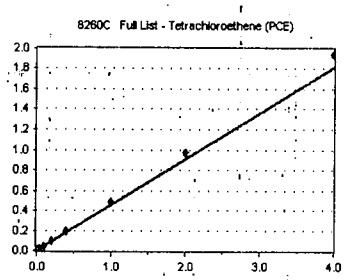
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Tetrachloroethene (PCE)

Curve Fit: **AVERAGE RF**

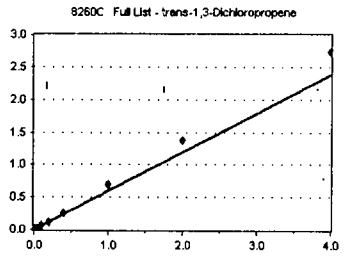


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	769	0.353	8.66
0A06051-CAL4	1	2425	0.464	8.67
0A06051-CAL5	2	4547	0.420	8.68
0A06051-CAL6	5	12115	0.449	8.67
0A06051-CAL7	10	23746	0.463	8.68
0A06051-CAL8	20	49335	0.479	8.67
0A06051-CAL9	50	128862	0.489	8.67
0A06051-CALA	100	257455	0.487	8.67
0A06051-CALB	200	525373	0.485	8.67

AVE RF **0.454** RF RSD **9.69** AVE RT **8.67**

trans-1,3-Dichloropropene

Curve Fit: **AVERAGE RF**

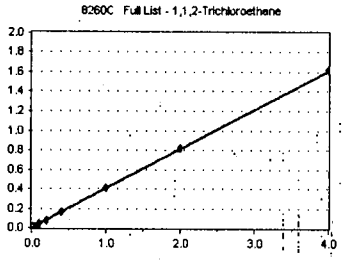


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	527	0.507	8.70
0A06051-CAL3	0.4	1069	0.490	8.70
0A06051-CAL4	1	2806	0.537	8.69
0A06051-CAL5	2	5629	0.520	8.69
0A06051-CAL6	5	15519	0.575	8.69
0A06051-CAL7	10	30984	0.604	8.69
0A06051-CAL8	20	67947	0.659	8.70
0A06051-CAL9	50	181998	0.691	8.69
0A06051-CALA	100	364799	0.690	8.69
0A06051-CALB	200	742175	0.685	8.69

AVE RF **0.596** RF RSD **13.55** AVE RT **8.69**

1,1,2-Trichloroethane

Curve Fit: **AVERAGE RF**

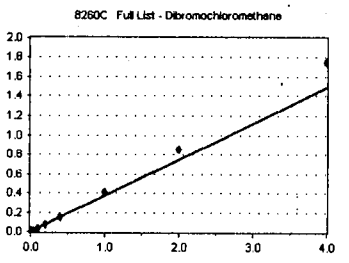


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	835	0.383	8.86
0A06051-CAL4	1	2116	0.405	8.86
0A06051-CAL5	2	4369	0.404	8.87
0A06051-CAL6	5	10798	0.400	8.87
0A06051-CAL7	10	20750	0.404	8.87
0A06051-CAL8	20	42261	0.410	8.87
0A06051-CAL9	50	108807	0.413	8.87
0A06051-CALA	100	216245	0.409	8.87
0A06051-CALB	200	439402	0.406	8.87

AVE RF **0.404** RF RSD **2.16** AVE RT **8.87**

Dibromochloromethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~513~~	~~0.235~~	~~9.06~~
0A06051-CAL4	1	1661	0.318	9.05
0A06051-CAL5	2	3651	0.337	9.06
0A06051-CAL6	5	9016	0.334	9.06
0A06051-CAL7	10	18046	0.352	9.06
0A06051-CAL8	20	38652	0.375	9.06
0A06051-CAL9	50	107752	0.409	9.06
0A06051-CALA	100	225531	0.426	9.06
0A06051-CALB	200	475554	0.439	9.06

AVE RF **0.374** RF RSD **12.32** AVE RT **9.06**

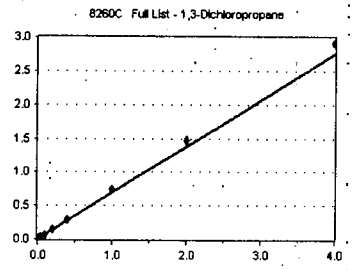
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,3-Dichloropropane

Curve Fit: **AVERAGE RF**

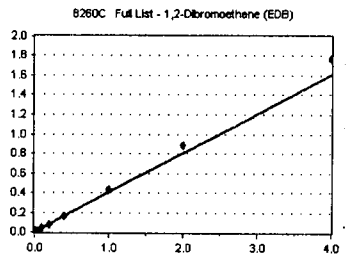


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	587	0.565	9.16
0A06051-CAL3	0.4	1360	0.624	9.15
0A06051-CAL4	1	3556	0.680	9.16
0A06051-CAL5	2	7539	0.697	9.16
0A06051-CAL6	5	18904	0.700	9.16
0A06051-CAL7	10	36128	0.704	9.16
0A06051-CAL8	20	73561	0.714	9.16
0A06051-CAL9	50	197608	0.750	9.16
0A06051-CALA	100	390171	0.738	9.16
0A06051-CALB	200	792112	0.732	9.16

AVE RF **0.690** RF RSD **8.18** AVE RT **9.15**

1,2-Dibromoethane (EDB)

Curve Fit: **AVERAGE RF**

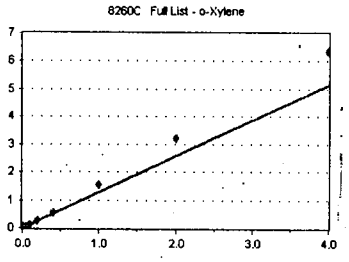


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~83~~	~~7.985~~	~~0.00~~
0A06051-CAL3	0.4	831	0.381	9.30
0A06051-CAL4	1	1817	0.347	9.30
0A06051-CAL5	2	4035	0.373	9.30
0A06051-CAL6	5	10465	0.387	9.30
0A06051-CAL7	10	20354	0.397	9.30
0A06051-CAL8	20	42367	0.411	9.30
0A06051-CAL9	50	115102	0.437	9.30
0A06051-CALA	100	233841	0.442	9.30
0A06051-CALB	200	481376	0.445	9.30

AVE RF **0.402** RF RSD **8.43** AVE RT **9.30**

o-Xylene

Curve Fit: **AVERAGE RF**

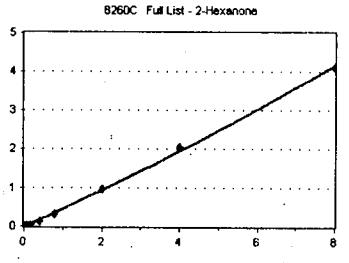


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	564	1.078	0.00
0A06051-CAL2	0.2	1119	1.077	10.37
0A06051-CAL3	0.4	2230	1.022	10.37
0A06051-CAL4	1	5891	1.127	10.37
0A06051-CAL5	2	12494	1.155	10.37
0A06051-CAL6	5	33335	1.234	10.37
0A06051-CAL7	10	67509	1.315	10.37
0A06051-CAL8	20	148399	1.440	10.37
0A06051-CAL9	50	410782	1.559	10.37
0A06051-CALA	100	848401	1.604	10.37
0A06051-CALB	200	1721459	1.590	10.37

AVE RF **1.291** RF RSD **17.22** AVE RT **9.43**

2-Hexanone

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



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.4~~	~~368~~	~~0.177~~	~~9.55~~
0A06051-CAL3	0.8	948	0.217	9.55
0A06051-CAL4	2	2805	0.268	9.54
0A06051-CAL5	4	5771	0.267	9.54
0A06051-CAL6	10	16429	0.304	9.54
0A06051-CAL7	20	37094	0.361	9.54
0A06051-CAL8	40	86807	0.421	9.54
0A06051-CAL9	100	255220	0.484	9.54
0A06051-CALA	200	540017	0.510	9.54
0A06051-CALB	400	1114091	0.514	9.53

AVE RF **0.372** RF RSD **30.79** AVE RT **9.54**

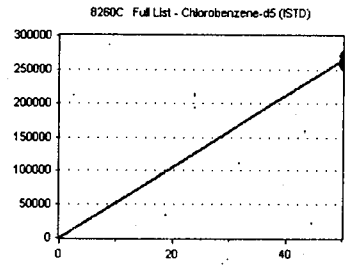
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

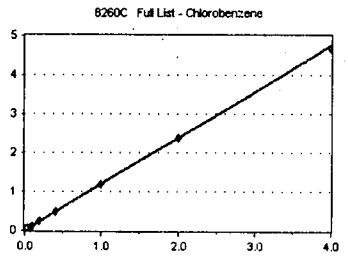


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	261559	5231.180	9.80
0A06051-CAL2	50	259849	5196.980	9.80
0A06051-CAL3	50	272623	5452.460	9.80
0A06051-CAL4	50	261444	5228.880	9.80
0A06051-CAL5	50	270452	5409.040	9.80
0A06051-CAL6	50	270091	5401.820	9.80
0A06051-CAL7	50	256667	5133.340	9.80
0A06051-CAL8	50	257589	5151.780	9.80
0A06051-CAL9	50	263462	5269.240	9.80
0A06051-CALA	50	264522	5290.440	9.80
0A06051-CALB	50	270707	5414.140	9.80

AVE RF **5289.027** RF RSD **2.14** AVE RT **9.80**

Chlorobenzene

Curve Fit: **AVERAGE RF**

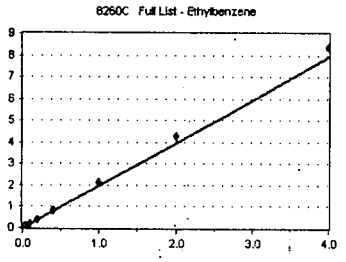


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	1202	1.156	9.82
0A06051-CAL3	0.4	2570	1.178	9.82
0A06051-CAL4	1	6584	1.259	9.82
0A06051-CAL5	2	12552	1.160	9.81
0A06051-CAL6	5	32096	1.188	9.81
0A06051-CAL7	10	60211	1.173	9.82
0A06051-CAL8	20	122718	1.191	9.82
0A06051-CAL9	50	316184	1.200	9.81
0A06051-CALA	100	628098	1.187	9.82
0A06051-CALB	200	1265574	1.169	9.82

AVE RF **1.186** RF RSD **2.46** AVE RT **9.82**

Ethylbenzene

Curve Fit: **AVERAGE RF**

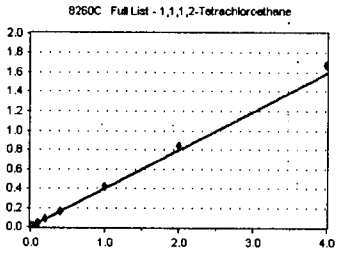


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	1054	2.015	9.85
0A06051-CAL2	0.2	1865	1.794	9.86
0A06051-CAL3	0.4	4047	1.856	9.85
0A06051-CAL4	1	9882	1.890	9.85
0A06051-CAL5	2	19761	1.827	9.85
0A06051-CAL6	5	52137	1.930	9.85
0A06051-CAL7	10	103298	2.012	9.86
0A06051-CAL8	20	213322	2.070	9.85
0A06051-CAL9	50	565519	2.146	9.85
0A06051-CALA	100	1130105	2.136	9.85
0A06051-CALB	200	2266469	2.093	9.85

AVE RF **1.979** RF RSD **6.38** AVE RT **9.85**

1,1,1,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~233~~	~~0.224~~	~~9.89~~
0A06051-CAL3	0.4	777	0.356	9.88
0A06051-CAL4	1	2058	0.394	9.88
0A06051-CAL5	2	3933	0.364	9.88
0A06051-CAL6	5	10529	0.390	9.88
0A06051-CAL7	10	20894	0.407	9.88
0A06051-CAL8	20	41303	0.401	9.88
0A06051-CAL9	50	111798	0.424	9.88
0A06051-CALA	100	222622	0.421	9.88
0A06051-CALB	200	452718	0.418	9.88

AVE RF **0.397** RF RSD **6.11** AVE RT **9.88**

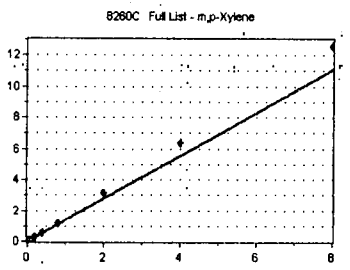
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

m,p-Xylene

Curve Fit: **AVERAGE RF**

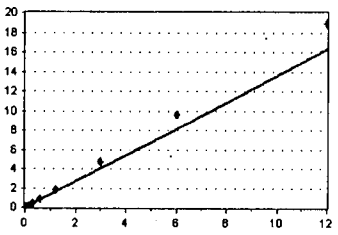


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.2	1299	1.242	9.99
0A06051-CAL2	0.4	2624	1.262	9.99
0A06051-CAL3	0.8	5235	1.200	9.99
0A06051-CAL4	2	12904	1.234	9.99
0A06051-CAL5	4	26834	1.240	9.99
0A06051-CAL6	10	72607	1.344	9.99
0A06051-CAL7	20	150111	1.462	9.99
0A06051-CAL8	40	316584	1.536	9.99
0A06051-CAL9	100	841910	1.598	9.99
0A06051-CALA	200	1695177	1.602	9.99
0A06051-CALB	400	3397624	1.569	9.99

AVE RF **1.390** RF RSD **11.82** AVE RT **9.99**

Xylenes, total

Curve Fit: **AVERAGE RF**

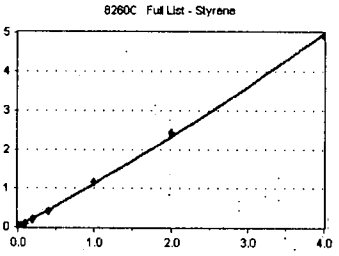


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.3	1863	1.187	9.99
0A06051-CAL2	0.6	3743	1.200	10.37
0A06051-CAL3	1.2	7465	1.141	10.37
0A06051-CAL4	3	18795	1.198	10.37
0A06051-CAL5	6	39328	1.212	10.37
0A06051-CAL6	15	105942	1.307	10.37
0A06051-CAL7	30	217620	1.413	10.37
0A06051-CAL8	60	464983	1.504	10.37
0A06051-CAL9	150	1252692	1.585	10.37
0A06051-CALA	300	2543578	1.603	10.37
0A06051-CALB	600	5119083	1.576	10.37

AVE RF **1.357** RF RSD **13.47** AVE RT **10.34**

Styrene

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

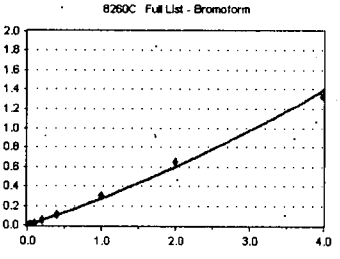


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	584	0.562	10.42
0A06051-CAL3	0.4	1339	0.614	10.42
0A06051-CAL4	1	3632	0.695	10.42
0A06051-CAL5	2	7538	0.697	10.42
0A06051-CAL6	5	21910	0.811	10.42
0A06051-CAL7	10	47163	0.919	10.42
0A06051-CAL8	20	105595	1.025	10.42
0A06051-CAL9	50	305455	1.159	10.42
0A06051-CALA	100	642559	1.215	10.42
0A06051-CALB	200	1328257	1.227	10.42

AVE RF **0.892** RF RSD **28.35** AVE RT **10.42**

Bromoform

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL4	1	1194	0.228	10.43
0A06051-CAL5	2	2340	0.216	10.43
0A06051-CAL6	5	5923	0.219	10.43
0A06051-CAL7	10	12623	0.246	10.43
0A06051-CAL8	20	27653	0.268	10.43
0A06051-CAL9	50	78801	0.299	10.43
0A06051-CALA	100	170457	0.322	10.43
0A06051-CALB	200	358978	0.332	10.43

AVE RF **0.266** RF RSD **17.39** AVE RT **10.43**

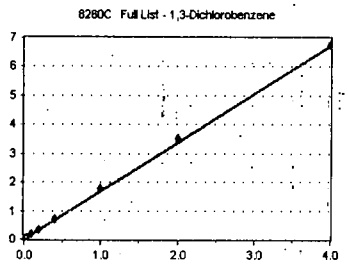
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

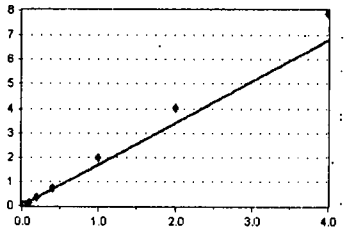


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	321	1.368	0.00
0A06051-CAL2	0.2	734	1.577	11.70
0A06051-CAL3	0.4	1584	1.643	11.70
0A06051-CAL4	1	3963	1.723	11.70
0A06051-CAL5	2	8234	1.702	11.70
0A06051-CAL6	5	21401	1.754	11.70
0A06051-CAL7	10	42611	1.744	11.70
0A06051-CAL8	20	87350	1.811	11.70
0A06051-CAL9	50	225400	1.770	11.70
0A06051-CALA	100	464345	1.757	11.70
0A06051-CALB	200	940100	1.691	11.70

AVE RF **1.685** RF RSD **7.32** AVE RT **10.64**

Isopropylbenzene

Curve Fit: **AVERAGE RF**

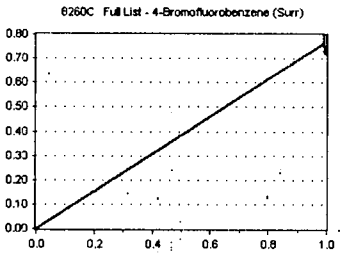


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~735~~	~~1.405~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~1389~~	~~1.336~~	~~10.65~~
~~0A06051-CAL3~~	~~0.4~~	~~2678~~	~~1.228~~	~~10.65~~
0A06051-CAL4	1	6863	1.313	10.65
0A06051-CAL5	2	14392	1.330	10.65
0A06051-CAL6	5	40606	1.503	10.65
0A06051-CAL7	10	86843	1.692	10.65
0A06051-CAL8	20	187864	1.823	10.65
0A06051-CAL9	50	518688	1.969	10.65
0A06051-CALA	100	1059421	2.003	10.65
0A06051-CALB	200	2132542	1.969	10.65

AVE RF **1.700** RF RSD **16.89** AVE RT **10.65**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

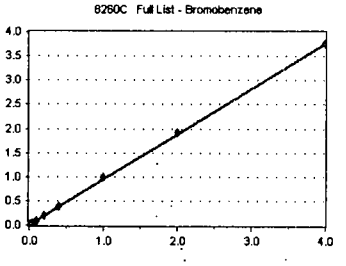


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	91026	0.776	10.88
0A06051-CAL2	50	90060	0.774	10.88
0A06051-CAL3	50	95713	0.794	10.87
0A06051-CAL4	50	91612	0.797	10.88
0A06051-CAL5	50	95258	0.787	10.88
0A06051-CAL6	50	95713	0.784	10.88
0A06051-CAL7	50	91761	0.751	10.88
0A06051-CAL8	50	93096	0.772	10.88
0A06051-CAL9	50	98126	0.771	10.88
0A06051-CALA	50	99383	0.752	10.88
0A06051-CALB	50	101679	0.732	10.88

AVE RF **0.772** RF RSD **2.58** AVE RT **10.88**

Bromobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	195	0.831	10.96
0A06051-CAL2	0.2	376	0.808	10.96
0A06051-CAL3	0.4	871	0.903	10.96
0A06051-CAL4	1	2415	1.050	10.96
0A06051-CAL5	2	4846	1.002	10.96
0A06051-CAL6	5	11819	0.969	10.96
0A06051-CAL7	10	23107	0.946	10.96
0A06051-CAL8	20	46956	0.973	10.96
0A06051-CAL9	50	125364	0.984	10.96
0A06051-CALA	100	255205	0.966	10.96
0A06051-CALB	200	521478	0.938	10.96

AVE RF **0.943** RF RSD **7.58** AVE RT **10.96**

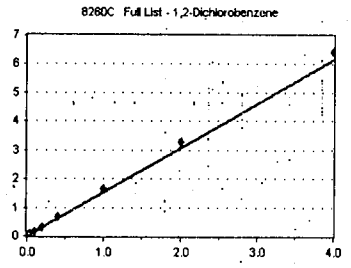
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

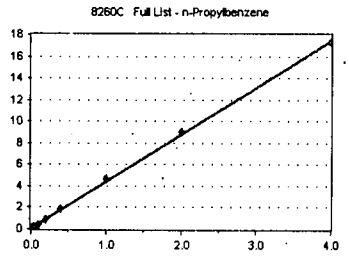


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	297	1.266	0.00
0A06051-CAL2	0.2	602	1.293	12.08
0A06051-CAL3	0.4	1511	1.567	12.09
0A06051-CAL4	1	3619	1.573	12.09
0A06051-CAL5	2	7435	1.537	12.09
0A06051-CAL6	5	18907	1.550	12.09
0A06051-CAL7	10	37998	1.556	12.09
0A06051-CAL8	20	79965	1.658	12.09
0A06051-CAL9	50	211241	1.659	12.09
0A06051-CALA	100	434657	1.645	12.09
0A06051-CALB	200	895922	1.612	12.09

AVE RF **1.538** RF RSD **8.78** AVE RT **10.99**

n-Propylbenzene

Curve Fit: **AVERAGE RF**

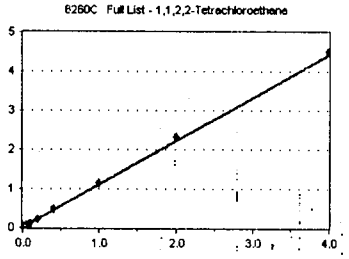


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	1066	4.544	10.99
0A06051-CAL2	0.2	1899	4.079	10.99
0A06051-CAL3	0.4	3877	4.021	10.99
0A06051-CAL4	1	10018	4.356	10.99
0A06051-CAL5	2	19804	4.093	10.99
0A06051-CAL6	5	52319	4.288	10.99
0A06051-CAL7	10	106920	4.377	10.99
0A06051-CAL8	20	224394	4.652	10.99
0A06051-CAL9	50	599088	4.705	10.99
0A06051-CALA	100	1201239	4.545	10.99
0A06051-CALB	200	2406935	4.329	10.99

AVE RF **4.363** RF RSD **5.34** AVE RT **10.99**

1,1,2,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**

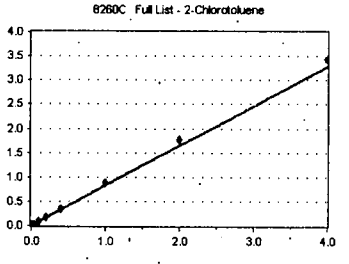


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	402	0.864	11.04
0A06051-CAL3	0.4	972	1.008	11.04
0A06051-CAL4	1	2649	1.152	11.04
0A06051-CAL5	2	5532	1.143	11.04
0A06051-CAL6	5	13376	1.096	11.04
0A06051-CAL7	10	28029	1.147	11.04
0A06051-CAL8	20	57542	1.193	11.04
0A06051-CAL9	50	148641	1.167	11.04
0A06051-CALA	100	306207	1.159	11.04
0A06051-CALB	200	627455	1.129	11.04

AVE RF **1.106** RF RSD **8.95** AVE RT **11.04**

2-Chlorotoluene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	612	0.635	11.11
0A06051-CAL4	1	1802	0.783	11.11
0A06051-CAL5	2	3844	0.794	11.11
0A06051-CAL6	5	9710	0.796	11.11
0A06051-CAL7	10	20381	0.834	11.11
0A06051-CAL8	20	42921	0.890	11.11
0A06051-CAL9	50	113827	0.894	11.11
0A06051-CALA	100	234244	0.886	11.11
0A06051-CALB	200	477290	0.859	11.11

AVE RF **0.819** RF RSD **9.97** AVE RT **11.11**

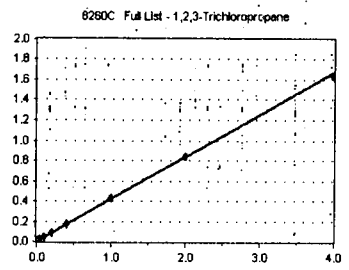
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,2,3-Trichloropropane

Curve Fit: **AVERAGE RF**

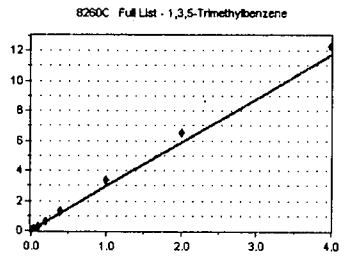


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	291	0.302	11.15
0A06051-CAL4	1	1090	0.474	11.15
0A06051-CAL5	2	2114	0.437	11.15
0A06051-CAL6	5	5081	0.416	11.15
0A06051-CAL7	10	10290	0.421	11.15
0A06051-CAL8	20	21237	0.440	11.15
0A06051-CAL9	50	55741	0.438	11.15
0A06051-CALA	100	111214	0.421	11.15
0A06051-CALB	200	227473	0.409	11.15

AVE RF **0.418** RF RSD **11.35** AVE RT **11.15**

1,3,5-Trimethylbenzene

Curve Fit: **AVERAGE RF**

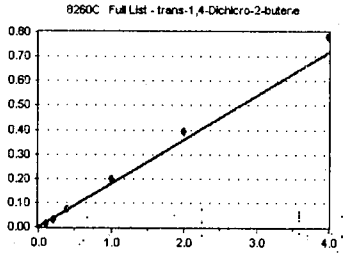


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	645	2.749	11.15
0A06051-CAL2	0.2	1117	2.400	11.15
0A06051-CAL3	0.4	2466	2.558	11.15
0A06051-CAL4	1	6230	2.709	11.15
0A06051-CAL5	2	12985	2.684	11.15
0A06051-CAL6	5	36600	3.000	11.15
0A06051-CAL7	10	75905	3.107	11.15
0A06051-CAL8	20	161340	3.345	11.15
0A06051-CAL9	50	430440	3.380	11.15
0A06051-CALA	100	863093	3.266	11.15
0A06051-CALB	200	1711211	3.078	11.15

AVE RF **2.934** RF RSD **11.34** AVE RT **11.15**

trans-1,4-Dichloro-2-butene

Curve Fit: **AVERAGE RF**

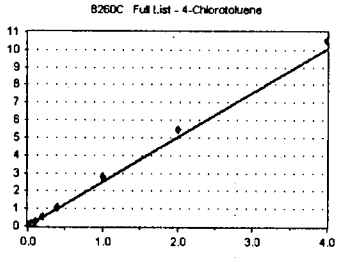


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL4~~	~~1~~	~~226~~	~~9.826~~	~~11.18~~
~~0A06051-CAL5~~	~~2~~	~~619~~	~~0.128~~	~~11.18~~
0A06051-CAL6	5	1822	0.149	11.18
0A06051-CAL7	10	3884	0.159	11.18
0A06051-CAL8	20	8711	0.181	11.18
0A06051-CAL9	50	25245	0.198	11.18
0A06051-CALA	100	51769	0.196	11.18
0A06051-CALB	200	108766	0.196	11.18

AVE RF **0.180** RF RSD **11.70** AVE RT **11.18**

4-Chlorotoluene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	877	1.884	11.25
0A06051-CAL3	0.4	2122	2.201	11.24
0A06051-CAL4	1	5536	2.407	11.24
0A06051-CAL5	2	12109	2.503	11.24
0A06051-CAL6	5	31240	2.560	11.24
0A06051-CAL7	10	64835	2.654	11.24
0A06051-CAL8	20	132335	2.743	11.24
0A06051-CAL9	50	353161	2.773	11.24
0A06051-CALA	100	721994	2.732	11.24
0A06051-CALB	200	1463967	2.633	11.24

AVE RF **2.509** RF RSD **11.19** AVE RT **11.24**

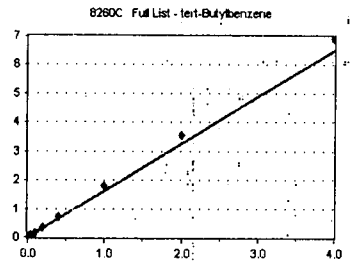
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

tert-Butylbenzene

Curve Fit: **AVERAGE RF**

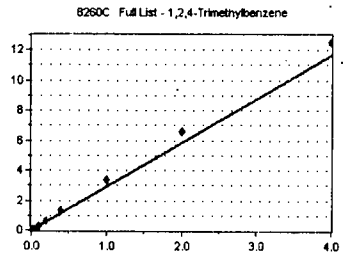


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	702	1.508	11.40
0A06051-CAL3	0.4	1366	1.417	11.40
0A06051-CAL4	1	3477	1.512	11.40
0A06051-CAL5	2	7227	1.494	11.40
0A06051-CAL6	5	19450	1.594	11.40
0A06051-CAL7	10	40173	1.645	11.40
0A06051-CAL8	20	85895	1.781	11.40
0A06051-CAL9	50	232884	1.829	11.40
0A06051-CALA	100	472004	1.786	11.40
0A06051-CALB	200	960546	1.728	11.40

AVE RF **1.629** RF RSD **8.93** AVE RT **11.40**

1,2,4-Trimethylbenzene

Curve Fit: **AVERAGE RF**

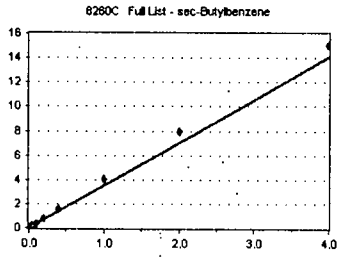


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	710	3.026	11.46
0A06051-CAL2	0.2	1050	2.256	11.46
0A06051-CAL3	0.4	2349	2.436	11.46
0A06051-CAL4	1	6016	2.616	11.46
0A06051-CAL5	2	12691	2.623	11.46
0A06051-CAL6	5	35579	2.916	11.46
0A06051-CAL7	10	75834	3.104	11.46
0A06051-CAL8	20	161792	3.354	11.46
0A06051-CAL9	50	429588	3.374	11.46
0A06051-CALA	100	869693	3.291	11.46
0A06051-CALB	200	1736316	3.123	11.46

AVE RF **2.920** RF RSD **13.15** AVE RT **11.46**

sec-Butylbenzene

Curve Fit: **AVERAGE RF**

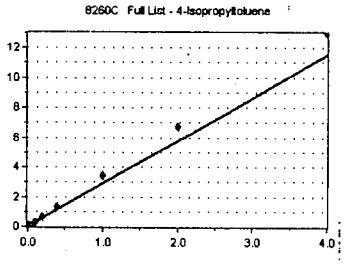


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	752	3.205	11.54
0A06051-CAL2	0.2	1319	2.833	11.54
0A06051-CAL3	0.4	3028	3.141	11.54
0A06051-CAL4	1	7491	3.257	11.54
0A06051-CAL5	2	15694	3.243	11.54
0A06051-CAL6	5	43743	3.585	11.54
0A06051-CAL7	10	90653	3.711	11.54
0A06051-CAL8	20	191481	3.970	11.54
0A06051-CAL9	50	513113	4.030	11.54
0A06051-CALA	100	1045783	3.957	11.54
0A06051-CALB	200	2093887	3.766	11.54

AVE RF **3.518** RF RSD **11.42** AVE RT **11.54**

4-Isopropyltoluene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	634	2.702	11.65
0A06051-CAL2	0.2	1120	2.406	11.65
0A06051-CAL3	0.4	2257	2.341	11.65
0A06051-CAL4	1	5556	2.416	11.65
0A06051-CAL5	2	12340	2.550	11.65
0A06051-CAL6	5	34578	2.834	11.65
0A06051-CAL7	10	73953	3.027	11.65
0A06051-CAL8	20	159437	3.305	11.65
0A06051-CAL9	50	441545	3.467	11.65
0A06051-CALA	100	890642	3.370	11.65
0A06051-CALB	200	1802226	3.242	11.65

AVE RF **2.878** RF RSD **14.71** AVE RT **11.65**

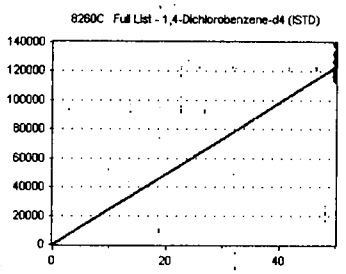
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

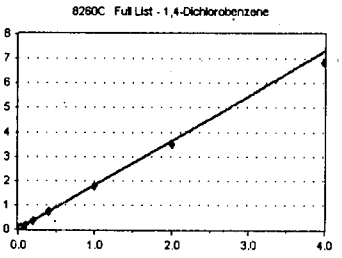


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	117300	2346.000	11.76
0A06051-CAL2	50	116376	2327.520	11.76
0A06051-CAL3	50	120513	2410.260	11.76
0A06051-CAL4	50	114999	2299.980	11.76
0A06051-CAL5	50	120966	2419.320	11.76
0A06051-CAL6	50	122018	2440.360	11.76
0A06051-CAL7	50	122138	2442.760	11.76
0A06051-CAL8	50	120591	2411.820	11.76
0A06051-CAL9	50	127339	2546.780	11.76
0A06051-CALA	50	132141	2642.820	11.76
0A06051-CALB	50	138986	2779.720	11.76

AVE RF **2460.667** RF RSD **5.84** AVE RT **11.76**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

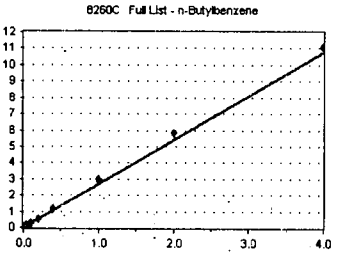


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	390	1.662	11.77
0A06051-CAL2	0.2	971	2.086	11.77
0A06051-CAL3	0.4	1905	1.976	11.77
0A06051-CAL4	1	4395	1.911	11.77
0A06051-CAL5	2	8741	1.806	11.77
0A06051-CAL6	5	22186	1.818	11.77
0A06051-CAL7	10	42971	1.759	11.77
0A06051-CAL8	20	86262	1.788	11.77
0A06051-CAL9	50	227356	1.785	11.77
0A06051-CALA	100	464868	1.759	11.77
0A06051-CALB	200	951168	1.711	11.77

AVE RF **1.824** RF RSD **6.71** AVE RT **11.77**

n-Butylbenzene

Curve Fit: **AVERAGE RF**

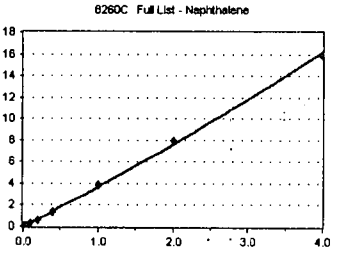


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	596	2.540	11.97
0A06051-CAL2	0.2	1286	2.763	11.97
0A06051-CAL3	0.4	2410	2.500	11.97
0A06051-CAL4	1	5772	2.510	11.97
0A06051-CAL5	2	12089	2.498	11.97
0A06051-CAL6	5	31798	2.606	11.97
0A06051-CAL7	10	65286	2.673	11.97
0A06051-CAL8	20	137345	2.847	11.97
0A06051-CAL9	50	378474	2.972	11.97
0A06051-CALA	100	768302	2.907	11.97
0A06051-CALB	200	1537990	2.766	11.97

AVE RF **2.689** RF RSD **6.42** AVE RT **11.97**

Naphthalene

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



Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	645	2.749	0.00
0A06051-CAL2	0.2	1083	2.327	13.51
0A06051-CAL3	0.4	2141	2.221	13.51
0A06051-CAL4	1	5528	2.403	13.51
0A06051-CAL5	2	11317	2.339	13.51
0A06051-CAL6	5	31622	2.592	13.51
0A06051-CAL7	10	71917	2.944	13.51
0A06051-CAL8	20	169409	3.512	13.51
0A06051-CAL9	50	494428	3.883	13.51
0A06051-CALA	100	1049457	3.971	13.51
0A06051-CALB	200	2224076	4.001	13.51

AVE RF **2.995** RF RSD **23.78** AVE RT **12.28**

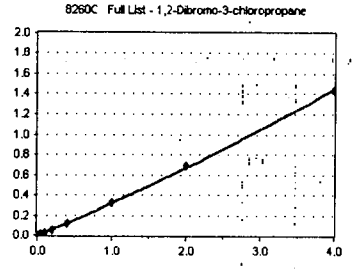
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,2-Dibromo-3-chloropropane

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

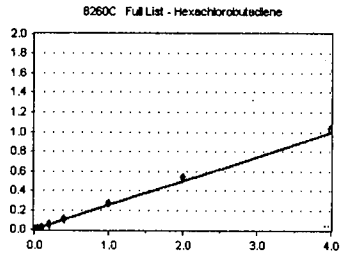


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~62~~	~~6.431~~	~~12.68~~
0A06051-CAL4	1	499	0.217	12.69
0A06051-CAL5	2	1165	0.241	12.69
0A06051-CAL6	5	3076	0.252	12.69
0A06051-CAL7	10	6494	0.266	12.69
0A06051-CAL8	20	14277	0.296	12.69
0A06051-CAL9	50	40894	0.321	12.69
0A06051-CALA	100	91004	0.344	12.69
0A06051-CALB	200	200017	0.360	12.69

AVE RF **0.287** RF RSD **17.92** AVE RT **12.69**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

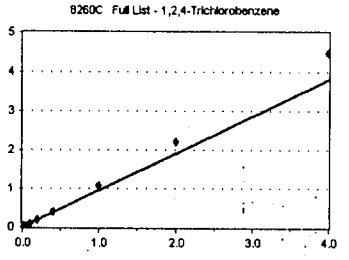


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	179	0.186	13.21
0A06051-CAL4	1	511	0.222	13.21
0A06051-CAL5	2	1281	0.265	13.21
0A06051-CAL6	5	3211	0.263	13.21
0A06051-CAL7	10	5995	0.245	13.21
0A06051-CAL8	20	12808	0.266	13.21
0A06051-CAL9	50	33881	0.266	13.21
0A06051-CALA	100	70914	0.268	13.21
0A06051-CALB	200	144234	0.259	13.21

AVE RF **0.249** RF RSD **11.22** AVE RT **13.21**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**

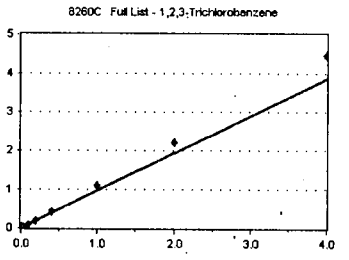


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~366~~	~~0.786~~	~~13.24~~
0A06051-CAL3	0.4	777	0.806	13.24
0A06051-CAL4	1	1974	0.858	13.24
0A06051-CAL5	2	3943	0.815	13.24
0A06051-CAL6	5	10371	0.850	13.24
0A06051-CAL7	10	22199	0.909	13.24
0A06051-CAL8	20	48617	1.008	13.23
0A06051-CAL9	50	136960	1.076	13.23
0A06051-CALA	100	294426	1.114	13.23
0A06051-CALB	200	622345	1.119	13.23

AVE RF **0.951** RF RSD **13.61** AVE RT **13.23**

1,2,3-Trichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~236~~	~~0.507~~	~~13.67~~
0A06051-CAL3	0.4	740	0.768	13.67
0A06051-CAL4	1	1898	0.825	13.67
0A06051-CAL5	2	4030	0.833	13.67
0A06051-CAL6	5	10894	0.893	13.67
0A06051-CAL7	10	23796	0.974	13.67
0A06051-CAL8	20	51239	1.062	13.67
0A06051-CAL9	50	140414	1.103	13.67
0A06051-CALA	100	293236	1.110	13.67
0A06051-CALB	200	618452	1.112	13.67

AVE RF **0.964** RF RSD **14.31** AVE RT **13.67**

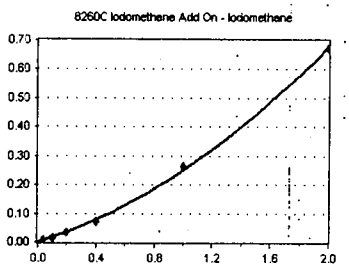
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Iodomethane Add On** Instrument Cal ID: **VJ200106S VJ200106G**

Iodomethane

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

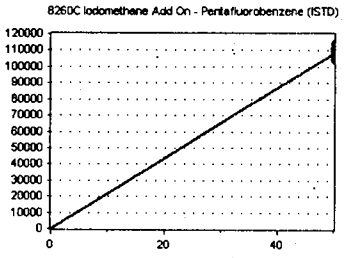


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~696~~	~~3.271~~	~~3.29~~
~~0A06051-CAL2~~	~~0.2~~	~~695~~	~~1.555~~	~~3.30~~
~~0A06051-CAL3~~	~~0.4~~	~~505~~	~~0.589~~	~~3.28~~
~~0A06051-CAL4~~	~~1~~	~~631~~	~~0.302~~	~~3.29~~
0A06051-CAL5	2	879	0.204	3.29
0A06051-CAL6	5	1801	0.165	3.29
0A06051-CAL7	10	3523	0.168	3.29
0A06051-CAL8	20	7988	0.184	3.29
0A06051-CAL9	50	29149	0.265	3.29
0A06051-CALA	100	74685	0.337	3.30
~~0A06051-CALB~~	~~200~~	~~71908~~	~~0.158~~	~~3.28~~

AVE RF **0.220** RF RSD **30.79** AVE RT **3.29**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	106379	2127.580	6.08
0A06051-CAL2	50	111744	2234.880	6.09
0A06051-CAL3	50	107259	2145.180	6.08
0A06051-CAL4	50	104320	2086.400	6.08
0A06051-CAL5	50	107612	2152.240	6.08
0A06051-CAL6	50	109312	2186.240	6.08
0A06051-CAL7	50	105104	2102.080	6.08
0A06051-CAL8	50	108585	2171.700	6.08
0A06051-CAL9	50	109944	2198.880	6.08
0A06051-CALA	50	110868	2217.360	6.08
0A06051-CALB	50	113880	2277.600	6.08

AVE RF **2172.740** RF RSD **2.66** AVE RT **6.08**

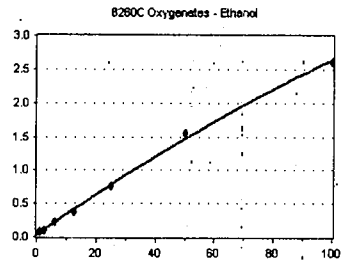
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VJ200106S VJ200106G**

Ethanol

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

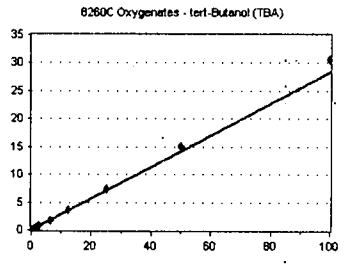


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~6.25~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~12.5~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~25~~	~~4984~~	~~9.293~~	~~3.28~~
0A06051-CAL4	62.5	7706	5.910	3.29
0A06051-CAL5	125	11257	4.184	3.27
0A06051-CAL6	312	25232	3.699	3.29
0A06051-CAL7	625	40033	3.047	3.26
0A06051-CAL8	1250	82383	3.035	3.27
0A06051-CAL9	2500	170551	3.103	3.27
0A06051-CALA	5000	289845	2.614	3.26

AVE RF **3.656** RF RSD **30.60** AVE RT **3.27**

tert-Butanol (TBA)

Curve Fit: **AVERAGE RF**

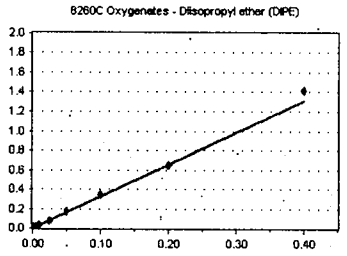


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~6.25~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~12.5~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	25	13587	0.253	4.27
0A06051-CAL4	62.5	34787	0.267	4.27
0A06051-CAL5	125	71300	0.265	4.26
0A06051-CAL6	312	191781	0.281	4.27
0A06051-CAL7	625	380675	0.290	4.25
0A06051-CAL8	1250	810615	0.299	4.25
0A06051-CAL9	2500	1662623	0.302	4.25
0A06051-CALA	5000	3395354	0.306	4.25

AVE RF **0.283** RF RSD **6.91** AVE RT **4.26**

Diisopropyl ether (DIPE)

Curve Fit: **AVERAGE RF**

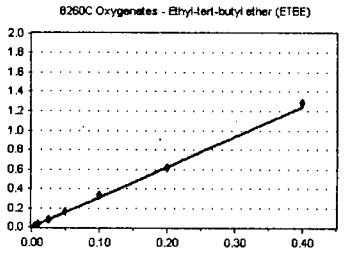


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.1	678	3.161	4.50
0A06051-CAL4	0.25	1629	3.123	4.50
0A06051-CAL5	0.5	3346	3.109	4.50
0A06051-CAL6	1.25	8433	3.086	4.50
0A06051-CAL7	2.5	17671	3.363	4.50
0A06051-CAL8	5	37517	3.455	4.50
0A06051-CAL9	10	71778	3.264	4.50
0A06051-CALA	20	157347	3.548	4.50

AVE RF **3.264** RF RSD **5.35** AVE RT **4.50**

Ethyl-tert-butyl ether (ETBE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL4	0.25	1510	2.895	4.87
0A06051-CAL5	0.5	3087	2.869	4.87
0A06051-CAL6	1.25	8258	3.022	4.87
0A06051-CAL7	2.5	17105	3.255	4.87
0A06051-CAL8	5	36823	3.391	4.86
0A06051-CAL9	10	67581	3.073	4.87
0A06051-CALA	20	143062	3.226	4.87

AVE RF **3.104** RF RSD **6.26** AVE RT **4.87**

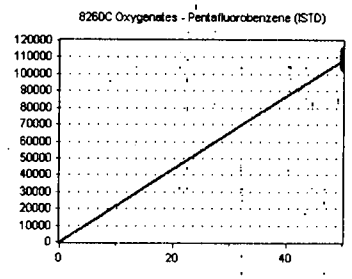
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VJ200106S VJ200106G**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

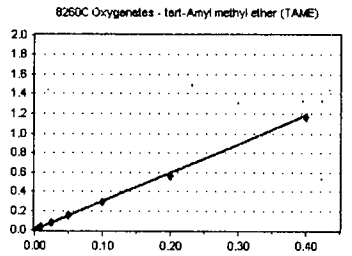


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	106379	2127.580	6.08
0A06051-CAL2	50	111744	2234.880	6.09
0A06051-CAL3	50	107259	2145.180	6.08
0A06051-CAL4	50	104320	2086.400	6.08
0A06051-CAL5	50	107612	2152.240	6.08
0A06051-CAL6	50	109312	2186.240	6.08
0A06051-CAL7	50	105104	2102.080	6.08
0A06051-CAL8	50	108585	2171.700	6.08
0A06051-CAL9	50	109944	2198.880	6.08
0A06051-CALA	50	110868	2217.360	6.08
0A06051-CALB	50	113880	2277.600	6.08

AVE RF **2172.740** RF RSD **2.66** AVE RT **6.08**

tert-Amyl methyl ether (TAME)

Curve Fit: **AVERAGE RF**

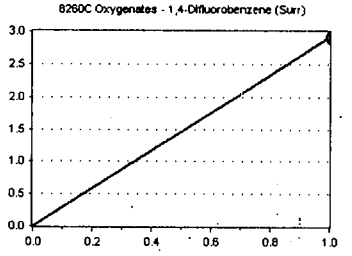


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL4	0.25	1634	3.133	6.14
0A06051-CAL5	0.5	3505	3.257	6.15
0A06051-CAL6	1.25	7869	2.879	6.14
0A06051-CAL7	2.5	15488	2.947	6.14
0A06051-CAL8	5	31171	2.871	6.15
0A06051-CAL9	10	61806	2.811	6.14
0A06051-CALA	20	129917	2.930	6.14

AVE RF **2.975** RF RSD **5.39** AVE RT **6.14**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

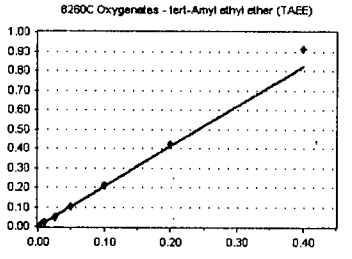


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	313857	2.950	6.64
0A06051-CAL2	50	320717	2.870	6.65
0A06051-CAL3	50	317056	2.956	6.64
0A06051-CAL4	50	303345	2.908	6.64
0A06051-CAL5	50	312825	2.907	6.65
0A06051-CAL6	50	319667	2.924	6.64
0A06051-CAL7	50	303283	2.886	6.65
0A06051-CAL8	50	312074	2.874	6.64
0A06051-CAL9	50	323337	2.941	6.64
0A06051-CALA	50	322488	2.909	6.65
0A06051-CALB	50	336999	2.959	6.64

AVE RF **2.917** RF RSD **1.10** AVE RT **6.65**

tert-Amyl ethyl ether (TAEE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.1~~	~~355~~	~~1.655~~	~~0.00~~
0A06051-CAL4	0.25	996	1.910	6.90
0A06051-CAL5	0.5	2192	2.037	6.90
0A06051-CAL6	1.25	5290	1.936	6.90
0A06051-CAL7	2.5	10793	2.054	6.89
0A06051-CAL8	5	22830	2.103	6.90
0A06051-CAL9	10	46132	2.098	6.90
0A06051-CALA	20	101352	2.285	6.90

AVE RF **2.060** RF RSD **6.03** AVE RT **6.90**

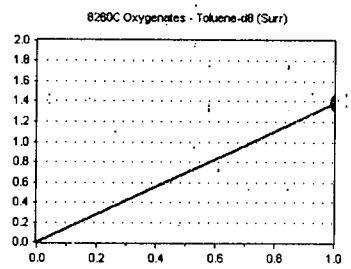
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VJ200106S VJ200106G**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**

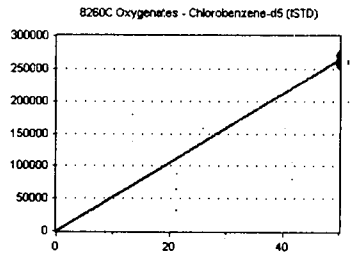


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	365118	1.396	8.16
0A06051-CAL2	50	371366	1.429	8.16
0A06051-CAL3	50	372287	1.366	8.16
0A06051-CAL4	50	353415	1.352	8.16
0A06051-CAL5	50	366801	1.356	8.16
0A06051-CAL6	50	371403	1.375	8.16
0A06051-CAL7	50	357128	1.391	8.16
0A06051-CAL8	50	363051	1.409	8.16
0A06051-CAL9	50	366647	1.392	8.16
0A06051-CALA	50	366947	1.387	8.16
0A06051-CALB	50	377155	1.393	8.16

AVE RF **1.386** RF RSD **1.65** AVE RT **8.16**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

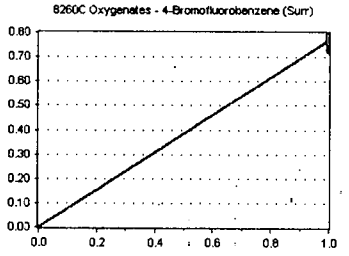


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	261559	5231.180	9.80
0A06051-CAL2	50	259849	5196.980	9.80
0A06051-CAL3	50	272623	5452.460	9.80
0A06051-CAL4	50	261444	5228.880	9.80
0A06051-CAL5	50	270452	5409.040	9.80
0A06051-CAL6	50	270091	5401.820	9.80
0A06051-CAL7	50	256667	5133.340	9.80
0A06051-CAL8	50	257589	5151.780	9.80
0A06051-CAL9	50	263462	5269.240	9.80
0A06051-CALA	50	264522	5290.440	9.80
0A06051-CALB	50	270707	5414.140	9.80

AVE RF **5289.027** RF RSD **2.14** AVE RT **9.80**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

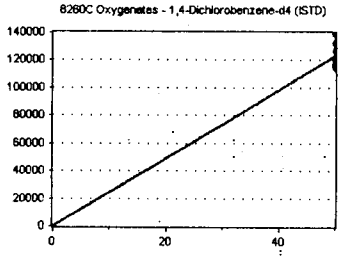


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	91026	0.776	10.88
0A06051-CAL2	50	90060	0.774	10.88
0A06051-CAL3	50	95713	0.794	10.87
0A06051-CAL4	50	91612	0.797	10.88
0A06051-CAL5	50	95258	0.787	10.88
0A06051-CAL6	50	95713	0.784	10.88
0A06051-CAL7	50	91761	0.751	10.88
0A06051-CAL8	50	93096	0.772	10.88
0A06051-CAL9	50	98126	0.771	10.88
0A06051-CALA	50	99383	0.752	10.88
0A06051-CALB	50	101679	0.732	10.88

AVE RF **0.772** RF RSD **2.58** AVE RT **10.88**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	117300	2346.000	11.76
0A06051-CAL2	50	116376	2327.520	11.76
0A06051-CAL3	50	120513	2410.260	11.76
0A06051-CAL4	50	114999	2299.980	11.76
0A06051-CAL5	50	120966	2419.320	11.76
0A06051-CAL6	50	122018	2440.360	11.76
0A06051-CAL7	50	122138	2442.760	11.76
0A06051-CAL8	50	120591	2411.820	11.76
0A06051-CAL9	50	127339	2546.780	11.76
0A06051-CALA	50	132141	2642.820	11.76
0A06051-CALB	50	138986	2779.720	11.76

AVE RF **2460.667** RF RSD **5.84** AVE RT **11.76**

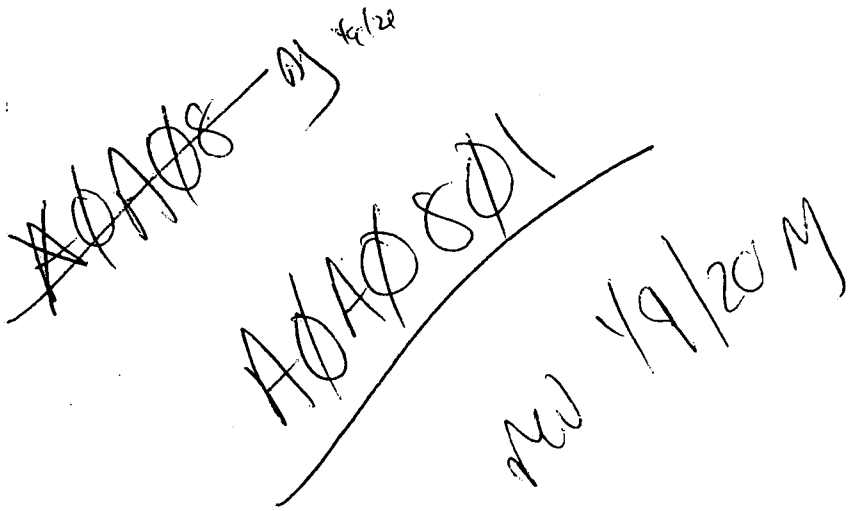
Calibration Status Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200106G.M
Title : NWTPH-Gx by GC/MS
Last Update : Tue Jan 07 15:45:42 2020
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	50	50	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010634.D
2	100	100	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010635.D
3	250	250	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010636.D
4	500	500	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010637.D
5	1000	1000	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010638.D
6	2500	2500	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010639.D
7	5000	5000	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010640.D
8	10K	10000	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010641.D

#	ID	Update Time	Quant Time	Acquisition Time
1	50	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 2:09 am
2	100	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 2:36 am
3	250	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 3:03 am
4	500	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 3:30 am
5	1000	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 3:57 am
6	2500	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 4:24 am
7	5000	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 4:50 am
8	10K	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 5:17 am

VJ200106G.M Wed Jan 08 12:21:21 2020



Response Factor Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200106G.M
Title : NWTPH-Gx by GC/MS
Last Update : Tue Jan 07 15:45:42 2020
Response Via : Initial Calibration

Calibration Files
50 =VJ20010634.D 100 =VJ20010635.D 250 =VJ20010636.D 500 =VJ20010637.D 1000=VJ20010638.D 2500=VJ20010639.D
5000=VJ20010640.D 10K =VJ20010641.D

		Compound	50	100	250	500	1000	2500	5000	10K	Avg	%RSD
1)	I	Pentafluorobenzene...	----------	----------	----------	ISTD	----------	----------	----------	----------		
2)	S	1,4-Difluorobe...	1.641	1.609	1.622	1.616	1.607	1.601	1.603	1.598	1.612	0.87
3)	S	4-Bromofluorob...	0.474	0.456	0.470	0.467	0.467	0.481	0.489	0.484	0.474	2.29
4)	H	NWTPH-Gx (TPH)	1.482	1.482	1.618	1.713	1.780	2.021	1.898	1.996	1.749	12.22
5)	H	TPHg (C5-C9)	4.605	3.482	2.711	2.394	2.363	2.519	2.289	2.350	2.839	28.60
6)	H	TPHg (C6-C10)	3.055	2.376	2.114	2.042	2.023	2.162	1.964	2.021	2.220	16.26
7)	H	CA-LUFT (C5-C12)	4.933	3.808	3.085	2.811	2.806	3.039	2.795	2.874	3.269	22.98
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

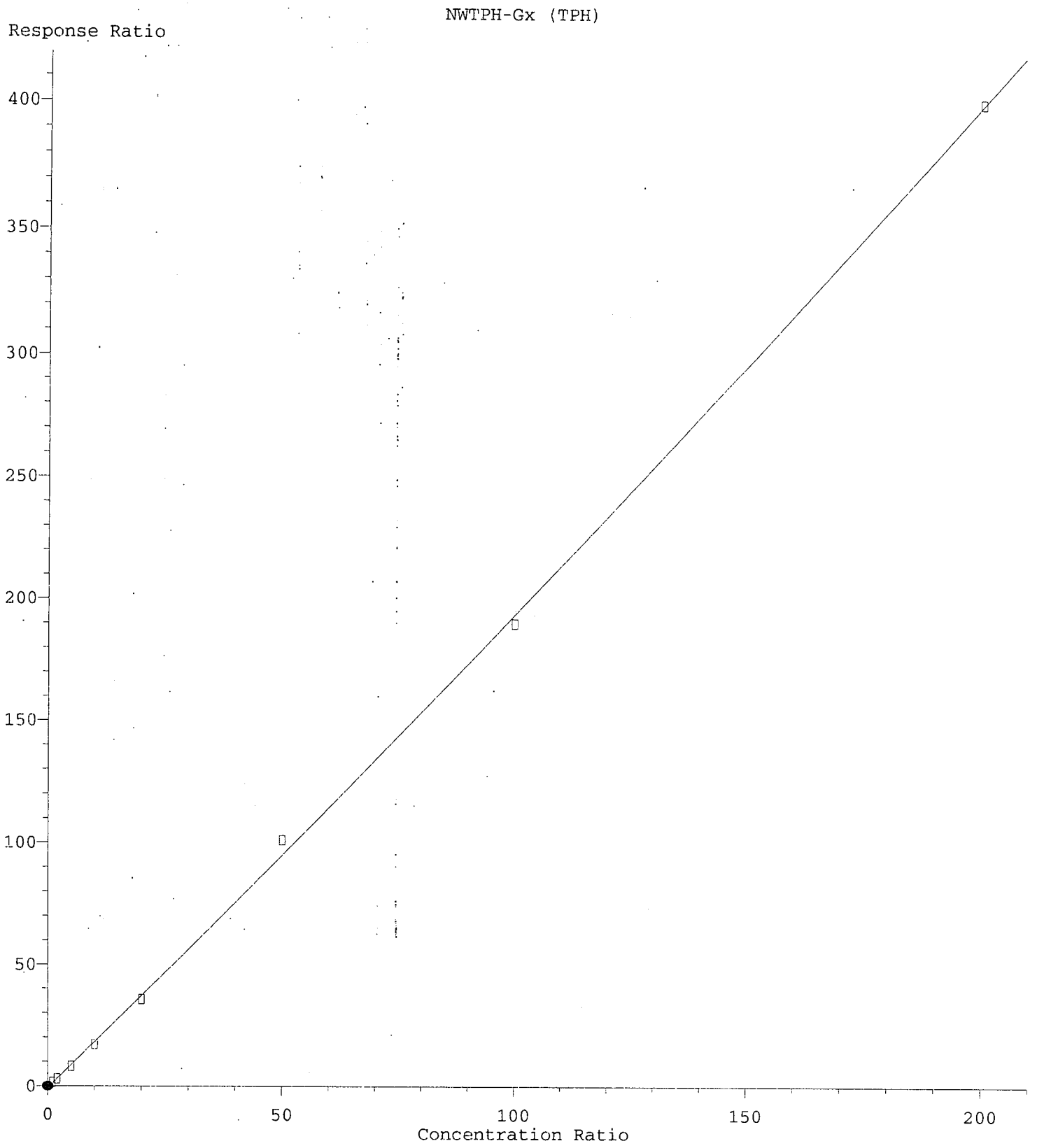
Method Path : C:\msdchem\1\methods\
Method File : VJ200106G.M
Title : NWTPH-Gx by GC/MS
Last Update : Tue Jan 07 15:45:42 2020
Response Via : Initial Calibration

Total Cpnds : 13

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Pentafluorobenzene (IS)	168	6.095	1.000	A	2	A	B
2	S	1,4-Difluorobenzene (Sur)	114	6.655	1.092	A	2	A	B
3	S	4-Bromofluorobenzene (Sur)	174	10.883	1.785	A	2	A	B
4	H	NWTPH-Gx (TPH)	TIC	8.739	1.434	Q	0	A	B
5	H	TPHg (C5-C9)	TIC	9.239	1.516	Q	0	A	B
6	H	TPHg (C6-C10)	TIC	9.239	1.516	Q	0	A	B
7	H	CA-LUFT (C5-C12)	TIC	9.239	1.516	Q	0	A	B
8		Benzene (NR)	78	6.004	0.985	A	2	A	B
9	S	Toluene-d8 (NR)	98	8.170	1.340	A	2	A	B
10		Toluene (NR)	91	8.231	1.350	A	2	A	B
11	S	Chlorobenzene-d5 (NR)	117	9.806	1.609	A	2	A	B
12	S	1,4-Dichlorobenzene-d4 (NR)	150	11.765	1.930	A	2	A	B
13		Naphthalene (NR)	128	13.517	2.218	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

VJ200106G.M Wed Jan 08 12:20:52 2020



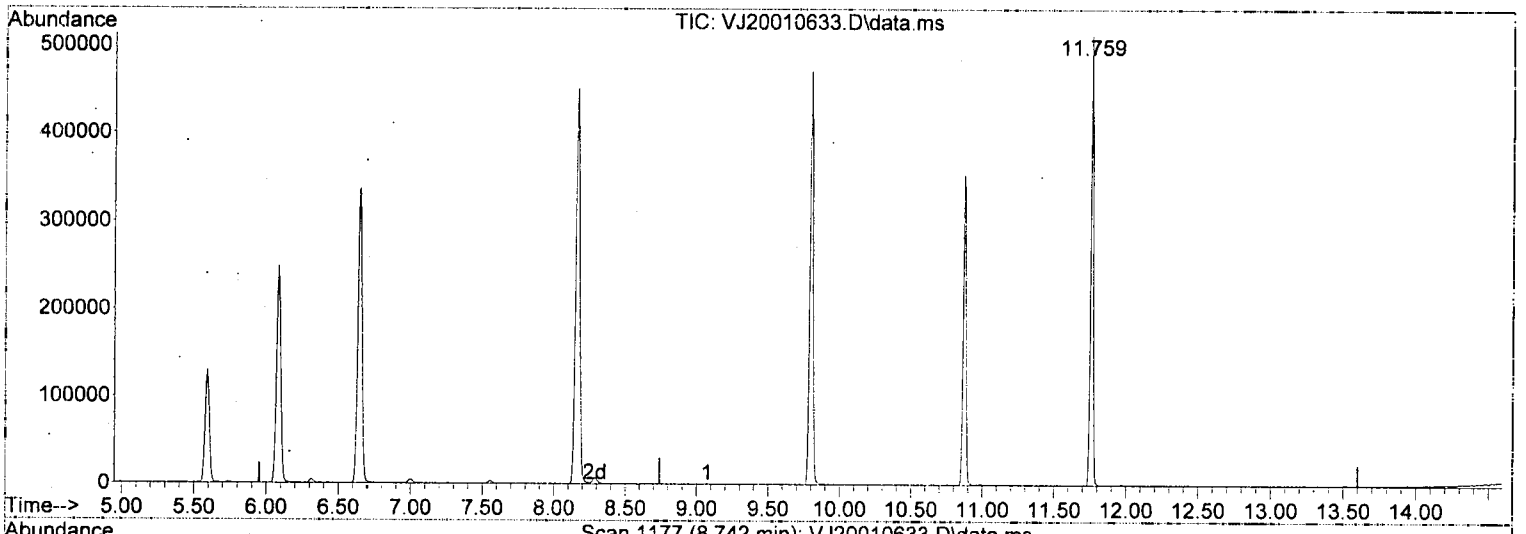
Int = 32.73

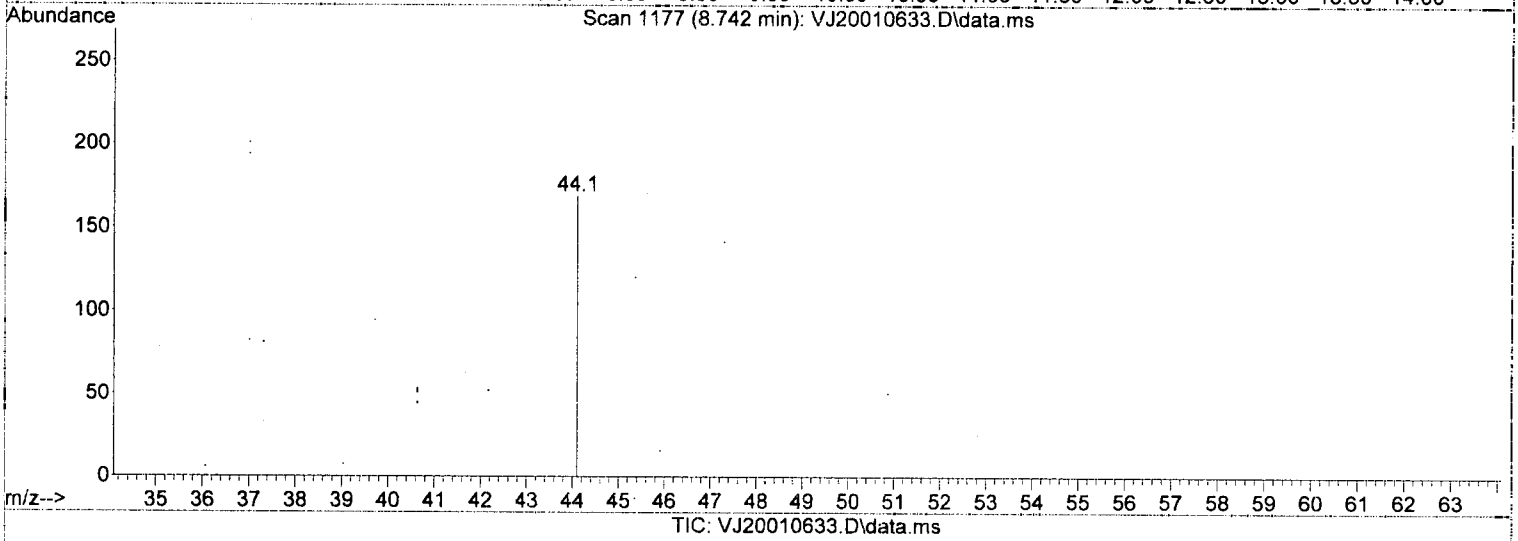
R = 5.73e-004 A*A + 1.88e+000 A - 6.85e-001
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ2001066.M
Calibration Table Last Updated: Tue Jan 07 15:46:27 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





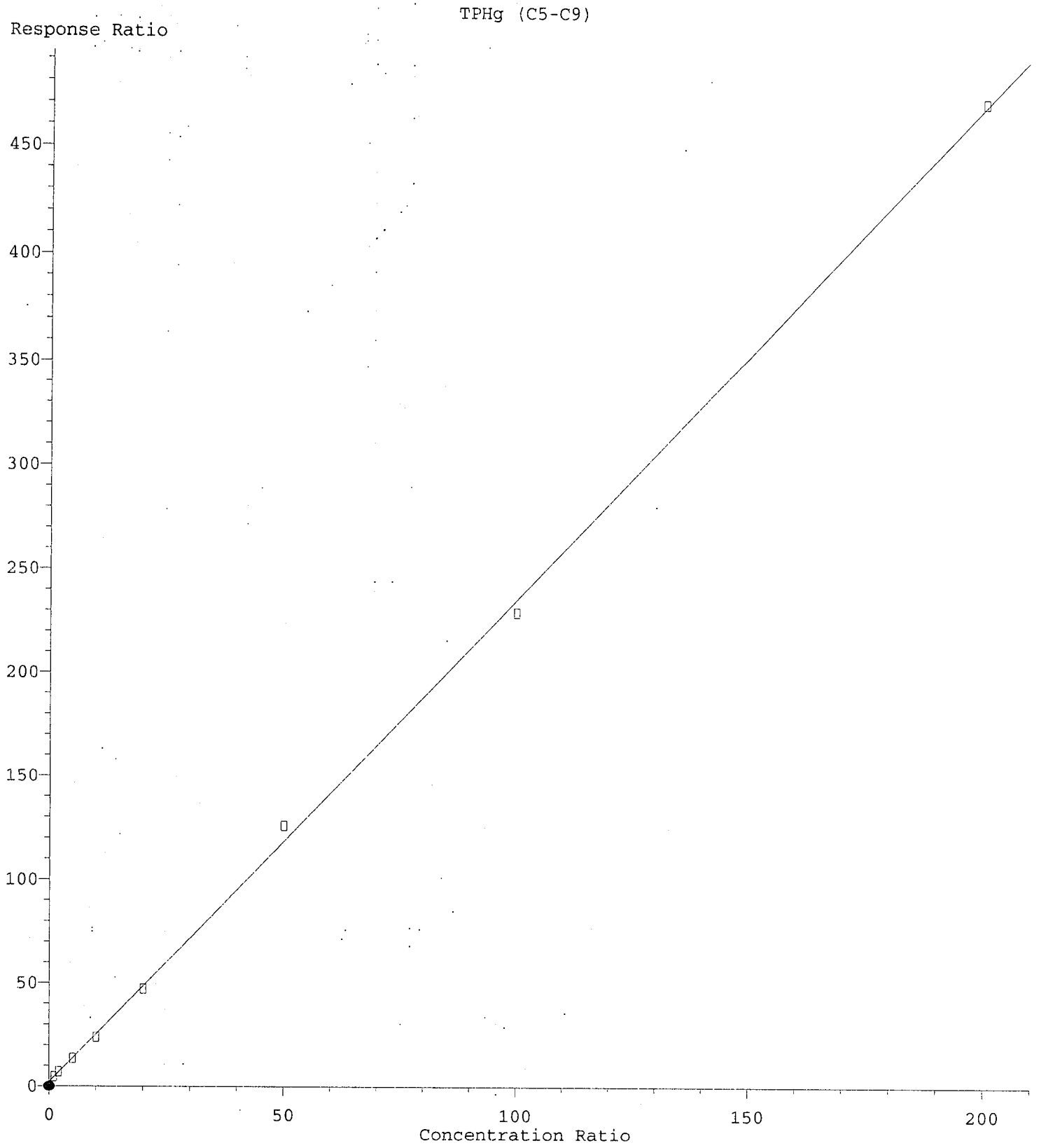
TIC: VJ20010633.D\data.ms

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

8.739min (0.000) 32.73 ug/L m

response 99460

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



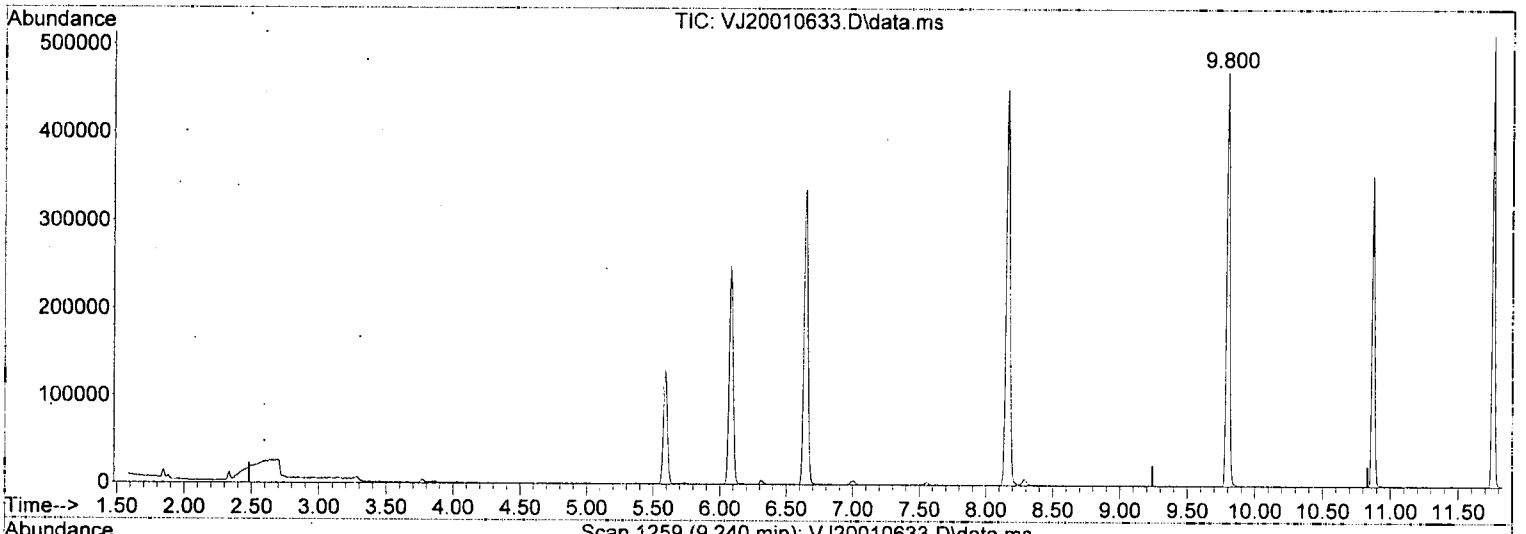
Int= (-)

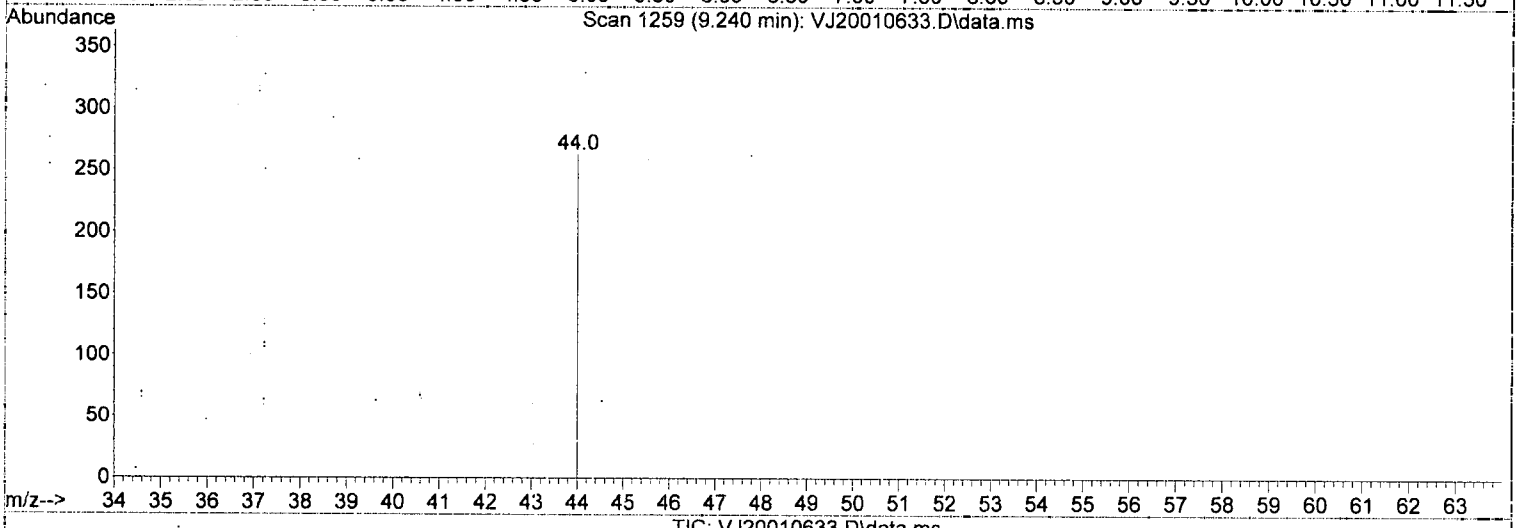
R = 5.23e-005 A*A + 2.32e+000 A + 2.18e+000
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vJ240010GC.M
Calibration Table Last Updated: Tue Jan 07 15:46:27 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL : DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





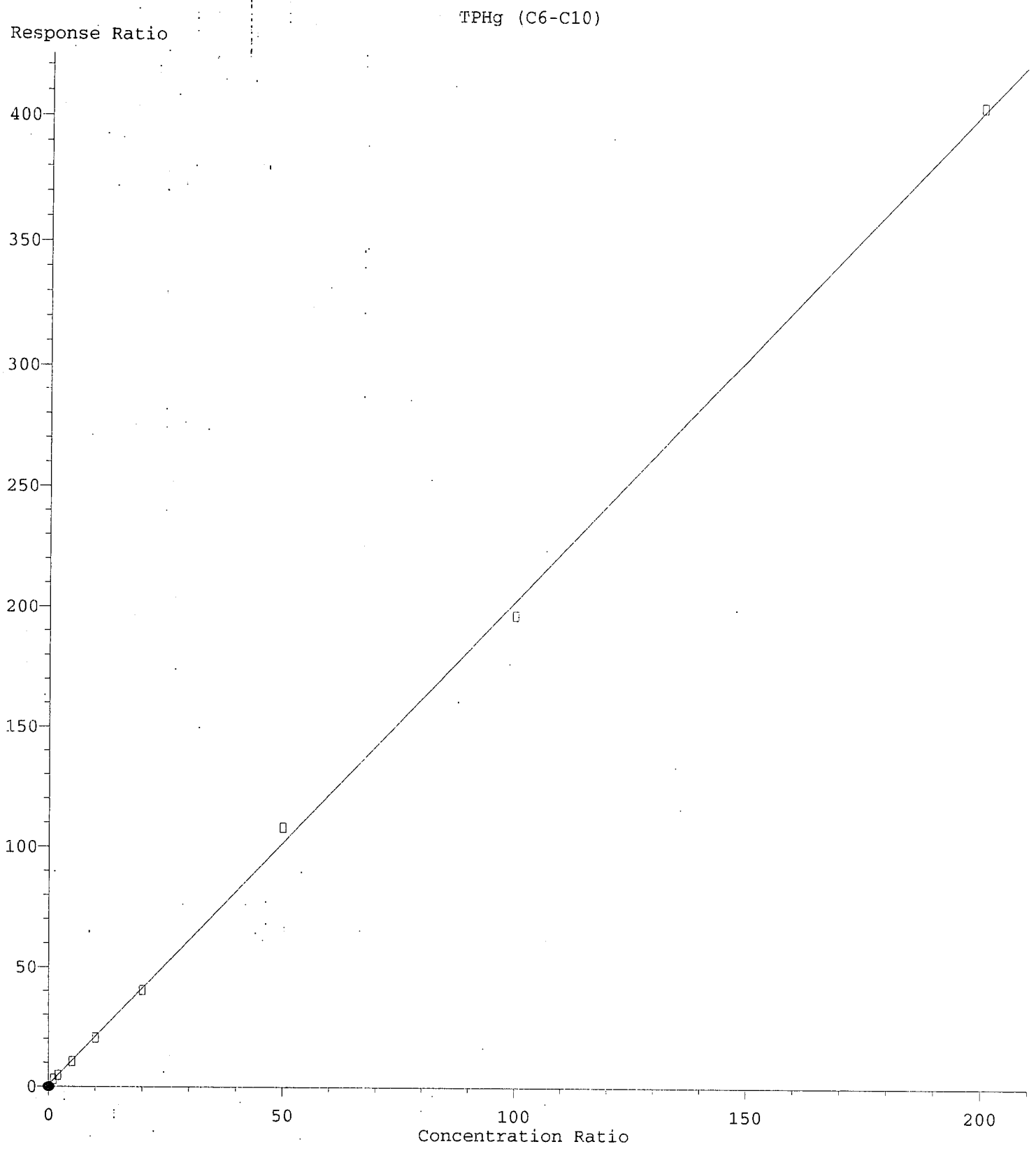
TIC: VJ20010633.D\data.ms

(5) TPHg (C5-C9) (H)

9.239min (0.000) -1.00 ug/L m

response 360890

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



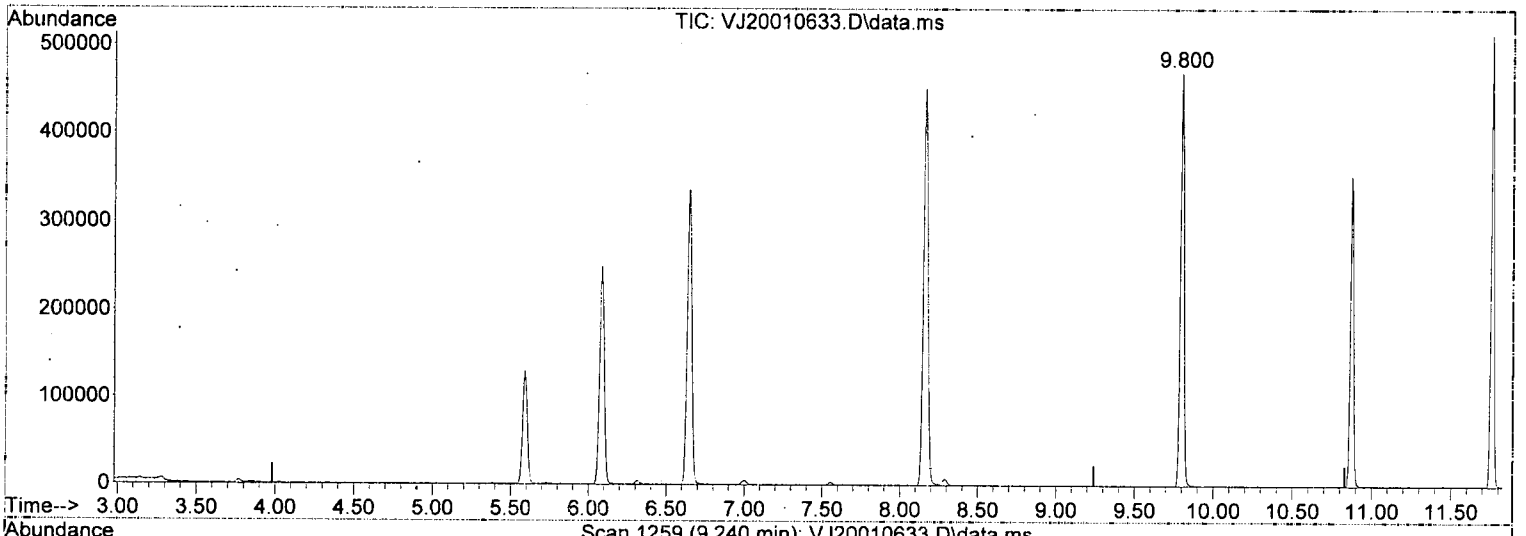
Int = 26.04

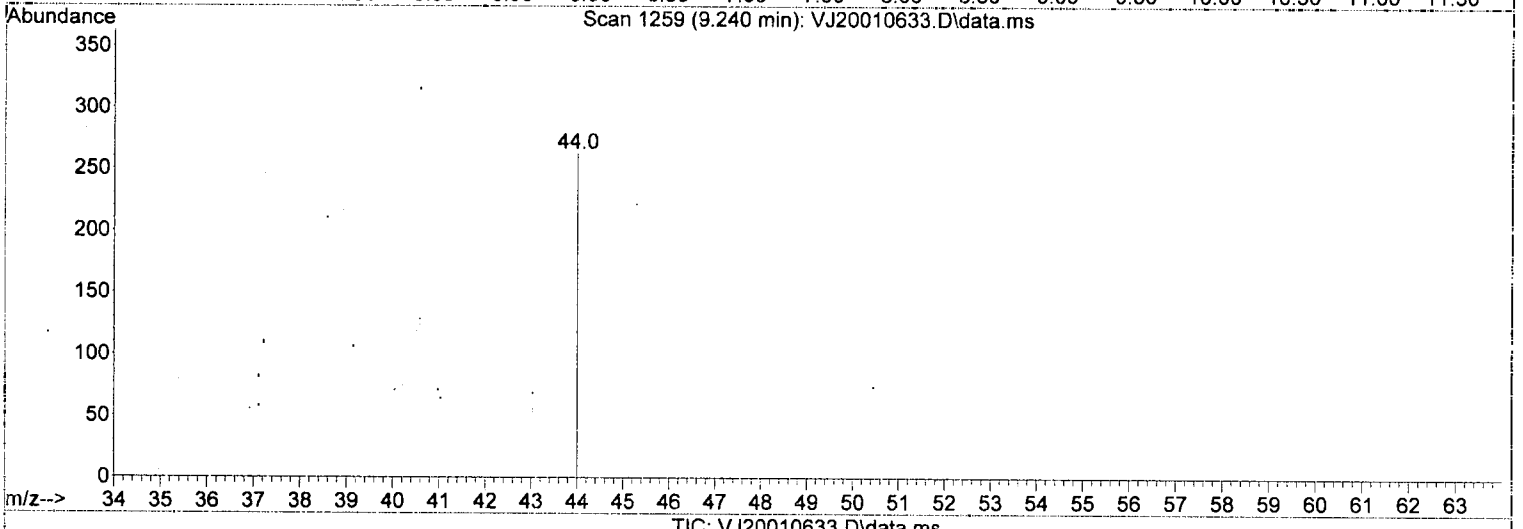
R = -6.65e-005 A*A + 2.02e+000 A + 8.51e-001
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ200106C.M
Calibration Table Last Updated: Tue Jan 07 15:46:27 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





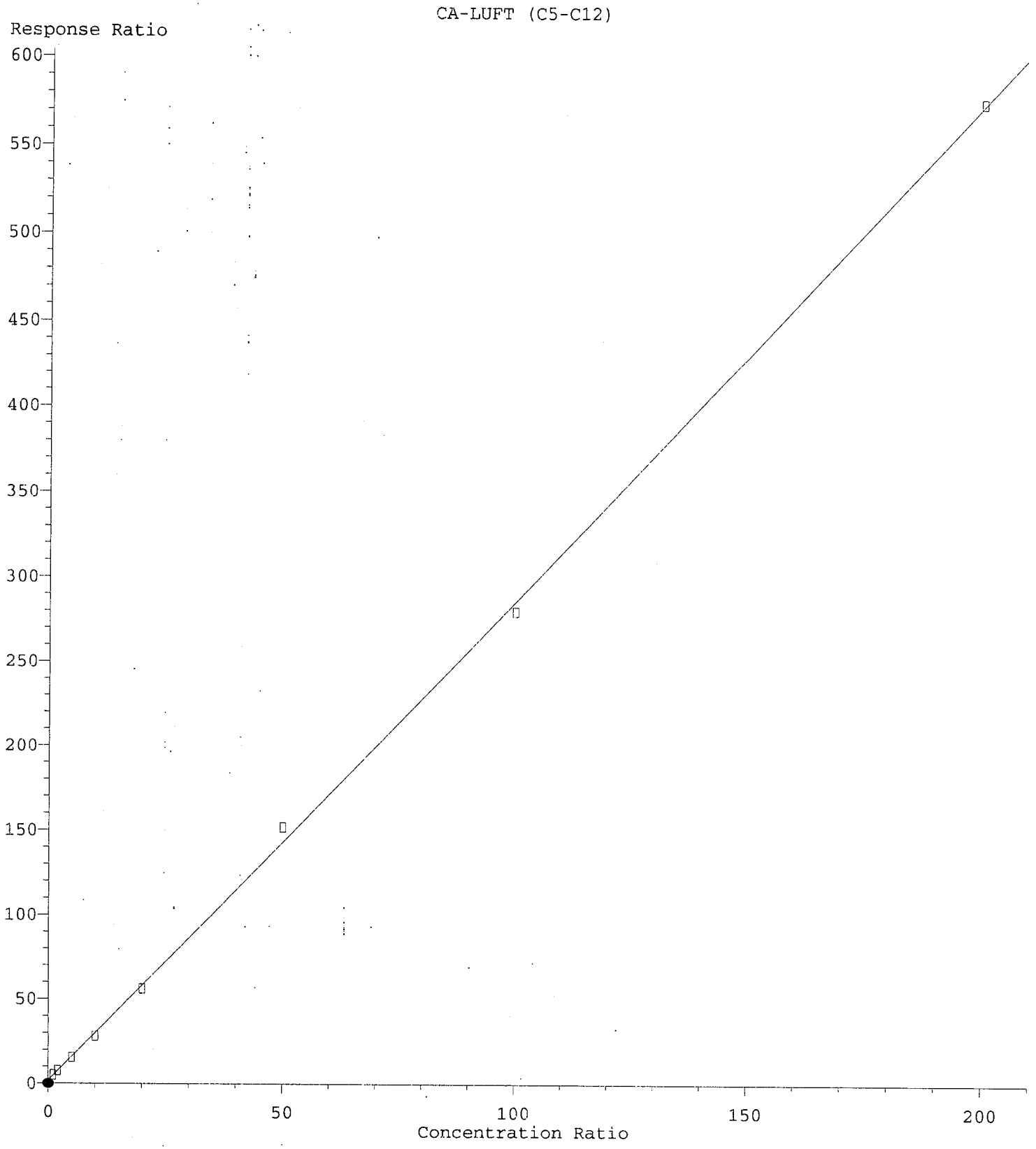
TIC: VJ20010633.D\data.ms

(6) TPHg (C6-C10) (H)

9.239min (0.000) 26.04 ug/L m

response 345915

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



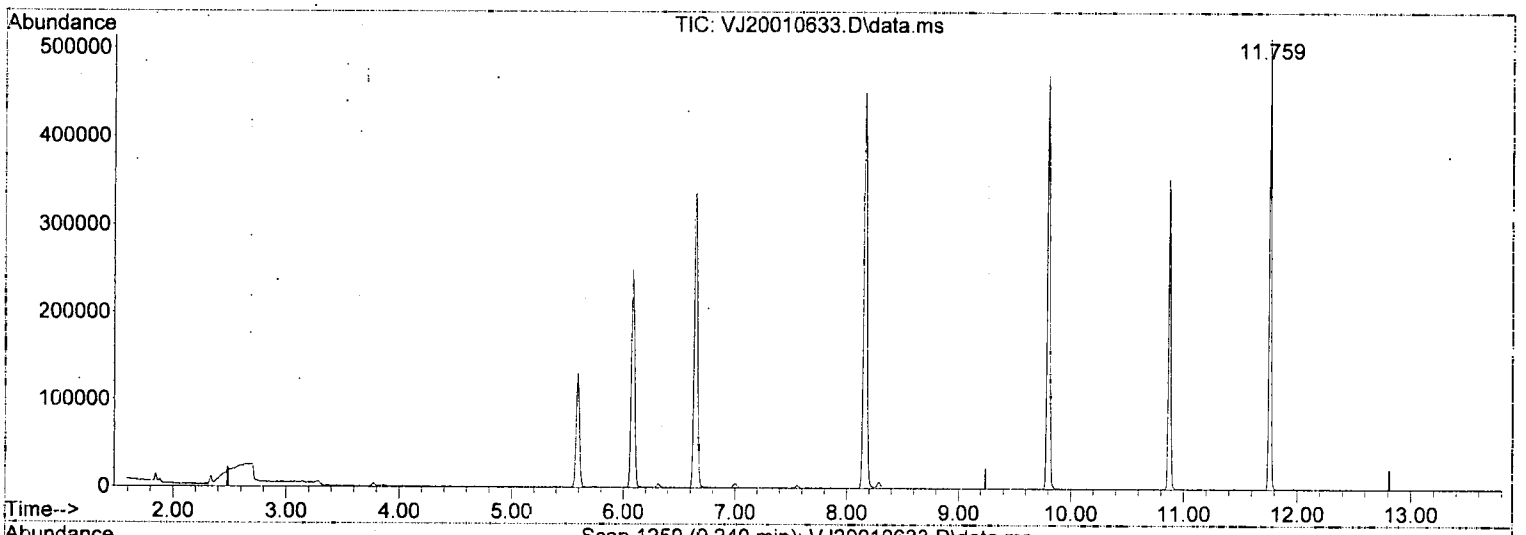
Int = 4.98

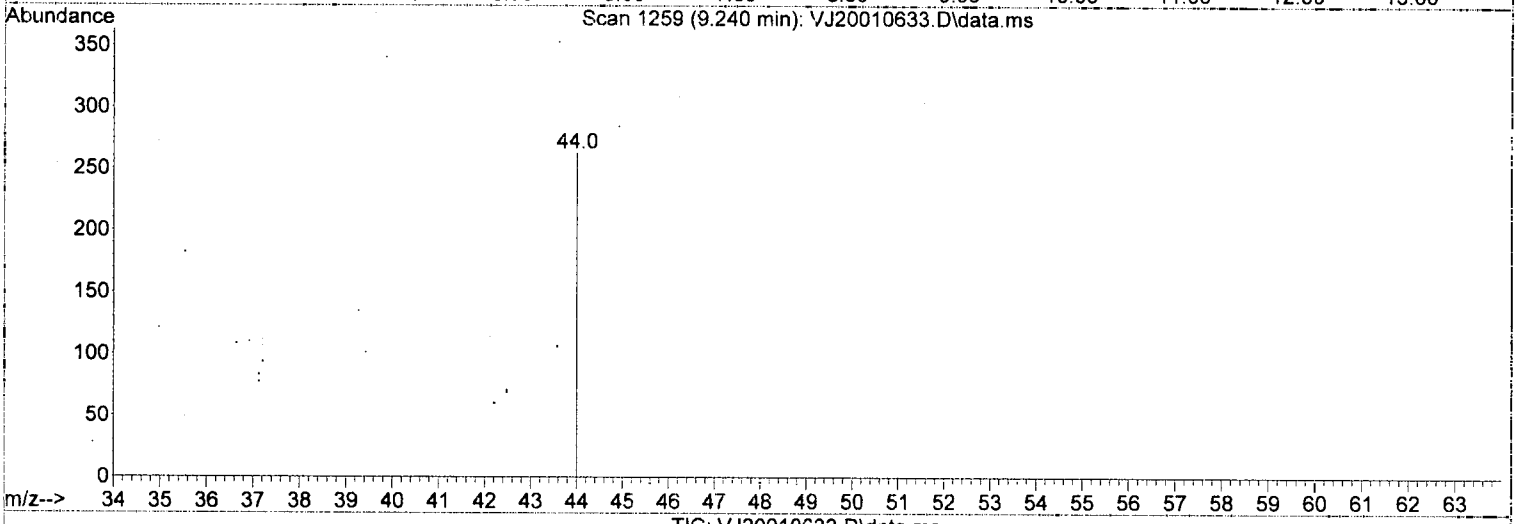
R = 2.58e-004 A*A + 2.81e+000 A + 1.90e+000
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj2001166.m
Calibration Table Last Updated: Tue Jan 07 15:46:27 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20010633.D\data.ms

(7) CA-LUFT (C5-C12) (H)

9.239min (0.000) 4.98 ug/L m

response 396221

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: 0A06051 **Seq. Date: 1/7/2020**

SEQUENCE LOG

SampleID	Analysis	Matrix	STDID	Analyzed
0A06051-TUN2	8015D-Mod Gasoline (C6-C10) by	Soil		1/7/2020 12:49:00AM
"	+CA LUFT GRO	"		"
"	+NWTPH-Gx	"		"
0A06051-ICB2	8015D-Mod Gasoline (C6-C10) by	Soil		1/7/2020 1:43:00AM
"	+CA LUFT GRO	"		"
"	+NWTPH-Gx	"		"
0A06051-CALC	8015D-Mod Gasoline (C6-C10) by	Soil	A20A115	1/7/2020 2:09:00AM
"	+CA LUFT GRO	"	A20A115	"
"	+NWTPH-Gx	"	A20A115	"
0A06051-CALD	8015D-Mod Gasoline (C6-C10) by	Soil	A20A116	1/7/2020 2:36:00AM
"	+CA LUFT GRO	"	A20A116	"
"	+NWTPH-Gx	"	A20A116	"
0A06051-CALE	8015D-Mod Gasoline (C6-C10) by	Soil	A20A117	1/7/2020 3:03:00AM
"	+CA LUFT GRO	"	A20A117	"
"	+NWTPH-Gx	"	A20A117	"
0A06051-CALF	8015D-Mod Gasoline (C6-C10) by	Soil	A20A118	1/7/2020 3:30:00AM
"	+CA LUFT GRO	"	A20A118	"
"	+NWTPH-Gx	"	A20A118	"
0A06051-CALG	8015D-Mod Gasoline (C6-C10) by	Soil	A20A119	1/7/2020 3:57:00AM
"	+CA LUFT GRO	"	A20A119	"
"	+NWTPH-Gx	"	A20A119	"
0A06051-CALH	8015D-Mod Gasoline (C6-C10) by	Soil	A20A120	1/7/2020 4:24:00AM
"	+CA LUFT GRO	"	A20A120	"
"	+NWTPH-Gx	"	A20A120	"
0A06051-CALI	8015D-Mod Gasoline (C6-C10) by	Soil	A20A121	1/7/2020 4:50:00AM
"	+CA LUFT GRO	"	A20A121	"
"	+NWTPH-Gx	"	A20A121	"
0A06051-CALJ	8015D-Mod Gasoline (C6-C10) by	Soil	A20A122	1/7/2020 5:17:00AM
"	+CA LUFT GRO	"	A20A122	"
"	+NWTPH-Gx	"	A20A122	"
0A06051-ICV2	8015D-Mod Gasoline (C6-C10) by	Soil	A19G350	1/7/2020 6:38:00AM
"	+CA LUFT GRO	"	A19G350	"
"	+NWTPH-Gx	"	A19G350	"

CALIBRATION STANDARD RECOVERIES

Calibration: **A0A0801** Instrument: **VOA-GCMS10**

8015D-Mod Gasoline (C6-C1(Sequence: **0A06051** Matrix: **Soil**

0A06051-CALC	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CALD	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A06051-CALE	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A06051-CALF	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0A06051 **Seq. Date: 1/7/2020**

0A06051-CALG	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A06051-CALH	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A06051-CALI	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A06051-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: **A0A0801** Instrument: **VOA-GCMS10**

NWTPH-Gx Sequence: **0A06051** Matrix: **Soil**

0A06051-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\2020-01\0A06051\
Data File : VJ20010644.D
Acq On : 7 Jan 2020 6:38 am
Operator : tb
Sample : 0A06051-ICV2
Misc : 1X 5mL 500ppb GX DI+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 08 10:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

1/8/20

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 (IS)	50.000	50.000	0.0	116	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	49.286	1.4	114	-0.01
3	S	4-Bromofluorobenzene (Sur)	50.000	48.553	2.9	114	0.00
4	H	NWTPH-Gx (TPH)	500.000	443.329	11.3	109	0.00
5	H	TPHg (C5-C9)	500.000	421.345	15.7	105	0.00
6	H	TPHg (C6-C10)	500.000	445.097	11.0	107	0.00
7	H	CA-LUFT (C5-C12)	500.000	424.734	15.1	106	0.00
8		Benzene (NR)	-1.000	0.000	0.0	110	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	112	0.00
10		Toluene (NR)	-1.000	0.000	0.0	112	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	113	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	112	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	113	-0.01

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

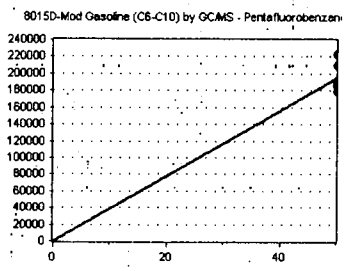
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8015D-Mod Gasoline (C6-C1** Instrument Cal ID: **VJ200106S VJ200106G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

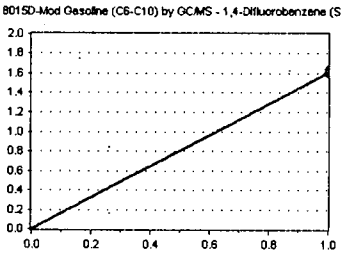


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	189886	3797.720	6.09
0A06051-CALD	50	179443	3588.860	6.09
0A06051-CALE	50	186189	3723.780	6.09
0A06051-CALF	50	192629	3852.580	6.09
0A06051-CALG	50	191267	3825.340	6.08
0A06051-CALH	50	186048	3720.960	6.08
0A06051-CALI	50	209694	4193.880	6.09
0A06051-CALJ	50	222960	4459.200	6.09

AVE RF **3895.290** RF RSD **7.37** AVE RT **6.09**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

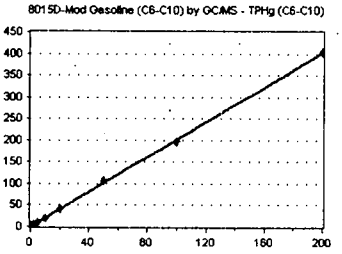


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	311513	1.641	6.65
0A06051-CALD	50	288672	1.609	6.65
0A06051-CALE	50	302044	1.622	6.65
0A06051-CALF	50	311330	1.616	6.65
0A06051-CALG	50	307334	1.607	6.65
0A06051-CALH	50	297873	1.601	6.65
0A06051-CALI	50	336080	1.603	6.65
0A06051-CALJ	50	356334	1.598	6.65

AVE RF **1.612** RF RSD **0.87** AVE RT **6.65**

TPHg (C6-C10)

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

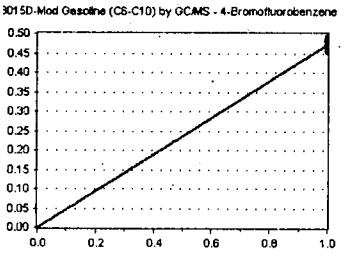


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	580106	3.055	9.24
0A06051-CALD	100	852839	2.376	9.24
0A06051-CALE	250	1968325	2.114	9.24
0A06051-CALF	500	3933470	2.042	9.24
0A06051-CALG	1000	7738058	2.023	9.24
0A06051-CALH	2500	2.010977E+07	2.162	9.24
0A06051-CALI	5000	4.117868E+07	1.964	9.24
0A06051-CALJ	10000	9.013048E+07	2.021	9.24

AVE RF **2.220** RF RSD **16.26** AVE RT **9.24**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	89937	0.474	10.88
0A06051-CALD	50	81750	0.456	10.88
0A06051-CALE	50	87530	0.470	10.88
0A06051-CALF	50	90026	0.467	10.88
0A06051-CALG	50	89389	0.467	10.88
0A06051-CALH	50	89534	0.481	10.88
0A06051-CALI	50	102563	0.489	10.88
0A06051-CALJ	50	107899	0.484	10.88

AVE RF **0.474** RF RSD **2.29** AVE RT **10.88**

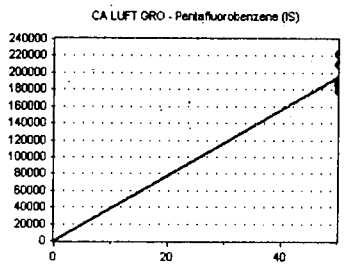
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **CA LUFT GRO** Instrument Cal ID: **VJ200106S VJ200106G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

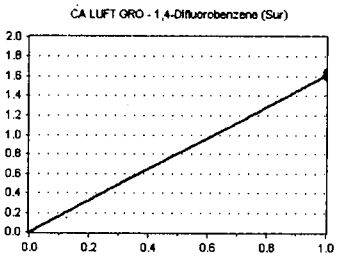


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	189886	3797.720	6.09
0A06051-CALD	50	179443	3588.860	6.09
0A06051-CALE	50	186189	3723.780	6.09
0A06051-CALF	50	192629	3852.580	6.09
0A06051-CALG	50	191267	3825.340	6.08
0A06051-CALH	50	186048	3720.960	6.08
0A06051-CALI	50	209694	4193.880	6.09
0A06051-CALJ	50	222960	4459.200	6.09

AVE RF **3895.290** RF RSD **7.37** AVE RT **6.09**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

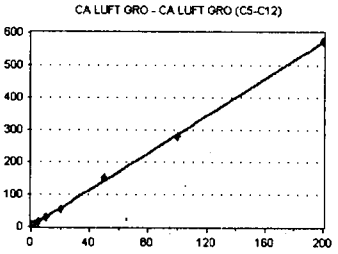


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	311513	1.641	6.65
0A06051-CALD	50	288672	1.609	6.65
0A06051-CALE	50	302044	1.622	6.65
0A06051-CALF	50	311330	1.616	6.65
0A06051-CALG	50	307334	1.607	6.65
0A06051-CALH	50	297873	1.601	6.65
0A06051-CALI	50	336080	1.603	6.65
0A06051-CALJ	50	356334	1.598	6.65

AVE RF **1.612** RF RSD **0.87** AVE RT **6.65**

CA LUFT GRO (C5-C12)

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

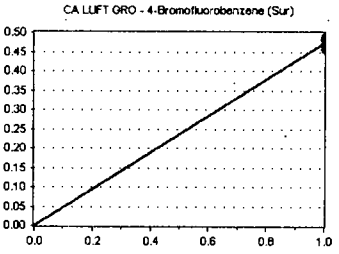


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	936641	4.933	9.24
0A06051-CALD	100	1366640	3.808	9.24
0A06051-CALE	250	2871923	3.085	9.24
0A06051-CALF	500	5414996	2.811	9.24
0A06051-CALG	1000	1.073255E+07	2.806	9.24
0A06051-CALH	2500	2.827339E+07	3.039	9.24
0A06051-CALI	5000	5.861624E+07	2.795	9.24
0A06051-CALJ	10000	1.281721E+08	2.874	9.24

AVE RF **3.269** RF RSD **22.98** AVE RT **9.24**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	89937	0.474	10.88
0A06051-CALD	50	81750	0.456	10.88
0A06051-CALE	50	87530	0.470	10.88
0A06051-CALF	50	90026	0.467	10.88
0A06051-CALG	50	89389	0.467	10.88
0A06051-CALH	50	89534	0.481	10.88
0A06051-CALI	50	102563	0.489	10.88
0A06051-CALJ	50	107899	0.484	10.88

AVE RF **0.474** RF RSD **2.29** AVE RT **10.88**

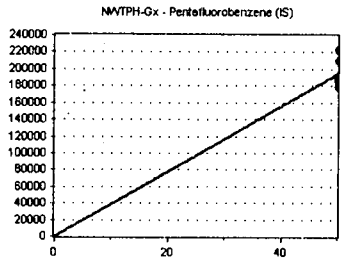
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **NWTPH-Gx** Instrument Cal ID: **VJ200106S VJ200106G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

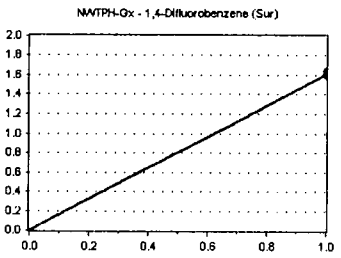


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	189886	3797.720	6.09
0A06051-CALD	50	179443	3588.860	6.09
0A06051-CALE	50	186189	3723.780	6.09
0A06051-CALF	50	192629	3852.580	6.09
0A06051-CALG	50	191267	3825.340	6.08
0A06051-CALH	50	186048	3720.960	6.08
0A06051-CALI	50	209694	4193.880	6.09
0A06051-CALJ	50	222960	4459.200	6.09

AVE RF **3895.290** RF RSD **7.37** AVE RT **6.09**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

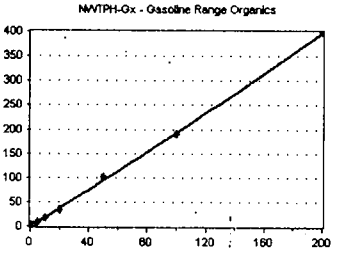


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	311513	1.641	6.65
0A06051-CALD	50	288672	1.609	6.65
0A06051-CALE	50	302044	1.622	6.65
0A06051-CALF	50	311330	1.616	6.65
0A06051-CALG	50	307334	1.607	6.65
0A06051-CALH	50	297873	1.601	6.65
0A06051-CALI	50	336080	1.603	6.65
0A06051-CALJ	50	356334	1.598	6.65

AVE RF **1.612** RF RSD **0.87** AVE RT **6.65**

Gasoline Range Organics

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

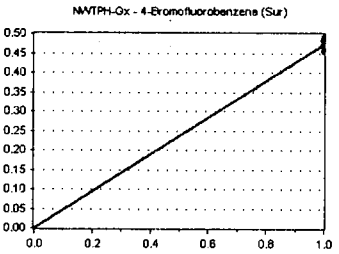


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	281399	1.482	8.74
0A06051-CALD	100	531697	1.482	8.74
0A06051-CALE	250	1506348	1.618	8.74
0A06051-CALF	500	3298839	1.713	8.74
0A06051-CALG	1000	6810936	1.780	8.74
0A06051-CALH	2500	1.880355E+07	2.021	8.74
0A06051-CALI	5000	3.97933E+07	1.898	8.74
0A06051-CALJ	10000	8.898816E+07	1.996	8.74

AVE RF **1.749** RF RSD **12.22** AVE RT **8.74**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	89937	0.474	10.88
0A06051-CALD	50	81750	0.456	10.88
0A06051-CALE	50	87530	0.470	10.88
0A06051-CALF	50	90026	0.467	10.88
0A06051-CALG	50	89389	0.467	10.88
0A06051-CALH	50	89534	0.481	10.88
0A06051-CALI	50	102563	0.489	10.88
0A06051-CALJ	50	107899	0.484	10.88

AVE RF **0.474** RF RSD **2.29** AVE RT **10.88**

Injection Log

Directory: W:\DATA\2020-01\0A06051

Line	Vial	FileName	Multiplier	SampleName		Misc Info	Injected
1	1	Vj20010611.d	1.	0A06051-IBL1		1X 5mL DI+MeOH	6 Jan 2020 15:51
2	2	Vj20010612.d	1.	0A06051-TUN1		1X 5mL DI+MeOH	6 Jan 2020 16:18
3	3	Vj20010613.d	1.	0A06051-ICB1		1X 5mL DI+MeOH	6 Jan 2020 16:45
4	4	Vj20010614.d	1.	0A06051-CAL1		1X 5mL 0.1ppb ...	6 Jan 2020 17:12
5	5	Vj20010615.d	1.	0A06051-CAL2		1X 5mL 0.2ppb ...	6 Jan 2020 17:39
6	6	Vj20010616.d	1.	0A06051-CAL3		1X 5mL 0.4ppb ...	6 Jan 2020 18:05
7	7	Vj20010617.d	1.	0A06051-CAL4		1X 5mL 1ppb D...	6 Jan 2020 18:32
8	8	Vj20010618.d	1.	0A06051-CAL5		1X 5mL 2ppb D...	6 Jan 2020 18:59
9	9	Vj20010619.d	1.	0A06051-CAL6		1X 5mL 5ppb D...	6 Jan 2020 19:26
10	10	Vj20010620.d	1.	0A06051-CAL7		1X 5mL 10ppb ...	6 Jan 2020 19:53
11	11	Vj20010621.d	1.	0A06051-CAL8		1X 5mL 20ppb ...	6 Jan 2020 20:20
12	12	Vj20010622.d	1.	0A06051-CAL9		1X 5mL 50ppb ...	6 Jan 2020 20:47
13	13	Vj20010623.d	1.	0A06051-IBL2		1X 5mL DI+MeOH	6 Jan 2020 21:14
14	14	Vj20010624.d	1.	0A06051-CALA		1X 5mL 50ppb ...	6 Jan 2020 21:41
15	15	Vj20010625.d	1.	0A06051-IBL3		1X 5mL DI+MeOH	6 Jan 2020 22:08
16	16	Vj20010626.d	1.	0A06051-CALB		1X 5mL 50ppb ...	6 Jan 2020 22:34
17	17	Vj20010627.d	1.	0A06051-IBL4		1X 5mL DI+MeOH	6 Jan 2020 23:01
18	18	Vj20010628.d	1.	0A06051-IBL5		1X 5mL DI+MeOH	6 Jan 2020 23:28
19	19	Vj20010629.d	1.	0A06051-ICV1		1X 5mL 20ppb ...	6 Jan 2020 23:55
20	20	Vj20010630.d	1.	0A06051-IBL6		1X 5mL DI+MeOH	7 Jan 2020 00:22
21	21	Vj20010631.d	1.	0A06051-TUN2	RT	1X 5mL DI+MeOH	7 Jan 2020 00:49
22	22	Vj20010632.d	1.	0A06051-IBL7		1X 5mL DI+MeOH	7 Jan 2020 01:16
23	23	Vj20010633.d	1.	0A06051-ICB2		1X 5mL DI+MeOH	7 Jan 2020 01:43
24	24	Vj20010634.d	1.	0A06051-CALC		1X 5mL 50ppb G...	7 Jan 2020 02:09
25	25	Vj20010635.d	1.	0A06051-CALD		1X 5mL 100ppb ...	7 Jan 2020 02:36
26	26	Vj20010636.d	1.	0A06051-CALE		1X 5mL 250ppb ...	7 Jan 2020 03:03
27	27	Vj20010637.d	1.	0A06051-CALF		1X 5mL 500ppb ...	7 Jan 2020 03:30
28	28	Vj20010638.d	1.	0A06051-CALG		1X 5mL 1000ppb...	7 Jan 2020 03:57
29	29	Vj20010639.d	1.	0A06051-CALH		1X 5mL 2500ppb...	7 Jan 2020 04:24
30	30	Vj20010640.d	1.	0A06051-CALI		1X 5mL 5000ppb...	7 Jan 2020 04:50
31	31	Vj20010641.d	1.	0A06051-CALJ		1X 5mL 10000pp...	7 Jan 2020 05:17
32	32	Vj20010642.d	1.	0A06051-IBL8		1X 5mL DI+MeOH	7 Jan 2020 05:44
33	33	Vj20010643.d	1.	0A06051-IBL9		1X 5mL DI+MeOH	7 Jan 2020 06:11
34	34	Vj20010644.d	1.	0A06051-ICV2		1X 5mL 500ppb ...	7 Jan 2020 06:38
35	35	Vj20010645.d	1.	0A06051-IBLA		1X 5mL DI+MeOH	7 Jan 2020 07:05

1/7/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010611.D
Acq On : 6 Jan 2020 3:51 pm
Operator : tb
Sample : 0A06051-IBL1
Misc : 1X 5mL DI+MeOH
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 08 10:50:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

NR

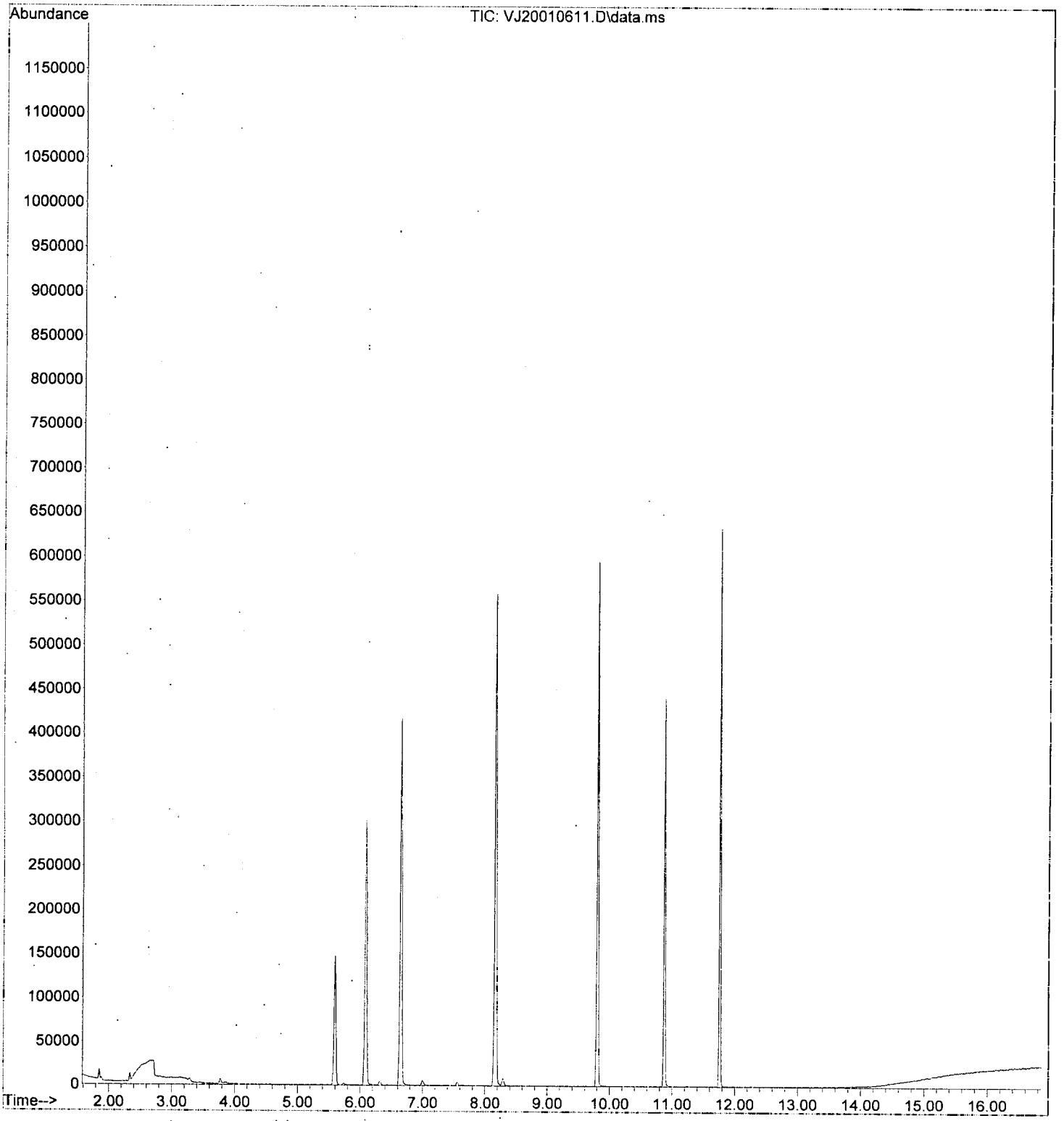
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	125357	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	310452	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	134853	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	100534	49.64	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	364737	49.88	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	430981	50.08	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	108954	52.34	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	2386	0.66	ug/L		99
5) Bromomethane	2.342	96	4048	0.13	ug/L		93
6) Chloroethane	2.476	64	61	0.09	ug/L	#	47
8) Ethanol	3.285	45	3406	Below Cal			87
12) Iodomethane	3.291	142	1127	2.57	ug/L		87
13) Methylene Chloride	3.771	84	3025	0.22	ug/L		87
14) Acetone	3.881	43	2201	1.39	ug/L		98
32) 2-Butanone (MEK)	5.742	43	3024	1.22	ug/L		81
34) tert-Amyl methyl ether...	6.077	73	600	0.08	ug/L	#	1
36) iso-Butyl Alcohol	6.314	43	2013	7.50	ug/L		88
84) Naphthalene	13.511	128	207	0.13	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010611.D
Acq On : 6 Jan 2020 3:51 pm
Operator : tb
Sample : 0A06051-IBL1
Misc : 1X 5mL DI+MeOH
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 08 10:50:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



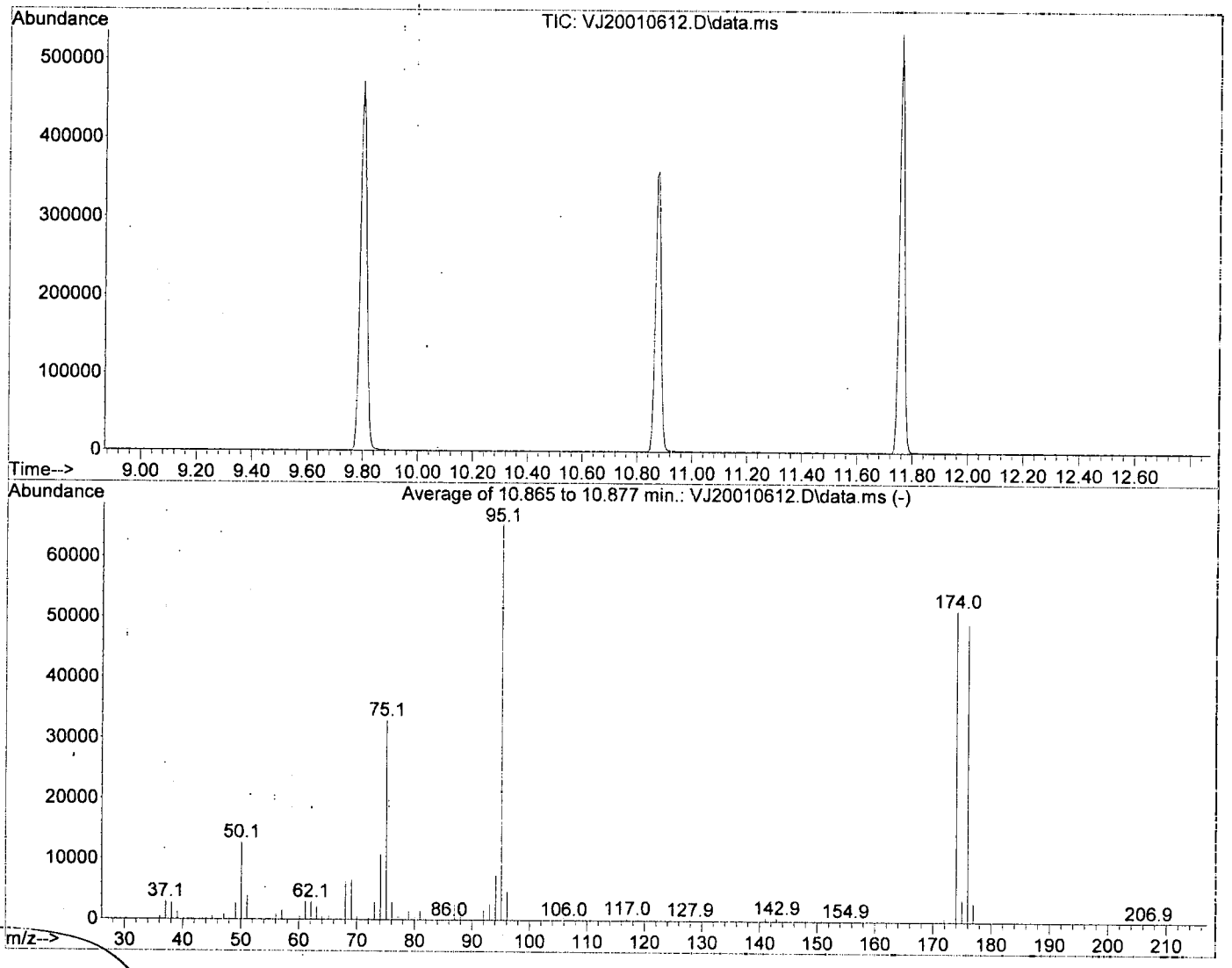
BFB

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010612.D
Acq On : 6 Jan 2020 4:18 pm
Operator : tb
Sample : 0A06051-TUN1
Misc : 1X 5mL DI+MeOH
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Tue Jan 07 15:08:13 2020

1/8/20



AutoFind: Scans 1526, 1527, 1528; Background Corrected with Scan 1520

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	127.1	65499	PASS
96	95	5	9	7.2	4697	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	200	78.7	51547	PASS
175	174	5	9	7.4	3806	PASS
176	174	95	105	95.7	49328	PASS
177	176	5	10	6.8	3345	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010612.D
Acq On : 6 Jan 2020 4:18 pm
Operator : tb
Sample : 0A06051-TUN1
Misc : 1X 5mL DI+MeOH
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 08 10:50:52 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

1/8/20

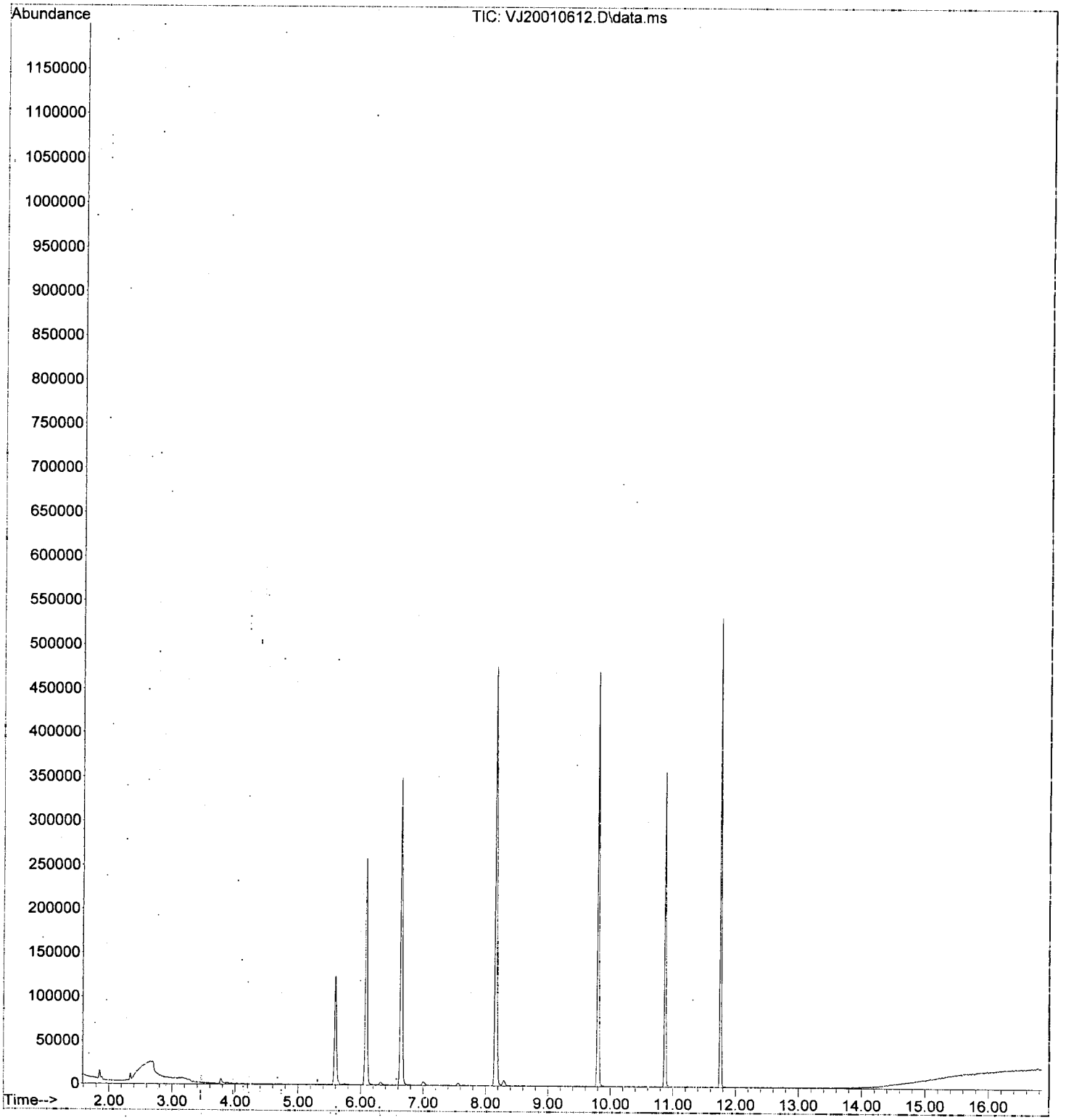
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	108485	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	259779	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	115149	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.597	111	86870	49.57	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	315553	49.86	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	369512	51.31	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	90129	50.70	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	1956	0.63	ug/L		98
5) Bromomethane	2.342	96	3958	0.54	ug/L		87
6) Chloroethane	2.506	64	57	0.10	ug/L	#	1
8) Ethanol	3.273	45	2404	Below Cal			82
12) Iodomethane	3.297	142	825	2.16	ug/L		77
13) Methylene Chloride	3.784	84	2952	0.37	ug/L		88
14) Acetone	3.875	43	1664	1.21	ug/L	#	42
18) tert-Butanol (TBA)	4.258	59	116	0.19	ug/L	#	46
32) 2-Butanone (MEK)	5.737	43	2720	1.26	ug/L		88
36) iso-Butyl Alcohol	6.314	43	1946	8.38	ug/L		94

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010612.D
Acq On : 6 Jan 2020 4:18 pm
Operator : tb
Sample : 0A06051-TUN1
Misc : 1X 5mL DI+MeOH
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 08 10:50:52 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010613.D
Acq On : 6 Jan 2020 4:45 pm
Operator : tb
Sample : 0A06051-ICB1
Misc : 1X 5mL DI+MeOH
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 08 10:51:13 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

1/8/20

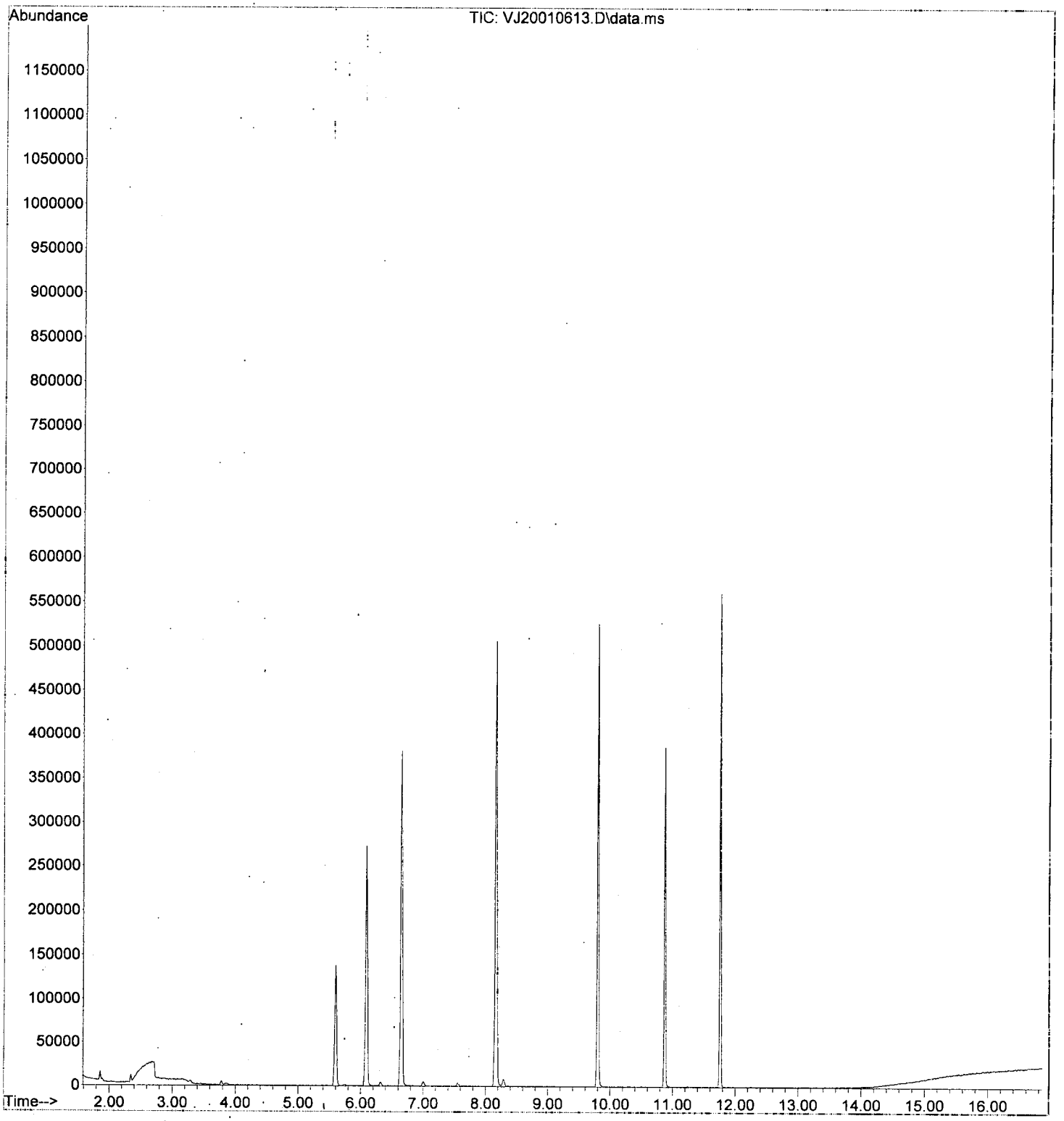
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.089	99	112751	50.00 ug/L	0.00
43) Chlorobenzene-d5 (I)	9.800	117	276522	50.00 ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	121375	50.00 ug/L	0.00
System Monitoring Compounds					
30) Dibromofluoromethane (S)	5.596	111	92840	50.97 ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.649	114	329156	50.04 ug/L	0.00
45) Toluene-d8 (S)	8.164	98	384807	50.20 ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.877	174	96050	51.26 ug/L	0.00
Target Compounds					Qvalue
3) Chloromethane	1.898	50	1900	0.59 ug/L	98 <MDL
5) Bromomethane	2.348	96	3762	0.24 ug/L	90
6) Chloroethane	2.451	64	65	0.11 ug/L #	1
8) Ethanol	3.291	45	3152	Below Cal	81
12) Iodomethane	3.297	142	876	2.21 ug/L	86
13) Methylene Chloride	3.784	84	2121	Below Cal	96
14) Acetone	3.869	43	1975	1.39 ug/L	84
32) 2-Butanone (MEK)	5.742	43	3077	1.38 ug/L	91
36) iso-Butyl Alcohol	6.314	43	1780	7.37 ug/L	82

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010613.D
Acq On : 6 Jan 2020 4:45 pm
Operator : tb
Sample : 0A06051-ICB1
Misc : 1X 5mL DI+MeOH
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 08 10:51:13 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 14:46:27 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.083	99	106379	50.00	ug/L	0.00
43) Chlorobenzene-d5 (I)	9.800	117	261559	50.00	ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	117300	50.00	ug/L	0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.590	111	85502	51.11	ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.643	114	313857	51.33	ug/L	0.00
45) Toluene-d8 (S)	8.164	98	365118	49.52	ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.877	174	91026	50.26	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	d	
3) Chloromethane	1.885	50	1721	0.61	ug/L	93
4) Vinyl Chloride	0.000		0	N.D.		
5) Bromomethane	2.336	96	3306	2.74	ug/L	99
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	0.000		0	N.D.	d	
11) Freon 113	0.000		0	N.D.		
12) Iodomethane	3.285	142	696	1.78	ug/L	63
13) Methylene Chloride	3.771	84	2558	1.20	ug/L	91
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	0.000		0	N.D.	d	
18) tert-Butanol (TBA)	0.000		0	N.D.	d	
19) Diisopropyl ether (DIPE)	0.000		0	N.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	0.000		0	N.D.	d	
25) Bromochloromethane	0.000		0	N.D.		
26) Chloroform	0.000		0	N.D.	d	
27) Carbon Tetrachloride	0.000		0	N.D.		
28) Tetrahydrofuran	0.000		0	N.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)	5.730	43	3330	1.69	ug/L	95
33) Benzene	6.004	78	964	0.10	ug/L	56
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	6.308	43	2064	9.49	ug/L	89
38) Trichloroethene (TCE)	0.000		0	N.D.	d	
39) tert-Amyl ethyl ether ...	0.000		0	N.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	8.225	91	1116	0.11	ug/L	82
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\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb, DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 14:46:27 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

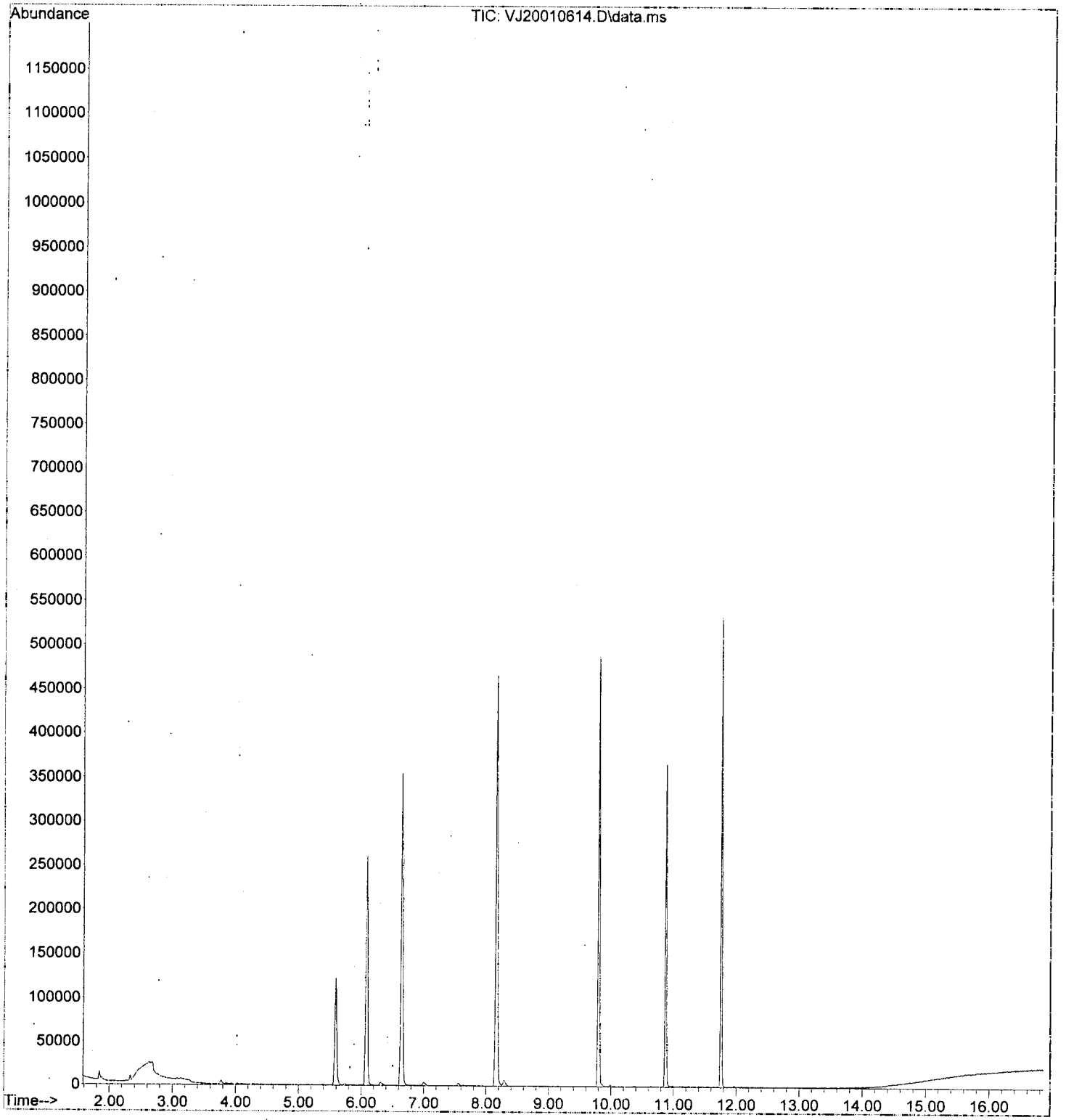
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	0.000		0	N.D.	d	
50) 1,1,2-Trichloroethane	0.000		0	N.D.		
51) Dibromochloromethane	0.000		0	N.D.		
52) 1,3-Dichloropropane	0.000		0	N.D.	d	
53) 1,2-Dibromoethane (EDB)	0.000		0	N.D.		
54) 2-Hexanone	0.000		0	N.D.		
55) Chlorobenzene	0.000		0	N.D.	d	
56) Ethylbenzene	9.849	91	1054	0.10	ug/L #	50
57) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	d	
58) m,p-Xylenes (2)	9.989	91	1299	0.16	ug/L	86
59) o-Xylene	10.372	91	564	0.07	ug/L	81
60) Styrene	0.000		0	N.D.	d	
61) Bromoform	0.000		0	N.D.		
62) Isopropylbenzene	10.646	105	735	0.08	ug/L	78
65) Bromobenzene	10.956	156	195	0.09	ug/L #	72
66) n-Propylbenzene	10.993	91	1066	0.10	ug/L	92
67) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
68) 2-Chlorotoluene	0.000		0	N.D.	d	
69) 1,3,5-Trimethylbenzene	11.151	105	645	0.08	ug/L	90
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	0.000		0	N.D.	d	
73) tert-Butylbenzene	0.000		0	N.D.	d	
74) 1,2,4-Trimethylbenzene	11.455	105	710	0.09	ug/L	94
75) sec-Butylbenzene	11.540	105	752	0.08	ug/L	58
76) 4-Isopropyltoluene	11.650	119	634	0.08	ug/L	79
77) 1,3-Dichlorobenzene	11.704	146	321	0.08	ug/L	82
78) 1,4-Dichlorobenzene	11.771	146	390	0.09	ug/L #	33
79) n-Butylbenzene	11.972	91	596	0.09	ug/L	94
80) 1,2-Dichlorobenzene	12.088	146	297	0.08	ug/L	92
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D		
82) Hexachlorobutadiene	0.000		0	N.D		
83) 1,2,4-Trichlorobenzene	0.000		0	N.D	d	
84) Naphthalene	13.511	128	645	0.08	ug/L	79
85) 1,2,3-Trichlorobenzene	0.000		0	N.D		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 14:46:27 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 11:53:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	106379	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	261559	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	117300	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	85502	51.11	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	313857	51.33	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	365118	49.52	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	91026	50.26	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	63	0.03	ug/L	#	51
3) Chloromethane	1.885	50	1721	0.61	ug/L		93
4) Vinyl Chloride	0.000		0	N.D.			
5) Bromomethane	2.336	96	3306	2.74	ug/L		99
6) Chloroethane	2.451	64	140	0.28	ug/L	#	1
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Ethanol	3.266	45	2356	36.51	ug/L		89
9) 1,1-Dichloroethene	3.133	61	339	0.14	ug/L	#	52
10) Carbon Disulfide	3.145	76	739	0.17	ug/L	#	35
11) Freon 113	0.000		0	N.D.			
12) Iodomethane	3.285	142	696	1.78	ug/L		63
13) Methylene Chloride	3.771	84	2558	1.20	ug/L		91
14) Acetone	3.857	43	1292	1.03	ug/L	#	42
15) t-1,2-Dichloroethene	3.936	61	345	0.11	ug/L	#	68
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.094	73	1150	0.15	ug/L		57
18) tert-Butanol (TBA)	4.264	59	1701	2.67	ug/L	#	73
19) Diisopropyl ether (DIPE)	0.000		0	N.D.			
20) 1,1-Dichloroethane	4.574	63	241	0.07	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	5.128	61	250	0.08	ug/L	#	18
24) 2,2-Dichloropropane	5.225	77	345	0.10	ug/L	#	32
25) Bromochloromethane	0.000		0	N.D.			
26) Chloroform	5.402	83	328	0.08	ug/L	#	25
27) Carbon Tetrachloride	0.000		0	N.D.			
28) Tetrahydrofuran	0.000		0	N.D.			
29) 1,1,1-Trichloroethane	5.621	97	267	0.07	ug/L	#	25
31) 1,1-Dichloropropene	5.736	75	260	0.08	ug/L	#	39
32) 2-Butanone (MEK)	5.730	43	3330	1.69	ug/L		95
33) Benzene	6.004	78	964	0.10	ug/L		56
34) tert-Amyl methyl ether...	6.138	73	55	0.01	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.199	62	198	0.06	ug/L	#	49
36) iso-Butyl Alcohol	6.308	43	2064	9.49	ug/L		89
38) Trichloroethene (TCE)	6.625	130	55	0.02	ug/L	#	1
39) tert-Amyl ethyl ether ...	0.000		0	N.D.			
40) Dibromomethane	0.000		0	N.D.			
41) 1,2-Dichloropropane	7.160	63	56	0.02	ug/L	#	40
42) Bromodichloromethane	0.000		0	N.D.			
44) c-1,3-Dichloropropene	7.933	75	180	0.05	ug/L	#	33
46) Toluene	8.225	91	1116	0.11	ug/L		82
47) Tetrachloroethene (PCE)	8.669	166	140	0.06	ug/L	#	24
48) 4-Methyl-2-Pentanone (...	8.681	43	257	0.08	ug/L	#	43

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 11:53:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

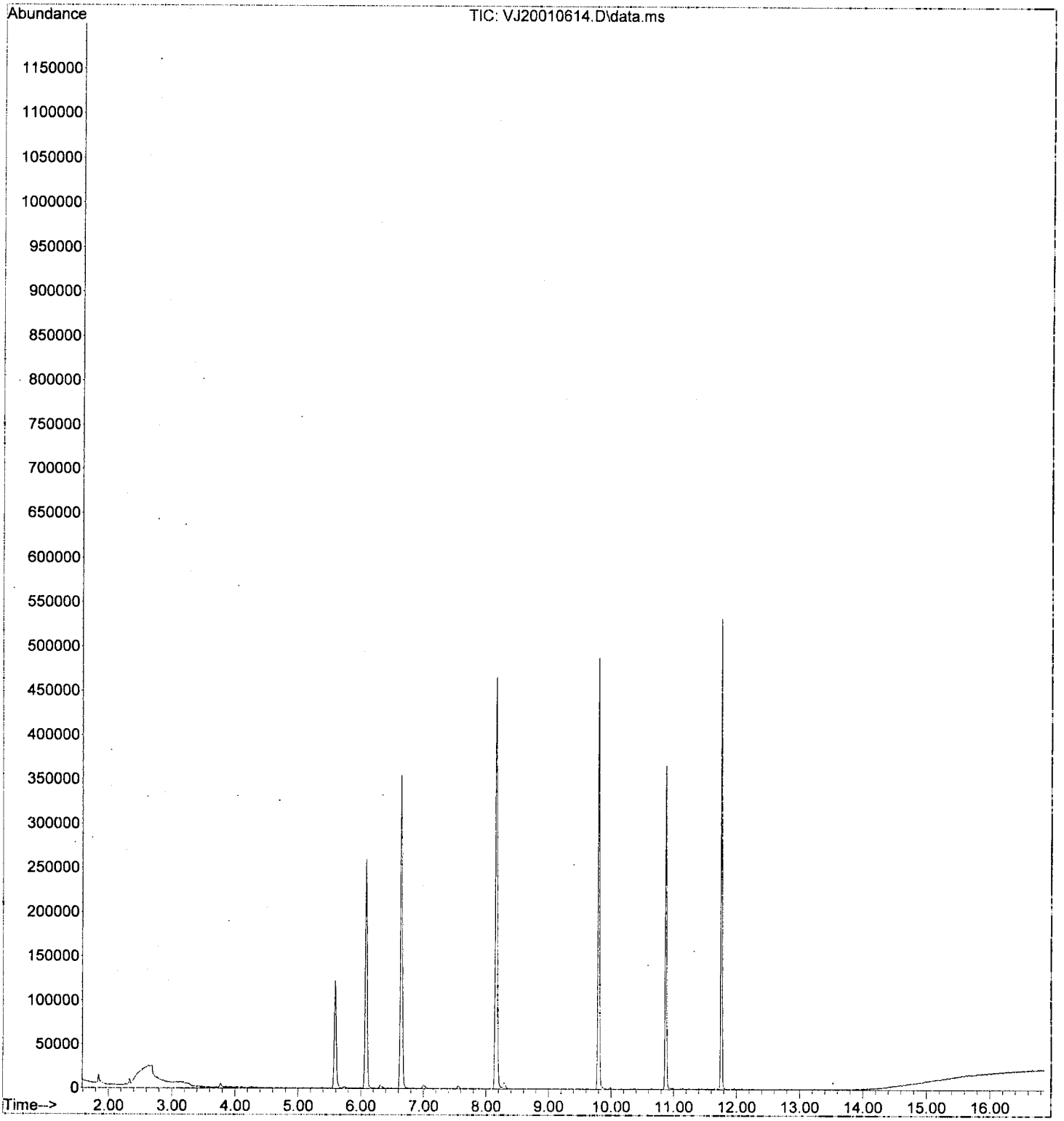
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	65	0.02	ug/L #	45
50) 1,1,2-Trichloroethane	0.000		0	N.D.		
51) Dibromochloromethane	0.000		0	N.D.		
52) 1,3-Dichloropropane	9.161	76	201	0.05	ug/L #	28
53) 1,2-Dibromoethane (EDB)	0.000		0	N.D.		
54) 2-Hexanone	0.000		0	N.D.		
55) Chlorobenzene	9.812	112	786	0.13	ug/L #	1
56) Ethylbenzene	9.849	91	1054	0.10	ug/L #	50
57) 1,1,1,2-Tetrachloroethane	9.873	131	55	0.03	ug/L #	36
58) m,p-Xylenes (2)	9.989	91	1299	0.16	ug/L	86
59) o-Xylene	10.372	91	564	0.07	ug/L	81
60) Styrene	10.415	104	311	0.06	ug/L #	40
61) Bromoform	0.000		0	N.D.		
62) Isopropylbenzene	10.646	105	735	0.08	ug/L	78
65) Bromobenzene	10.956	156	195	0.09	ug/L #	72
66) n-Propylbenzene	10.993	91	1066	0.10	ug/L	92
67) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
68) 2-Chlorotoluene	11.108	126	69	0.03	ug/L #	13
69) 1,3,5-Trimethylbenzene	11.151	105	645	0.08	ug/L	90
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	11.248	91	628	0.10	ug/L #	46
73) tert-Butylbenzene	11.400	91	310	0.07	ug/L #	58
74) 1,2,4-Trimethylbenzene	11.455	105	710	0.09	ug/L	94
75) sec-Butylbenzene	11.540	105	752	0.08	ug/L	58
76) 4-Isopropyltoluene	11.650	119	634	0.08	ug/L	79
77) 1,3-Dichlorobenzene	11.704	146	321	0.08	ug/L	82
78) 1,4-Dichlorobenzene	11.771	146	390	0.09	ug/L #	33
79) n-Butylbenzene	11.972	91	596	0.09	ug/L	94
80) 1,2-Dichlorobenzene	12.088	146	297	0.08	ug/L	92
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
82) Hexachlorobutadiene	0.000		0	N.D.		
83) 1,2,4-Trichlorobenzene	13.237	180	184	0.08	ug/L	80
84) Naphthalene	13.511	128	645	0.08	ug/L	79
85) 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\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 11:53:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 14:49:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.089	99	111744	50.00 ug/L	0.00
43) Chlorobenzene-d5 (I)	9.800	117	259849	50.00 ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	116376	50.00 ug/L	0.00
System Monitoring Compounds					
30) Dibromofluoromethane (S)	5.597	111	86345	49.14 ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.649	114	320717	49.93 ug/L	0.00
45) Toluene-d8 (S)	8.164	98	371366	50.70 ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.877	174	90060	50.12 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D. d	
3) Chloromethane	1.898	50	2258	0.76 ug/L	99
4) Vinyl Chloride	0.000		0	N.D. d	
5) Bromomethane	2.342	96	4152	3.27 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	3.145	61	573	0.22 ug/L	76
10) Carbon Disulfide	3.151	76	1049	0.23 ug/L	40
11) Freon 113	0.000		0	N.D. d	
12) Iodomethane	3.297	142	695	1.69 ug/L	85
13) Methylene Chloride	3.778	84	2700	1.21 ug/L	94
14) Acetone	0.000		0	N.D. d	
15) t-1,2-Dichloroethene	3.942	61	676	0.21 ug/L #	70
16) n-Hexane	0.000		0	N.D.	
17) Methyl-tert-butyl-ether	4.112	73	1683	0.21 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	4.574	63	614	0.16 ug/L	75
21) Acrylonitrile	0.000		0	N.D.	
22) Ethyl-tert-butyl ether...	0.000		0	N.D. d	
23) c-1,2-Dichloroethene	5.128	61	459	0.14 ug/L	96
24) 2,2-Dichloropropane	5.238	77	710	0.20 ug/L	67
25) Bromochloromethane	0.000		0	N.D. d	
26) Chloroform	5.414	83	750	0.18 ug/L	84
27) Carbon Tetrachloride	0.000		0	N.D.	
28) Tetrahydrofuran	0.000		0	N.D.	
29) 1,1,1-Trichloroethane	5.621	97	641	0.16 ug/L	85
31) 1,1-Dichloropropene	0.000		0	N.D. d	
32) 2-Butanone (MEK)	0.000		0	N.D. d	
33) Benzene	5.998	78	2055	0.20 ug/L	72
34) tert-Amyl methyl ether...	0.000		0	N.D. d	
35) 1,2-Dichloroethane (EDC)	6.205	62	601	0.16 ug/L	81
36) iso-Butyl Alcohol	6.320	43	2421	10.60 ug/L	94
38) Trichloroethene (TCE)	6.612	130	325	0.13 ug/L #	74
39) tert-Amyl ethyl ether ...	0.000		0	N.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. d	
44) c-1,3-Dichloropropene	0.000		0	N.D. d	
46) Toluene	8.225	91	2095	0.20 ug/L	89
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\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL . 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 14:49:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

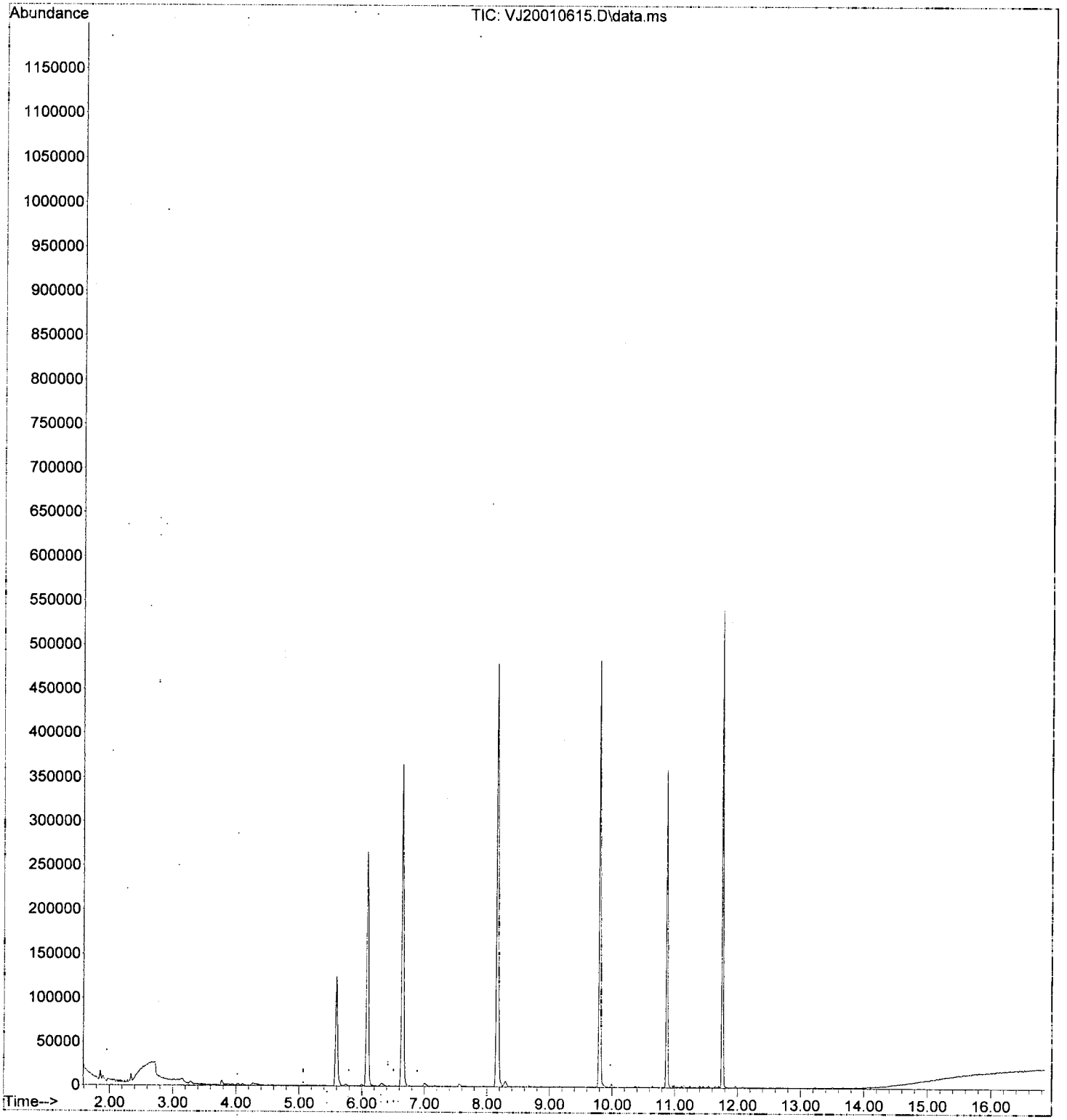
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	527	0.15	ug/L #	45
50) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
51) Dibromochloromethane	0.000		0	N.D.	d	
52) 1,3-Dichloropropane	9.155	76	587	0.16	ug/L #	59
53) 1,2-Dibromoethane (EDB)	9.295	107	83	0.04	ug/L	79
54) 2-Hexanone	9.545	43	368	0.17	ug/L	79
55) Chlorobenzene	9.819	112	1202	0.19	ug/L	73
56) Ethylbenzene	9.855	91	1865	0.17	ug/L	93
57) 1,1,1,2-Tetrachloroethane	9.885	131	233	0.11	ug/L #	81
58) m,p-Xylenes (2)	9.989	91	2624	0.33	ug/L	98
59) o-Xylene	10.372	91	1119	0.15	ug/L	92
60) Styrene	10.421	104	584	0.11	ug/L	75
61) Bromoform	0.000		0	N.D.	d	
62) Isopropylbenzene	10.646	105	1389	0.15	ug/L	93
65) Bromobenzene	10.962	156	376	0.17	ug/L	88
66) n-Propylbenzene	10.993	91	1899	0.18	ug/L	83
67) 1,1,2,2-Tetrachloroethane	11.041	83	402	0.14	ug/L	94
68) 2-Chlorotoluene	0.000		0	N.D.	d	
69) 1,3,5-Trimethylbenzene	11.145	105	1117	0.14	ug/L	86
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	11.248	91	877	0.14	ug/L	86
73) tert-Butylbenzene	11.400	91	702	0.17	ug/L #	73
74) 1,2,4-Trimethylbenzene	11.455	105	1050	0.13	ug/L	95
75) sec-Butylbenzene	11.540	105	1319	0.14	ug/L	87
76) 4-Isopropyltoluene	11.650	119	1120	0.15	ug/L	97
77) 1,3-Dichlorobenzene	11.704	146	734	0.17	ug/L	82
78) 1,4-Dichlorobenzene	11.771	146	971	0.23	ug/L #	64
79) n-Butylbenzene	11.972	91	1286	0.19	ug/L	93
80) 1,2-Dichlorobenzene	12.082	146	602	0.16	ug/L #	60
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
82) Hexachlorobutadiene	0.000		0	N.D.		
83) 1,2,4-Trichlorobenzene	13.237	180	366	0.16	ug/L	74
84) Naphthalene	13.511	128	1083	0.13	ug/L	79
85) 1,2,3-Trichlorobenzene	13.669	180	236	0.10	ug/L #	63

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 14:49:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 11:53:29 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

TB 1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	111744	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	259849	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	116376	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.597	111	86345	49.14	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	320717	49.93	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	371366	50.70	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	90060	50.12	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	303	0.15	ug/L	#	51
3) Chloromethane	1.898	50	2258	0.76	ug/L		99
4) Vinyl Chloride	2.007	62	402	0.17	ug/L	#	46
5) Bromomethane	2.342	96	4152	3.27	ug/L		93
6) Chloroethane	2.463	64	126	0.24	ug/L	#	27
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Ethanol	3.279	45	3210	47.36	ug/L		93
9) 1,1-Dichloroethene	3.145	61	573	0.22	ug/L		76
10) Carbon Disulfide	3.151	76	1049	0.23	ug/L		40
11) Freon 113	3.200	101	135	0.07	ug/L	#	73
12) Iodomethane	3.297	142	695	1.69	ug/L		85
13) Methylene Chloride	3.778	84	2700	1.21	ug/L		94
14) Acetone	3.863	43	1833	1.39	ug/L	#	42
15) t-1,2-Dichloroethene	3.942	61	676	0.21	ug/L	#	70
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.112	73	1683	0.21	ug/L		57
18) tert-Butanol (TBA)	4.270	59	3892	5.82	ug/L	#	67
19) Diisopropyl ether (DIPE)	4.501	45	172	0.02	ug/L	#	44
20) 1,1-Dichloroethane	4.574	63	614	0.16	ug/L		75
21) Acrylonitrile	0.000		0	N.D.			
22) Ethyl-tert-butyl ether...	4.873	59	125	0.02	ug/L	#	38
23) c-1,2-Dichloroethene	5.128	61	459	0.14	ug/L		96
24) 2,2-Dichloropropane	5.238	77	710	0.20	ug/L		67
25) Bromochloromethane	5.323	49	220	0.11	ug/L	#	14
26) Chloroform	5.414	83	750	0.18	ug/L		84
27) Carbon Tetrachloride	0.000		0	N.D.			
28) Tetrahydrofuran	0.000		0	N.D.			
29) 1,1,1-Trichloroethane	5.621	97	641	0.16	ug/L		85
31) 1,1-Dichloropropene	5.743	75	560	0.17	ug/L	#	54
32) 2-Butanone (MEK)	5.743	43	2809	1.36	ug/L		89
33) Benzene	5.998	78	2055	0.20	ug/L		72
34) tert-Amyl methyl ether...	6.144	73	385	0.06	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.205	62	601	0.16	ug/L		81
36) iso-Butyl Alcohol	6.320	43	2421	10.60	ug/L		94
38) Trichloroethene (TCE)	6.612	130	325	0.13	ug/L	#	74
39) tert-Amyl ethyl ether ...	0.000		0	N.D.			
40) Dibromomethane	0.000		0	N.D.			
41) 1,2-Dichloropropane	7.166	63	360	0.15	ug/L	#	40
42) Bromodichloromethane	7.245	83	221	0.08	ug/L	#	26
44) c-1,3-Dichloropropene	7.945	75	507	0.14	ug/L	#	67
46) Toluene	8.225	91	2095	0.20	ug/L		89
47) Tetrachloroethene (PCE)	8.675	166	420	0.17	ug/L	#	77
48) 4-Methyl-2-Pentanone (...	8.675	43	699	0.23	ug/L	#	43

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 11:53:29 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

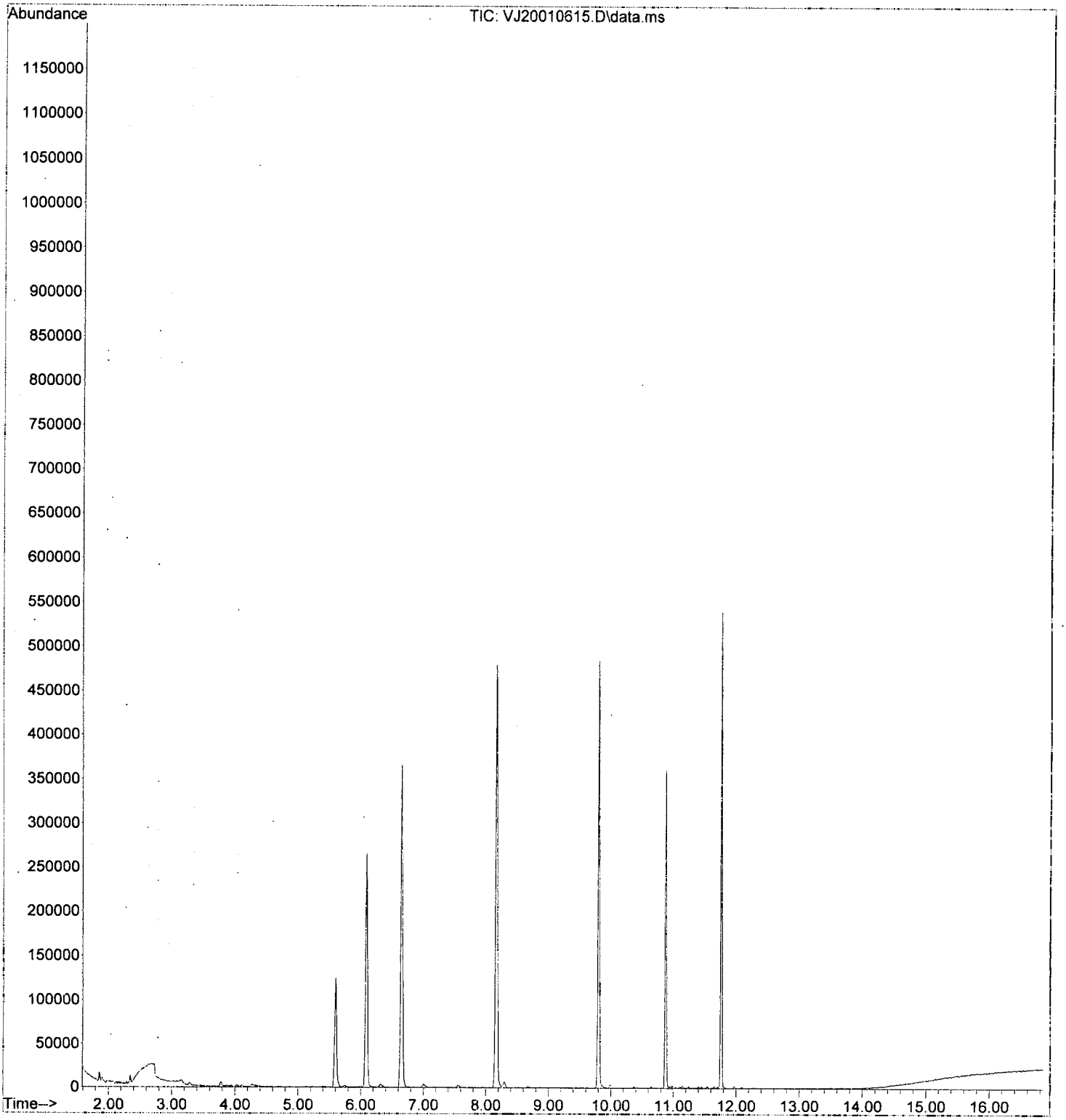
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	527	0.15	ug/L #	45
50) 1,1,2-Trichloroethane	8.869	97	230	0.11	ug/L #	63
51) Dibromochloromethane	9.058	129	61	0.03	ug/L #	17
52) 1,3-Dichloropropane	9.155	76	587	0.16	ug/L #	59
53) 1,2-Dibromoethane (EDB)	9.295	107	83	0.04	ug/L	79
54) 2-Hexanone	9.545	43	368	0.17	ug/L	79
55) Chlorobenzene	9.819	112	1202	0.19	ug/L	73
56) Ethylbenzene	9.855	91	1865	0.17	ug/L	93
57) 1,1,1,2-Tetrachloroethane	9.885	131	233	0.11	ug/L #	81
58) m,p-Xylenes (2)	9.989	91	2624	0.33	ug/L	98
59) o-Xylene	10.372	91	1119	0.15	ug/L	92
60) Styrene	10.421	104	584	0.11	ug/L	75
61) Bromoform	10.433	173	57	0.04	ug/L #	37
62) Isopropylbenzene	10.646	105	1389	0.15	ug/L	93
65) Bromobenzene	10.962	156	376	0.17	ug/L	88
66) n-Propylbenzene	10.993	91	1899	0.18	ug/L	83
67) 1,1,2,2-Tetrachloroethane	11.041	83	402	0.14	ug/L	94
68) 2-Chlorotoluene	11.114	126	227	0.11	ug/L #	74
69) 1,3,5-Trimethylbenzene	11.145	105	1117	0.14	ug/L	86
70) 1,2,3-Trichloropropane	11.151	110	60	0.06	ug/L #	7
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.		
72) 4-Chlorotoluene	11.248	91	877	0.14	ug/L	86
73) tert-Butylbenzene	11.400	91	702	0.17	ug/L #	73
74) 1,2,4-Trimethylbenzene	11.455	105	1050	0.13	ug/L	95
75) sec-Butylbenzene	11.540	105	1319	0.14	ug/L	87
76) 4-Isopropyltoluene	11.650	119	1120	0.15	ug/L	97
77) 1,3-Dichlorobenzene	11.704	146	734	0.17	ug/L	82
78) 1,4-Dichlorobenzene	11.771	146	971	0.23	ug/L #	64
79) n-Butylbenzene	11.972	91	1286	0.19	ug/L	93
80) 1,2-Dichlorobenzene	12.082	146	602	0.16	ug/L #	60
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
82) Hexachlorobutadiene	0.000		0	N.D.		
83) 1,2,4-Trichlorobenzene	13.237	180	366	0.16	ug/L	74
84) Naphthalene	13.511	128	1083	0.13	ug/L	79
85) 1,2,3-Trichlorobenzene	13.669	180	236	0.10	ug/L #	63

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 11:53:29 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

1/7/20

Quant Time: Jan 07 14:51:51 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	107259	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	272623	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	120513	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88521	52.48	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	317056	51.43	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	372287	48.44	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	95713	51.44	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	732	0.38	ug/L	#	51
3) Chloromethane	1.886	50	2494	0.87	ug/L		94
4) Vinyl Chloride	1.989	62	831	0.36	ug/L	#	46
5) Bromomethane	2.336	96	3494	2.87	ug/L		88
6) Chloroethane	0.000		0	N.D.	d		
7) Trichlorofluoromethane	2.579	101	277	0.35	ug/L	#	62
8) Ethanol	3.279	45	4984	76.61	ug/L		86
9) 1,1-Dichloroethene	3.133	61	1094	0.44	ug/L		82
10) Carbon Disulfide	3.145	76	2024	0.46	ug/L		83
11) Freon 113	3.194	101	716	0.37	ug/L		84
12) Iodomethane	3.279	142	505	1.28	ug/L	#	47
13) Methylene Chloride	3.772	84	3164	1.47	ug/L		96
14) Acetone	3.869	43	3011	2.38	ug/L		97
15) t-1,2-Dichloroethene	3.930	61	1275	0.41	ug/L		88
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.100	73	3201	0.41	ug/L		97
18) tert-Butanol (TBA)	4.270	59	13587	21.18	ug/L	#	89
19) Diisopropyl ether (DIPE)	4.495	45	678	0.09	ug/L		70
20) 1,1-Dichloroethane	4.575	63	1475	0.40	ug/L		89
21) Acrylonitrile	4.635	53	267	0.19	ug/L	#	14
22) Ethyl-tert-butyl ether...	0.000		0	N.D.	d		
23) c-1,2-Dichloroethene	5.122	61	1160	0.38	ug/L		94
24) 2,2-Dichloropropane	5.225	77	1342	0.39	ug/L		85
25) Bromochloromethane	5.323	49	685	0.37	ug/L		88
26) Chloroform	5.408	83	1637	0.41	ug/L		87
27) Carbon Tetrachloride	5.548	117	762	0.26	ug/L		89
28) Tetrahydrofuran	5.584	42	455	0.35	ug/L	#	72
29) 1,1,1-Trichloroethane	5.615	97	1303	0.34	ug/L		79
31) 1,1-Dichloropropene	5.737	75	1041	0.32	ug/L		93
32) 2-Butanone (MEK)	5.730	43	4185	2.11	ug/L		97
33) Benzene	5.998	78	3949	0.40	ug/L		98
34) tert-Amyl methyl ether...	0.000		0	N.D.	d		
35) 1,2-Dichloroethane (EDC)	6.199	62	1395	0.40	ug/L		93
36) iso-Butyl Alcohol	6.302	43	3703	16.89	ug/L		88
38) Trichloroethene (TCE)	6.613	130	861	0.36	ug/L	#	81
39) tert-Amyl ethyl ether ...	6.898	59	355	0.08	ug/L	#	32
40) Dibromomethane	7.051	93	440	0.31	ug/L		84
41) 1,2-Dichloropropane	7.166	63	812	0.35	ug/L		95
42) Bromodichloromethane	7.233	83	837	0.30	ug/L		76
44) c-1,3-Dichloropropene	7.939	75	1184	0.32	ug/L		98
46) Toluene	8.219	91	4056	0.38	ug/L		93
47) Tetrachloroethene (PCE)	8.663	166	769	0.29	ug/L		90
48) 4-Methyl-2-Pentanone (...	8.669	43	1816	0.57	ug/L		80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb; DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 14:51:51 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

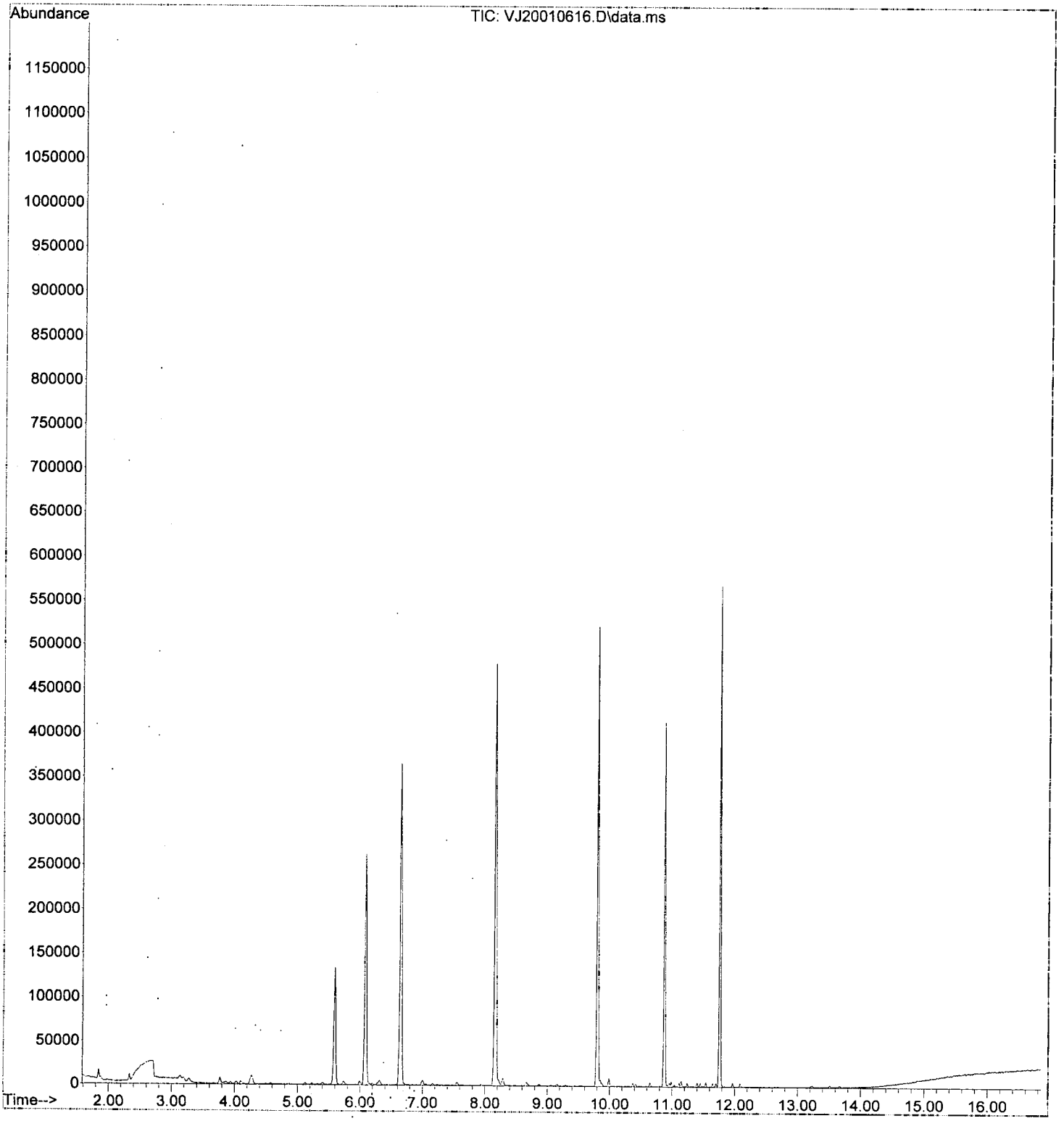
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	1069	0.30	ug/L		75
50) 1,1,2-Trichloroethane	8.863	97	835	0.37	ug/L		95
51) Dibromochloromethane	9.064	129	513	0.25	ug/L		94
52) 1,3-Dichloropropane	9.149	76	1360	0.35	ug/L		83
53) 1,2-Dibromoethane (EDB)	9.295	107	831	0.37	ug/L		97
54) 2-Hexanone	9.545	43	948	0.41	ug/L		84
55) Chlorobenzene	9.819	112	2570	0.40	ug/L		83
56) Ethylbenzene	9.849	91	4047	0.36	ug/L		90
57) 1,1,1,2-Tetrachloroethane	9.879	131	777	0.36	ug/L		98
58) m,p-Xylenes (2)	9.989	91	5235	0.62	ug/L		93
59) o-Xylene	10.366	91	2230	0.28	ug/L		91
60) Styrene	10.421	104	1339	0.24	ug/L		95
61) Bromoform	0.000		0	N.D.	d		
62) Isopropylbenzene	10.646	105	2678	0.27	ug/L		95
65) Bromobenzene	10.962	156	871	0.37	ug/L		83
66) n-Propylbenzene	10.987	91	3877	0.35	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.041	83	972	0.34	ug/L		93
68) 2-Chlorotoluene	11.114	126	612	0.29	ug/L		89
69) 1,3,5-Trimethylbenzene	11.145	105	2466	0.31	ug/L		87
70) 1,2,3-Trichloropropane	11.151	110	291	0.27	ug/L		87
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
72) 4-Chlorotoluene	11.242	91	2122	0.32	ug/L		91
73) tert-Butylbenzene	11.400	91	1366	0.32	ug/L	#	73
74) 1,2,4-Trimethylbenzene	11.455	105	2349	0.29	ug/L		94
75) sec-Butylbenzene	11.540	105	3028	0.32	ug/L		94
76) 4-Isopropyltoluene	11.650	119	2257	0.28	ug/L		91
77) 1,3-Dichlorobenzene	11.704	146	1584	0.36	ug/L		94
78) 1,4-Dichlorobenzene	11.771	146	1905	0.44	ug/L	#	80
79) n-Butylbenzene	11.966	91	2410	0.35	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	1511	0.38	ug/L		92
81) 1,2-Dibromo-3-Chloropr...	12.684	157	62	0.09	ug/L	#	19
82) Hexachlorobutadiene	13.207	223	179	0.28	ug/L	#	70
83) 1,2,4-Trichlorobenzene	13.238	180	777	0.32	ug/L		96
84) Naphthalene	13.505	128	2141	0.25	ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	740	0.29	ug/L		80

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 14:51:51 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 11:53:32 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S~~.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	107259	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	272623	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	120513	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88521	52.43	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	317056	51.43	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	372287	48.44	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	95713	51.44	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	732	0.38	ug/L	#	51
3) Chloromethane	1.886	50	2494	0.87	ug/L		94
4) Vinyl Chloride	1.989	62	831	0.36	ug/L	#	46
5) Bromomethane	2.336	96	3494	2.87	ug/L		88
6) Chloroethane	2.451	64	307	0.61	ug/L	#	50
7) Trichlorofluoromethane	2.579	101	277	0.35	ug/L	#	62
8) Ethanol	3.279	45	4984	76.61	ug/L		86
9) 1,1-Dichloroethene	3.133	61	1094	0.44	ug/L		82
10) Carbon Disulfide	3.145	76	2024	0.46	ug/L		83
11) Freon 113	3.194	101	716	0.37	ug/L		84
12) Iodomethane	3.279	142	505	1.28	ug/L	#	47
13) Methylene Chloride	3.772	84	3164	1.47	ug/L		96
14) Acetone	3.869	43	3011	2.38	ug/L		97
15) t-1,2-Dichloroethene	3.930	61	1275	0.41	ug/L		88
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.100	73	3201	0.41	ug/L		97
18) tert-Butanol (TBA)	4.270	59	13587	21.18	ug/L	#	89
19) Diisopropyl ether (DIPE)	4.495	45	678	0.09	ug/L		70
20) 1,1-Dichloroethane	4.575	63	1475	0.40	ug/L		89
21) Acrylonitrile	4.635	53	267	0.19	ug/L	#	14
22) Ethyl-tert-butyl ether...	4.873	59	472	0.06	ug/L	#	38
23) c-1,2-Dichloroethene	5.122	61	1160	0.38	ug/L		94
24) 2,2-Dichloropropane	5.225	77	1342	0.39	ug/L		85
25) Bromochloromethane	5.323	49	685	0.37	ug/L		88
26) Chloroform	5.408	83	1637	0.41	ug/L		87
27) Carbon Tetrachloride	5.548	117	762	0.26	ug/L		89
28) Tetrahydrofuran	5.584	42	455	0.35	ug/L	#	72
29) 1,1,1-Trichloroethane	5.615	97	1303	0.34	ug/L		79
31) 1,1-Dichloropropene	5.737	75	1041	0.32	ug/L		93
32) 2-Butanone (MEK)	5.730	43	4185	2.11	ug/L		97
33) Benzene	5.998	78	3949	0.40	ug/L		98
34) tert-Amyl methyl ether...	6.144	73	876	0.14	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.199	62	1395	0.40	ug/L		93
36) iso-Butyl Alcohol	6.302	43	3703	16.89	ug/L		88
38) Trichloroethene (TCE)	6.613	130	861	0.36	ug/L	#	81
39) tert-Amyl ethyl ether ...	6.898	59	355	0.08	ug/L	#	32
40) Dibromomethane	7.051	93	440	0.31	ug/L		84
41) 1,2-Dichloropropane	7.166	63	812	0.35	ug/L		95
42) Bromodichloromethane	7.233	83	837	0.30	ug/L		76
44) c-1,3-Dichloropropene	7.939	75	1184	0.32	ug/L		98
46) Toluene	8.219	91	4056	0.38	ug/L		93
47) Tetrachloroethene (PCE)	8.663	166	769	0.29	ug/L		90
48) 4-Methyl-2-Pentanone (...	8.669	43	1816	0.57	ug/L		80

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 11:53:32 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

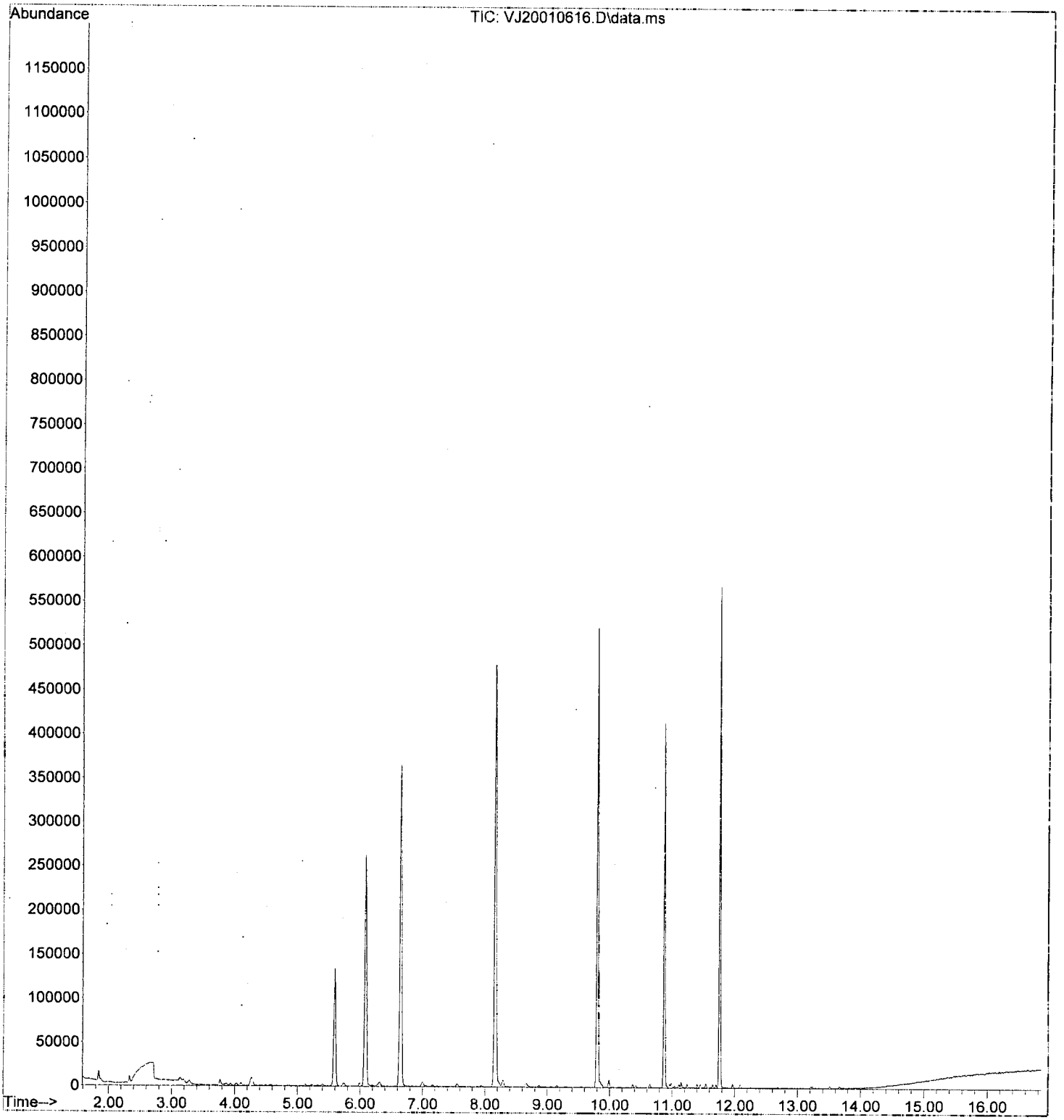
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	1069	0.30	ug/L		75
50) 1,1,2-Trichloroethane	8.863	97	835	0.37	ug/L		95
51) Dibromochloromethane	9.064	129	513	0.25	ug/L		94
52) 1,3-Dichloropropane	9.149	76	1360	0.35	ug/L		83
53) 1,2-Dibromoethane (EDB)	9.295	107	831	0.37	ug/L		97
54) 2-Hexanone	9.545	43	948	0.41	ug/L		84
55) Chlorobenzene	9.819	112	2570	0.40	ug/L		83
56) Ethylbenzene	9.849	91	4047	0.36	ug/L		90
57) 1,1,1,2-Tetrachloroethane	9.879	131	777	0.36	ug/L		98
58) m,p-Xylenes (2)	9.989	91	5235	0.62	ug/L		93
59) o-Xylene	10.366	91	2230	0.28	ug/L		91
60) Styrene	10.421	104	1339	0.24	ug/L		95
61) Bromoform	10.433	173	331	0.23	ug/L	#	37
62) Isopropylbenzene	10.646	105	2678	0.27	ug/L		95
65) Bromobenzene	10.962	156	871	0.37	ug/L		83
66) n-Propylbenzene	10.987	91	3877	0.35	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.041	83	972	0.34	ug/L		93
68) 2-Chlorotoluene	11.114	126	612	0.29	ug/L		89
69) 1,3,5-Trimethylbenzene	11.145	105	2466	0.31	ug/L		87
70) 1,2,3-Trichloropropane	11.151	110	291	0.27	ug/L		87
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
72) 4-Chlorotoluene	11.242	91	2122	0.32	ug/L		91
73) tert-Butylbenzene	11.400	91	1366	0.32	ug/L	#	73
74) 1,2,4-Trimethylbenzene	11.455	105	2349	0.29	ug/L		94
75) sec-Butylbenzene	11.540	105	3028	0.32	ug/L		94
76) 4-Isopropyltoluene	11.650	119	2257	0.28	ug/L		91
77) 1,3-Dichlorobenzene	11.704	146	1584	0.36	ug/L		94
78) 1,4-Dichlorobenzene	11.771	146	1905	0.44	ug/L	#	80
79) n-Butylbenzene	11.966	91	2410	0.35	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	1511	0.38	ug/L		92
81) 1,2-Dibromo-3-Chloropr...	12.684	157	62	0.09	ug/L	#	19
82) Hexachlorobutadiene	13.207	223	179	0.28	ug/L	#	70
83) 1,2,4-Trichlorobenzene	13.238	180	777	0.32	ug/L		96
84) Naphthalene	13.505	128	2141	0.25	ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	740	0.29	ug/L		80

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 11:53:32 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 14:52:52 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	104320	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	261444	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	114999	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	85866	52.34	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	303345	50.59	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	353415	47.96	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	91612	51.60	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	2002	1.08	ug/L		93
3) Chloromethane	1.885	50	4191	1.50	ug/L		95
4) Vinyl Chloride	1.989	62	2198	0.98	ug/L		90
5) Bromomethane	2.336	96	4342	3.67	ug/L		97
6) Chloroethane	0.000		0	N.D.	d		
7) Trichlorofluoromethane	2.591	101	841	1.08	ug/L		73
8) Ethanol	3.285	45	7706	121.79	ug/L		88
9) 1,1-Dichloroethene	3.133	61	2590	1.06	ug/L		91
10) Carbon Disulfide	3.145	76	4740	1.11	ug/L		93
11) Freon 113	3.187	101	1843	0.97	ug/L		95
12) Iodomethane	3.291	142	631	1.64	ug/L		74
13) Methylene Chloride	3.771	84	4182	2.00	ug/L		93
14) Acetone	3.863	43	4711	3.82	ug/L		85
15) t-1,2-Dichloroethene	3.942	61	3238	1.06	ug/L		96
16) n-Hexane	4.033	86	401	0.81	ug/L	#	70
17) Methyl-tert-butyl-ether	4.100	73	7733	1.02	ug/L		98
18) tert-Butanol (TBA)	4.270	59	34787	55.75	ug/L	#	100
19) Diisopropyl ether (DIPE)	4.495	45	1629	0.23	ug/L		96
20) 1,1-Dichloroethane	4.568	63	3757	1.05	ug/L		93
21) Acrylonitrile	4.629	53	1215	0.87	ug/L		76
22) Ethyl-tert-butyl ether...	4.872	59	1510	0.21	ug/L		98
23) c-1,2-Dichloroethene	5.122	61	2879	0.96	ug/L		86
24) 2,2-Dichloropropane	5.231	77	3369	1.02	ug/L		91
25) Bromochloromethane	5.323	49	1832	1.02	ug/L		88
26) Chloroform	5.408	83	4167	1.06	ug/L		96
27) Carbon Tetrachloride	5.548	117	2362	0.83	ug/L		90
28) Tetrahydrofuran	5.590	42	1286	1.00	ug/L		76
29) 1,1,1-Trichloroethane	5.609	97	3658	0.98	ug/L		97
31) 1,1-Dichloropropene	5.742	75	2751	0.88	ug/L		89
32) 2-Butanone (MEK)	5.736	43	6120	3.17	ug/L		87
33) Benzene	5.992	78	9450	0.98	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	1634	0.27	ug/L		91
35) 1,2-Dichloroethane (EDC)	6.205	62	3535	1.03	ug/L		89
36) iso-Butyl Alcohol	6.296	43	6310	29.60	ug/L		90
38) Trichloroethene (TCE)	6.618	130	2393	1.03	ug/L		88
39) tert-Amyl ethyl ether ...	6.904	59	996	0.23	ug/L		81
40) Dibromomethane	7.050	93	1401	1.02	ug/L		84
41) 1,2-Dichloropropane	7.166	63	2329	1.04	ug/L		98
42) Bromodichloromethane	7.239	83	2358	0.86	ug/L		94
44) c-1,3-Dichloropropene	7.939	75	2826	0.80	ug/L		95
46) Toluene	8.218	91	10340	1.00	ug/L		93
47) Tetrachloroethene (PCE)	8.669	166	2425	0.97	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.656	43	4709	1.54	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 14:52:52 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

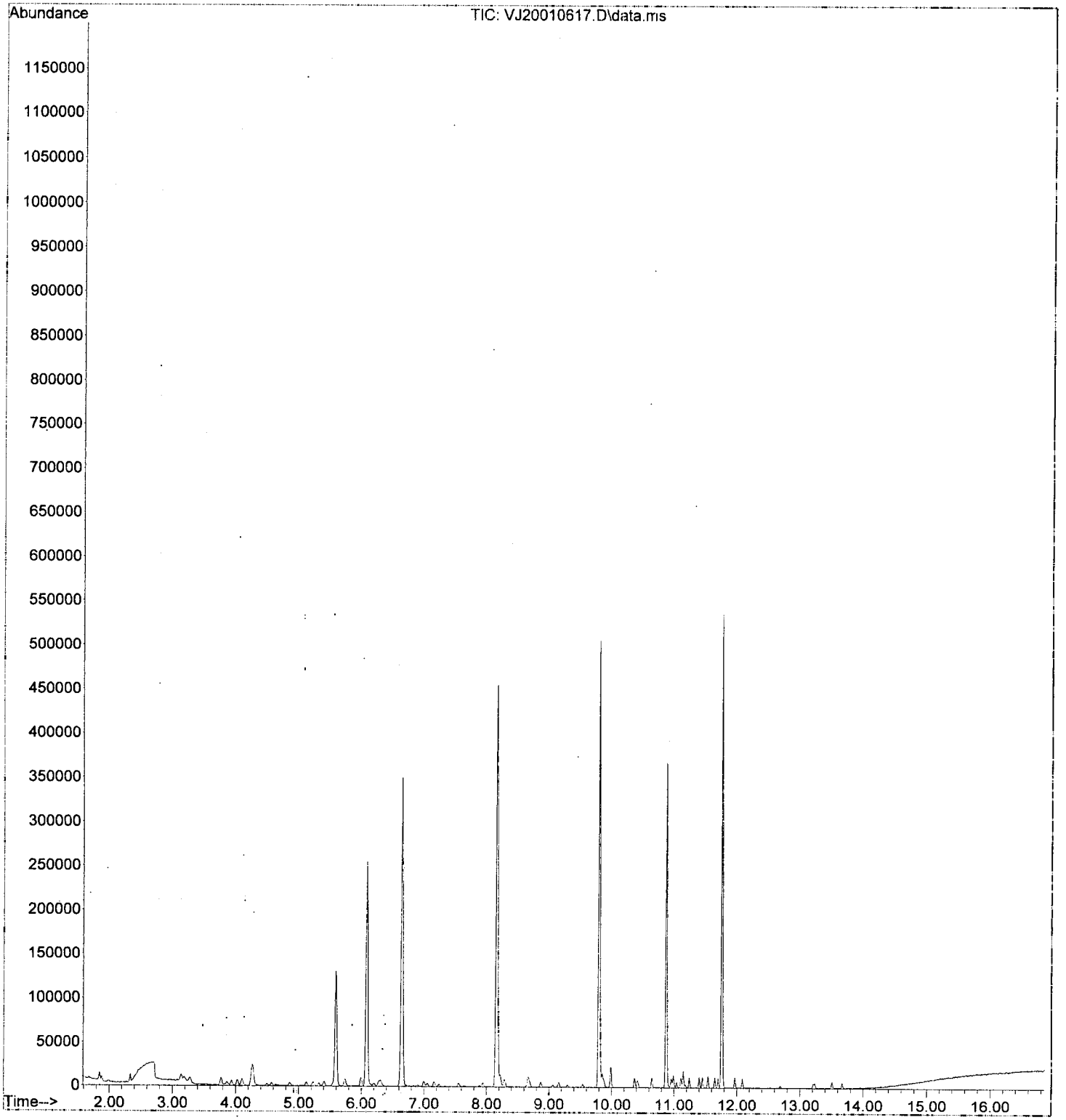
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	2806	0.81	ug/L		88
50) 1,1,2-Trichloroethane	8.863	97	2116	0.99	ug/L		91
51) Dibromochloromethane	9.052	129	1661	0.85	ug/L		82
52) 1,3-Dichloropropane	9.155	76	3556	0.95	ug/L		98
53) 1,2-Dibromoethane (EDB)	9.295	107	1817	0.85	ug/L		92
54) 2-Hexanone	9.539	43	2805	1.27	ug/L		92
55) Chlorobenzene	9.818	112	6584	1.06	ug/L		97
56) Ethylbenzene	9.849	91	9882	0.91	ug/L		93
57) 1,1,1,2-Tetrachloroethane	9.879	131	2058	0.98	ug/L		98
58) m,p-Xylenes (2)	9.989	91	12904	1.61	ug/L		97
59) o-Xylene	10.366	91	5891	0.78	ug/L		92
60) Styrene	10.415	104	3632	0.68	ug/L		96
61) Bromoform	10.433	173	1194	0.85	ug/L		84
62) Isopropylbenzene	10.646	105	6863	0.72	ug/L		99
65) Bromobenzene	10.956	156	2415	1.08	ug/L	#	83
66) n-Propylbenzene	10.986	91	10018	0.94	ug/L		91
67) 1,1,2,2-Tetrachloroethane	11.041	83	2649	0.97	ug/L		99
68) 2-Chlorotoluene	11.114	126	1802	0.88	ug/L		98
69) 1,3,5-Trimethylbenzene	11.151	105	6230	0.81	ug/L		94
70) 1,2,3-Trichloropropane	11.151	110	1090	1.08	ug/L	#	44
71) t-1,4-Dichloro-2-butene	11.181	88	226	0.54	ug/L	#	89
72) 4-Chlorotoluene	11.242	91	5536	0.88	ug/L		94
73) tert-Butylbenzene	11.400	91	3477	0.85	ug/L		90
74) 1,2,4-Trimethylbenzene	11.455	105	6016	0.78	ug/L		94
75) sec-Butylbenzene	11.540	105	7491	0.82	ug/L		96
76) 4-Isopropyltoluene	11.650	119	5556	0.73	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	3963	0.95	ug/L		91
78) 1,4-Dichlorobenzene	11.771	146	4395	1.07	ug/L		84
79) n-Butylbenzene	11.972	91	5772	0.88	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	3619	0.95	ug/L		95
81) 1,2-Dibromo-3-Chloropr...	12.690	157	499	0.73	ug/L	#	71
82) Hexachlorobutadiene	13.213	223	511	0.84	ug/L		86
83) 1,2,4-Trichlorobenzene	13.237	180	1974	0.85	ug/L		82
84) Naphthalene	13.511	128	5528	0.68	ug/L		99
85) 1,2,3-Trichlorobenzene	13.669	180	1898	0.78	ug/L		87

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 14:52:52 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 11:53:35 2020
Quant Method : C:\msdchem\1\methods\~~VJ200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	104320	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	261444	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	114999	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	85866	52.34	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	303345	50.59	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	353415	47.96	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	91612	51.60	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	2002	1.08	ug/L		93
3) Chloromethane	1.885	50	4191	1.50	ug/L		95
4) Vinyl Chloride	1.989	62	2198	0.98	ug/L		90
5) Bromomethane	2.336	96	4342	3.67	ug/L		97
6) Chloroethane	2.457	64	750	1.53	ug/L	#	32
7) Trichlorofluoromethane	2.591	101	841	1.08	ug/L		73
8) Ethanol	3.285	45	7706	121.79	ug/L		88
9) 1,1-Dichloroethene	3.133	61	2590	1.06	ug/L		91
10) Carbon Disulfide	3.145	76	4740	1.11	ug/L		93
11) Freon 113	3.187	101	1843	0.97	ug/L		95
12) Iodomethane	3.291	142	631	1.64	ug/L		74
13) Methylene Chloride	3.771	84	4182	2.00	ug/L		93
14) Acetone	3.863	43	4711	3.82	ug/L		85
15) t-1,2-Dichloroethene	3.942	61	3238	1.06	ug/L		96
16) n-Hexane	4.033	86	401	0.81	ug/L	#	70
17) Methyl-tert-butyl-ether	4.100	73	7733	1.02	ug/L		98
18) tert-Butanol (TBA)	4.270	59	34787	55.75	ug/L	#	100
19) Diisopropyl ether (DIPE)	4.495	45	1629	0.23	ug/L		96
20) 1,1-Dichloroethane	4.568	63	3757	1.05	ug/L		93
21) Acrylonitrile	4.629	53	1215	0.87	ug/L		76
22) Ethyl-tert-butyl ether...	4.872	59	1510	0.21	ug/L		98
23) c-1,2-Dichloroethene	5.122	61	2879	0.96	ug/L		86
24) 2,2-Dichloropropane	5.231	77	3369	1.02	ug/L		91
25) Bromochloromethane	5.323	49	1832	1.02	ug/L		88
26) Chloroform	5.408	83	4167	1.06	ug/L		96
27) Carbon Tetrachloride	5.548	117	2362	0.83	ug/L		90
28) Tetrahydrofuran	5.590	42	1286	1.00	ug/L		76
29) 1,1,1-Trichloroethane	5.609	97	3658	0.98	ug/L		97
31) 1,1-Dichloropropene	5.742	75	2751	0.88	ug/L		89
32) 2-Butanone (MEK)	5.736	43	6120	3.17	ug/L		87
33) Benzene	5.992	78	9450	0.98	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	1634	0.27	ug/L		91
35) 1,2-Dichloroethane (EDC)	6.205	62	3535	1.03	ug/L		89
36) iso-Butyl Alcohol	6.296	43	6310	29.60	ug/L		90
38) Trichloroethene (TCE)	6.618	130	2393	1.03	ug/L		88
39) tert-Amyl ethyl ether ...	6.904	59	996	0.23	ug/L		81
40) Dibromomethane	7.050	93	1401	1.02	ug/L		84
41) 1,2-Dichloropropane	7.166	63	2329	1.04	ug/L		98
42) Bromodichloromethane	7.239	83	2358	0.86	ug/L		94
44) c-1,3-Dichloropropene	7.939	75	2826	0.80	ug/L		95
46) Toluene	8.218	91	10340	1.00	ug/L		93
47) Tetrachloroethene (PCE)	8.669	166	2425	0.97	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.656	43	4709	1.54	ug/L		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 11:53:35 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

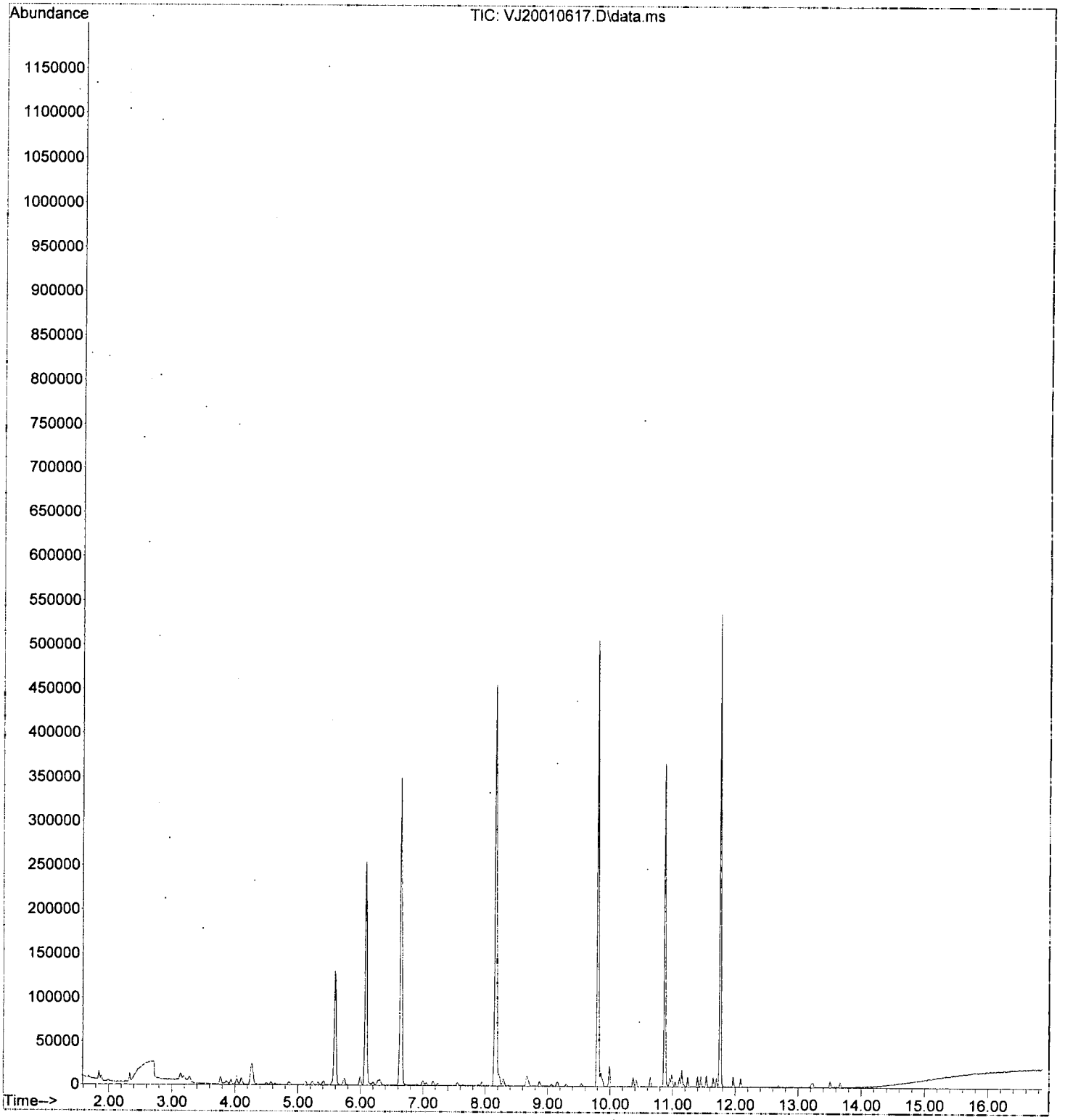
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	2806	0.81	ug/L		88
50) 1,1,2-Trichloroethane	8.863	97	2116	0.99	ug/L		91
51) Dibromochloromethane	9.052	129	1661	0.85	ug/L		82
52) 1,3-Dichloropropane	9.155	76	3556	0.95	ug/L		98
53) 1,2-Dibromoethane (EDB)	9.295	107	1817	0.85	ug/L		92
54) 2-Hexanone	9.539	43	2805	1.27	ug/L		92
55) Chlorobenzene	9.818	112	6584	1.06	ug/L		97
56) Ethylbenzene	9.849	91	9882	0.91	ug/L		93
57) 1,1,1,2-Tetrachloroethane	9.879	131	2058	0.98	ug/L		98
58) m,p-Xylenes (2)	9.989	91	12904	1.61	ug/L		97
59) o-Xylene	10.366	91	5891	0.78	ug/L		92
60) Styrene	10.415	104	3632	0.68	ug/L		96
61) Bromoform	10.433	173	1194	0.85	ug/L		84
62) Isopropylbenzene	10.646	105	6863	0.72	ug/L		99
65) Bromobenzene	10.956	156	2415	1.08	ug/L	#	83
66) n-Propylbenzene	10.986	91	10018	0.94	ug/L		91
67) 1,1,2,2-Tetrachloroethane	11.041	83	2649	0.97	ug/L		99
68) 2-Chlorotoluene	11.114	126	1802	0.88	ug/L		98
69) 1,3,5-Trimethylbenzene	11.151	105	6230	0.81	ug/L		94
70) 1,2,3-Trichloropropane	11.151	110	1090	1.08	ug/L	#	44
71) t-1,4-Dichloro-2-butene	11.181	88	226	0.54	ug/L	#	89
72) 4-Chlorotoluene	11.242	91	5536	0.88	ug/L		94
73) tert-Butylbenzene	11.400	91	3477	0.85	ug/L		90
74) 1,2,4-Trimethylbenzene	11.455	105	6016	0.78	ug/L		94
75) sec-Butylbenzene	11.540	105	7491	0.82	ug/L		96
76) 4-Isopropyltoluene	11.650	119	5556	0.73	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	3963	0.95	ug/L		91
78) 1,4-Dichlorobenzene	11.771	146	4395	1.07	ug/L		84
79) n-Butylbenzene	11.972	91	5772	0.88	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	3619	0.95	ug/L		95
81) 1,2-Dibromo-3-Chloropr...	12.690	157	499	0.73	ug/L	#	71
82) Hexachlorobutadiene	13.213	223	511	0.84	ug/L		86
83) 1,2,4-Trichlorobenzene	13.237	180	1974	0.85	ug/L		82
84) Naphthalene	13.511	128	5528	0.68	ug/L		99
85) 1,2,3-Trichlorobenzene	13.669	180	1898	0.78	ug/L		87

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 11:53:35 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	107612	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	270452	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	120966	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88362	52.22	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	312825	50.57	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366801	48.11	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	95258	51.00	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	3864	2.02	ug/L		94
3) Chloromethane	1.892	50	6640	2.31	ug/L		94
4) Vinyl Chloride	1.995	62	4540	1.97	ug/L		96
5) Bromomethane	2.336	96	5274	4.32	ug/L		96
6) Chloroethane	2.463	64	1133	2.24	ug/L	#	36
7) Trichlorofluoromethane	2.585	101	1611	2.01	ug/L		93
8) Ethanol	3.273	45	11257	172.47	ug/L		89
9) 1,1-Dichloroethene	3.139	61	5315	2.11	ug/L		95
10) Carbon Disulfide	3.151	76	9078	2.06	ug/L		97
11) Freon 113	3.193	101	3954	2.02	ug/L		95
12) Iodomethane	3.291	142	879	2.22	ug/L		84
13) Methylene Chloride	3.777	84	6338	2.94	ug/L		96
14) Acetone	3.869	43	7670	6.03	ug/L		99
15) t-1,2-Dichloroethene	3.942	61	6284	2.00	ug/L		89
16) n-Hexane	4.039	86	894	1.76	ug/L	#	87
17) Methyl-tert-butyl-ether	4.106	73	14619	1.87	ug/L		98
18) tert-Butanol (TBA)	4.264	59	71300	110.77	ug/L	#	99
19) Diisopropyl ether (DIPE)	4.501	45	3346	0.45	ug/L		88
20) 1,1-Dichloroethane	4.574	63	7524	2.04	ug/L		98
21) Acrylonitrile	4.629	53	2393	1.67	ug/L		96
22) Ethyl-tert-butyl ether...	4.866	59	3087	0.42	ug/L		90
23) c-1,2-Dichloroethene	5.122	61	5912	1.91	ug/L		93
24) 2,2-Dichloropropane	5.237	77	6612	1.94	ug/L		89
25) Bromochloromethane	5.323	49	3877	2.09	ug/L		95
26) Chloroform	5.408	83	8134	2.01	ug/L		95
27) Carbon Tetrachloride	5.542	117	5361	1.82	ug/L		93
28) Tetrahydrofuran	5.590	42	2587	1.96	ug/L		84
29) 1,1,1-Trichloroethane	5.615	97	7608	1.97	ug/L		90
31) 1,1-Dichloropropene	5.749	75	5753	1.79	ug/L		92
32) 2-Butanone (MEK)	5.730	43	10497	5.27	ug/L		91
33) Benzene	5.998	78	19123	1.93	ug/L		98
34) tert-Amyl methyl ether...	6.150	73	3505	0.57	ug/L		94
35) 1,2-Dichloroethane (EDC)	6.205	62	7281	2.06	ug/L		98
36) iso-Butyl Alcohol	6.278	43	10497	47.73	ug/L		79
38) Trichloroethene (TCE)	6.618	130	4651	1.94	ug/L		91
39) tert-Amyl ethyl ether ...	6.898	59	2192	0.48	ug/L		93
40) Dibromomethane	7.056	93	2722	1.92	ug/L	#	81
41) 1,2-Dichloropropane	7.166	63	4450	1.93	ug/L		81
42) Bromodichloromethane	7.239	83	5147	1.82	ug/L		90
44) c-1,3-Dichloropropene	7.945	75	5846	1.60	ug/L		88
46) Toluene	8.218	91	20173	1.89	ug/L		99
47) Tetrachloroethene (PCE)	8.675	166	4547	1.76	ug/L		96
48) 4-Methyl-2-Pentanone (...	8.663	43	9202	2.91	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

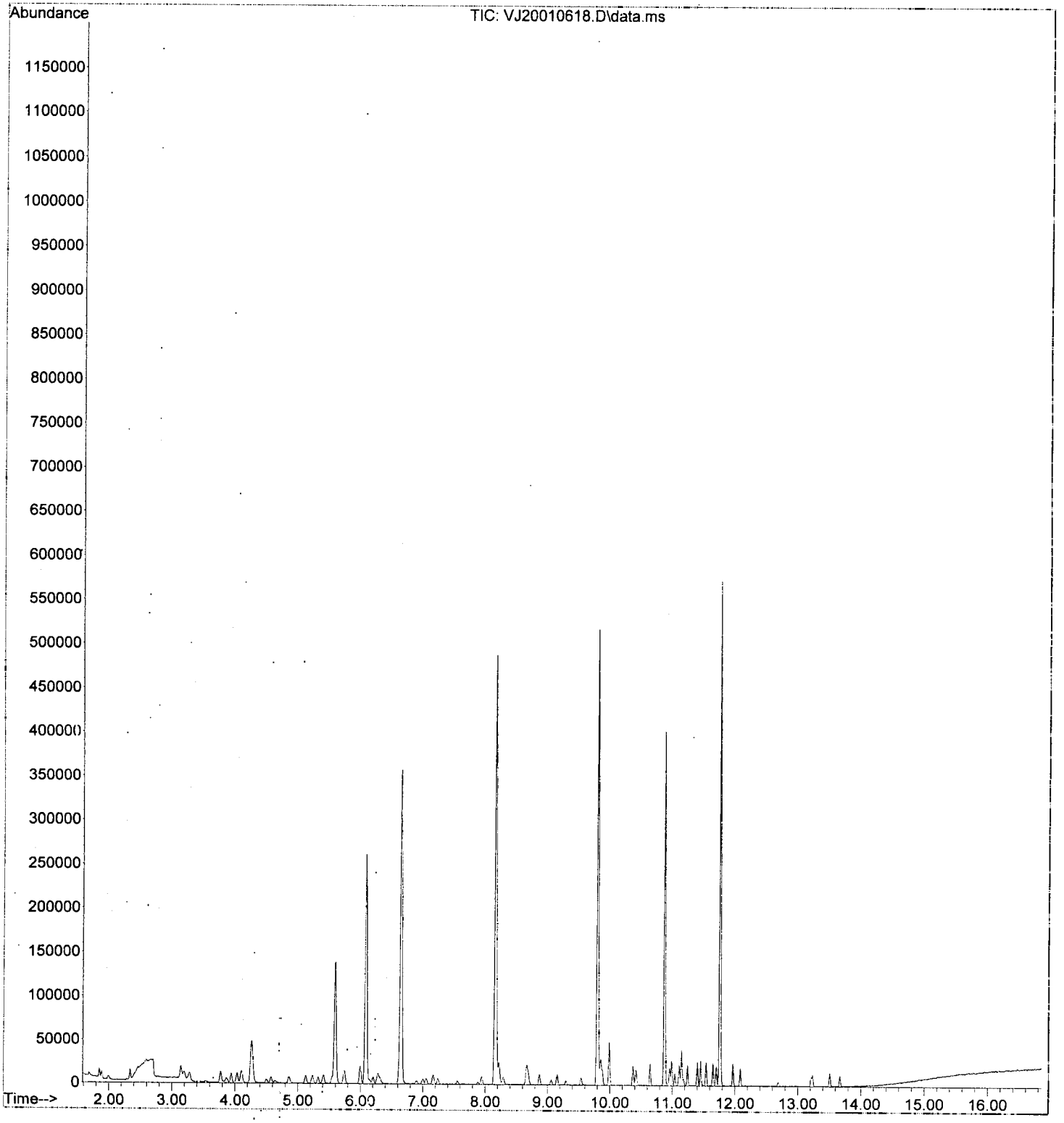
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	5629	1.58	ug/L		96
50) 1,1,2-Trichloroethane	8.869	97	4369	1.97	ug/L		92
51) Dibromochloromethane	9.058	129	3651	1.80	ug/L		99
52) 1,3-Dichloropropane	9.155	76	7539	1.95	ug/L		94
53) 1,2-Dibromoethane (EDB)	9.295	107	4035	1.81	ug/L		81
54) 2-Hexanone	9.539	43	5771	2.53	ug/L		95
55) Chlorobenzene	9.812	112	12552	1.95	ug/L		91
56) Ethylbenzene	9.849	91	19761	1.76	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	3933	1.81	ug/L		87
58) m,p-Xylenes (2)	9.989	91	26834	3.23	ug/L		95
59) o-Xylene	10.372	91	12494	1.60	ug/L		99
60) Styrene	10.415	104	7538	1.36	ug/L		96
61) Bromoform	10.433	173	2340	1.61	ug/L		88
62) Isopropylbenzene	10.646	105	14392	1.46	ug/L		95
65) Bromobenzene	10.956	156	4846	2.06	ug/L		88
66) n-Propylbenzene	10.993	91	19804	1.76	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	5532	1.92	ug/L		94
68) 2-Chlorotoluene	11.114	126	3844	1.79	ug/L		93
69) 1,3,5-Trimethylbenzene	11.151	105	12985	1.60	ug/L		91
70) 1,2,3-Trichloropropane	11.145	110	2114	1.98	ug/L	#	67
71) t-1,4-Dichloro-2-butene	11.175	88	619	1.42	ug/L	#	76
72) 4-Chlorotoluene	11.242	91	12109	1.82	ug/L		90
73) tert-Butylbenzene	11.400	91	7227	1.68	ug/L		92
74) 1,2,4-Trimethylbenzene	11.455	105	12691	1.56	ug/L		96
75) sec-Butylbenzene	11.540	105	15694	1.63	ug/L		96
76) 4-Isopropyltoluene	11.650	119	12340	1.54	ug/L		95
77) 1,3-Dichlorobenzene	11.704	146	8234	1.88	ug/L		97
78) 1,4-Dichlorobenzene	11.771	146	8741	2.02	ug/L		94
79) n-Butylbenzene	11.966	91	12089	1.75	ug/L		91
80) 1,2-Dichlorobenzene	12.088	146	7435	1.85	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	1165	1.63	ug/L		68
82) Hexachlorobutadiene	13.213	223	1281	1.99	ug/L		91
83) 1,2,4-Trichlorobenzene	13.237	180	3943	1.62	ug/L		96
84) Naphthalene	13.511	128	11317	1.33	ug/L		96
85) 1,2,3-Trichlorobenzene	13.669	180	4030	1.57	ug/L		95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	107612	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	270452	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	120966	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88362	52.22	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	312825	50.57	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366801	48.11	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	95258	51.00	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	3864	2.02	ug/L		94
3) Chloromethane	1.892	50	6640	2.31	ug/L		94
4) Vinyl Chloride	1.995	62	4540	1.97	ug/L		96
5) Bromomethane	2.336	96	5274	4.32	ug/L		96
6) Chloroethane	2.463	64	1133	2.24	ug/L	#	36
7) Trichlorofluoromethane	2.585	101	1611	2.01	ug/L		93
8) Ethanol	3.273	45	11257	172.47	ug/L		89
9) 1,1-Dichloroethene	3.139	61	5315	2.11	ug/L		95
10) Carbon Disulfide	3.151	76	9078	2.06	ug/L		97
11) Freon 113	3.193	101	3954	2.02	ug/L		95
12) Iodomethane	3.291	142	879	2.22	ug/L		84
13) Methylene Chloride	3.777	84	6338	2.94	ug/L		96
14) Acetone	3.869	43	7670	6.03	ug/L		99
15) t-1,2-Dichloroethene	3.942	61	6284	2.00	ug/L		89
16) n-Hexane	4.039	86	894	1.76	ug/L	#	87
17) Methyl-tert-butyl-ether	4.106	73	14619	1.87	ug/L		98
18) tert-Butanol (TBA)	4.264	59	71300	110.77	ug/L	#	99
19) Diisopropyl ether (DIPE)	4.501	45	3346	0.45	ug/L		88
20) 1,1-Dichloroethane	4.574	63	7524	2.04	ug/L		98
21) Acrylonitrile	4.629	53	2393	1.67	ug/L		96
22) Ethyl-tert-butyl ether...	4.866	59	3087	0.42	ug/L		90
23) c-1,2-Dichloroethene	5.122	61	5912	1.91	ug/L		93
24) 2,2-Dichloropropane	5.237	77	6612	1.94	ug/L		89
25) Bromochloromethane	5.323	49	3877	2.09	ug/L		95
26) Chloroform	5.408	83	8134	2.01	ug/L		95
27) Carbon Tetrachloride	5.542	117	5361	1.82	ug/L		93
28) Tetrahydrofuran	5.590	42	2587	1.96	ug/L		84
29) 1,1,1-Trichloroethane	5.615	97	7608	1.97	ug/L		90
31) 1,1-Dichloropropene	5.749	75	5753	1.79	ug/L		92
32) 2-Butanone (MEK)	5.730	43	10497	5.27	ug/L		91
33) Benzene	5.998	78	19123	1.93	ug/L		98
34) tert-Amyl methyl ether...	6.150	73	3505	0.57	ug/L		94
35) 1,2-Dichloroethane (EDC)	6.205	62	7281	2.06	ug/L		98
36) iso-Butyl Alcohol	6.278	43	10497	47.73	ug/L		79
38) Trichloroethene (TCE)	6.618	130	4651	1.94	ug/L		91
39) tert-Amyl ethyl ether ...	6.898	59	2192	0.48	ug/L		93
40) Dibromomethane	7.056	93	2722	1.92	ug/L	#	81
41) 1,2-Dichloropropane	7.166	63	4450	1.93	ug/L		81
42) Bromodichloromethane	7.239	83	5147	1.82	ug/L		90
44) c-1,3-Dichloropropene	7.945	75	5846	1.60	ug/L		88
46) Toluene	8.218	91	20173	1.89	ug/L		99
47) Tetrachloroethene (PCE)	8.675	166	4547	1.76	ug/L		96
48) 4-Methyl-2-Pentanone (...	8.663	43	9202	2.91	ug/L		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

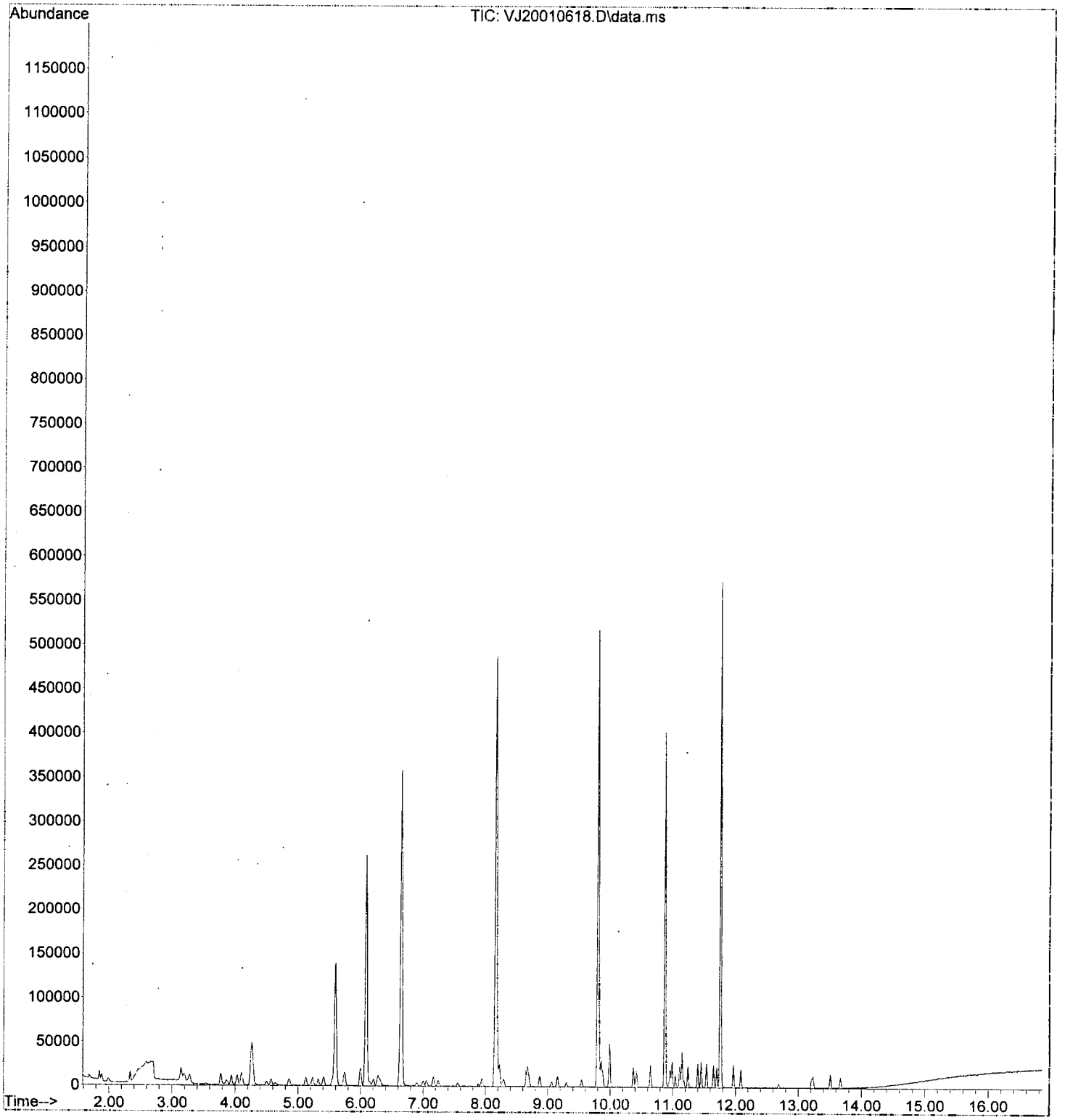
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	5629	1.58	ug/L		96
50) 1,1,2-Trichloroethane	8.869	97	4369	1.97	ug/L		92
51) Dibromochloromethane	9.058	129	3651	1.80	ug/L		99
52) 1,3-Dichloropropane	9.155	76	7539	1.95	ug/L		94
53) 1,2-Dibromoethane (EDB)	9.295	107	4035	1.81	ug/L		81
54) 2-Hexanone	9.539	43	5771	2.53	ug/L		95
55) Chlorobenzene	9.812	112	12552	1.95	ug/L		91
56) Ethylbenzene	9.849	91	19761	1.76	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	3933	1.81	ug/L		87
58) m,p-Xylenes (2)	9.989	91	26834	3.23	ug/L		95
59) o-Xylene	10.372	91	12494	1.60	ug/L		99
60) Styrene	10.415	104	7538	1.36	ug/L		96
61) Bromoform	10.433	173	2340	1.51	ug/L		88
62) Isopropylbenzene	10.646	105	14392	1.46	ug/L		95
65) Bromobenzene	10.956	156	4846	2.06	ug/L		88
66) n-Propylbenzene	10.993	91	19804	1.76	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	5532	1.92	ug/L		94
68) 2-Chlorotoluene	11.114	126	3844	1.79	ug/L		93
69) 1,3,5-Trimethylbenzene	11.151	105	12985	1.60	ug/L		91
70) 1,2,3-Trichloropropane	11.145	110	2114	1.98	ug/L	#	67
71) t-1,4-Dichloro-2-butene	11.175	88	619	1.42	ug/L	#	76
72) 4-Chlorotoluene	11.242	91	12109	1.82	ug/L		90
73) tert-Butylbenzene	11.400	91	7227	1.68	ug/L		92
74) 1,2,4-Trimethylbenzene	11.455	105	12691	1.56	ug/L		96
75) sec-Butylbenzene	11.540	105	15694	1.63	ug/L		96
76) 4-Isopropyltoluene	11.650	119	12340	1.54	ug/L		95
77) 1,3-Dichlorobenzene	11.704	146	8234	1.88	ug/L		97
78) 1,4-Dichlorobenzene	11.771	146	8741	2.02	ug/L		94
79) n-Butylbenzene	11.966	91	12089	1.75	ug/L		91
80) 1,2-Dichlorobenzene	12.088	146	7435	1.85	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	1165	1.63	ug/L		68
82) Hexachlorobutadiene	13.213	223	1281	1.99	ug/L		91
83) 1,2,4-Trichlorobenzene	13.237	180	3943	1.62	ug/L		96
84) Naphthalene	13.511	128	11317	1.33	ug/L		96
85) 1,2,3-Trichlorobenzene	13.669	180	4030	1.57	ug/L		95

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	109312	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	270091	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	122018	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	89267	51.93	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	319667	50.88	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	371403	48.78	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	95713	50.80	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	9676	4.99	ug/L		95
3) Chloromethane	1.886	50	15325	5.25	ug/L		97
4) Vinyl Chloride	1.989	62	11467	4.90	ug/L		99
5) Bromomethane	2.336	96	9353	7.53	ug/L		98
6) Chloroethane	2.457	64	2663	5.18	ug/L		79
7) Trichlorofluoromethane	2.585	101	4190	5.15	ug/L		94
8) Ethanol	3.285	45	25232	380.57	ug/L		87
9) 1,1-Dichloroethene	3.133	61	12989	5.08	ug/L		98
10) Carbon Disulfide	3.145	76	22304	4.98	ug/L		98
11) Freon 113	3.187	101	9807	4.92	ug/L		97
12) Iodomethane	3.285	142	1801	4.48	ug/L		68
13) Methylene Chloride	3.771	84	12754	5.83	ug/L		97
14) Acetone	3.863	43	16091	12.46	ug/L		96
15) t-1,2-Dichloroethene	3.936	61	15967	4.99	ug/L		97
16) n-Hexane	4.027	86	2157	4.18	ug/L	#	81
17) Methyl-tert-butyl-ether	4.100	73	37490	4.72	ug/L		99
18) tert-Butanol (TBA)	4.270	59	191781	293.31	ug/L	#	94
19) Diisopropyl ether (DIPE)	4.501	45	8433	1.12	ug/L		98
20) 1,1-Dichloroethane	4.568	63	18804	5.01	ug/L		97
21) Acrylonitrile	4.629	53	6774	4.65	ug/L		97
22) Ethyl-tert-butyl ether...	4.867	59	8258	1.11	ug/L		93
23) c-1,2-Dichloroethene	5.122	61	15089	4.81	ug/L		96
24) 2,2-Dichloropropane	5.231	77	16923	4.88	ug/L		93
25) Bromochloromethane	5.323	49	9397	4.98	ug/L		90
26) Chloroform	5.408	83	20786	5.05	ug/L		95
27) Carbon Tetrachloride	5.542	117	13736	4.60	ug/L		97
28) Tetrahydrofuran	5.584	42	6459	4.81	ug/L		91
29) 1,1,1-Trichloroethane	5.615	97	19285	4.92	ug/L		98
31) 1,1-Dichloropropene	5.743	75	14954	4.57	ug/L		97
32) 2-Butanone (MEK)	5.730	43	21516	10.64	ug/L		95
33) Benzene	5.992	78	49577	4.93	ug/L		98
34) tert-Amyl methyl ether...	6.138	73	7869	1.25	ug/L		93
35) 1,2-Dichloroethane (EDC)	6.199	62	18324	5.11	ug/L		96
36) iso-Butyl Alcohol	6.278	43	25660	114.87	ug/L		88
38) Trichloroethene (TCE)	6.619	130	11743	4.83	ug/L		95
39) tert-Amyl ethyl ether ...	6.898	59	5290	1.15	ug/L		96
40) Dibromomethane	7.057	93	7254	5.04	ug/L		86
41) 1,2-Dichloropropane	7.166	63	11716	5.00	ug/L		88
42) Bromodichloromethane	7.245	83	13785	4.80	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	15807	4.34	ug/L		98
46) Toluene	8.219	91	50497	4.75	ug/L		95
47) Tetrachloroethene (PCE)	8.669	166	12115	4.68	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.663	43	25616	8.12	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

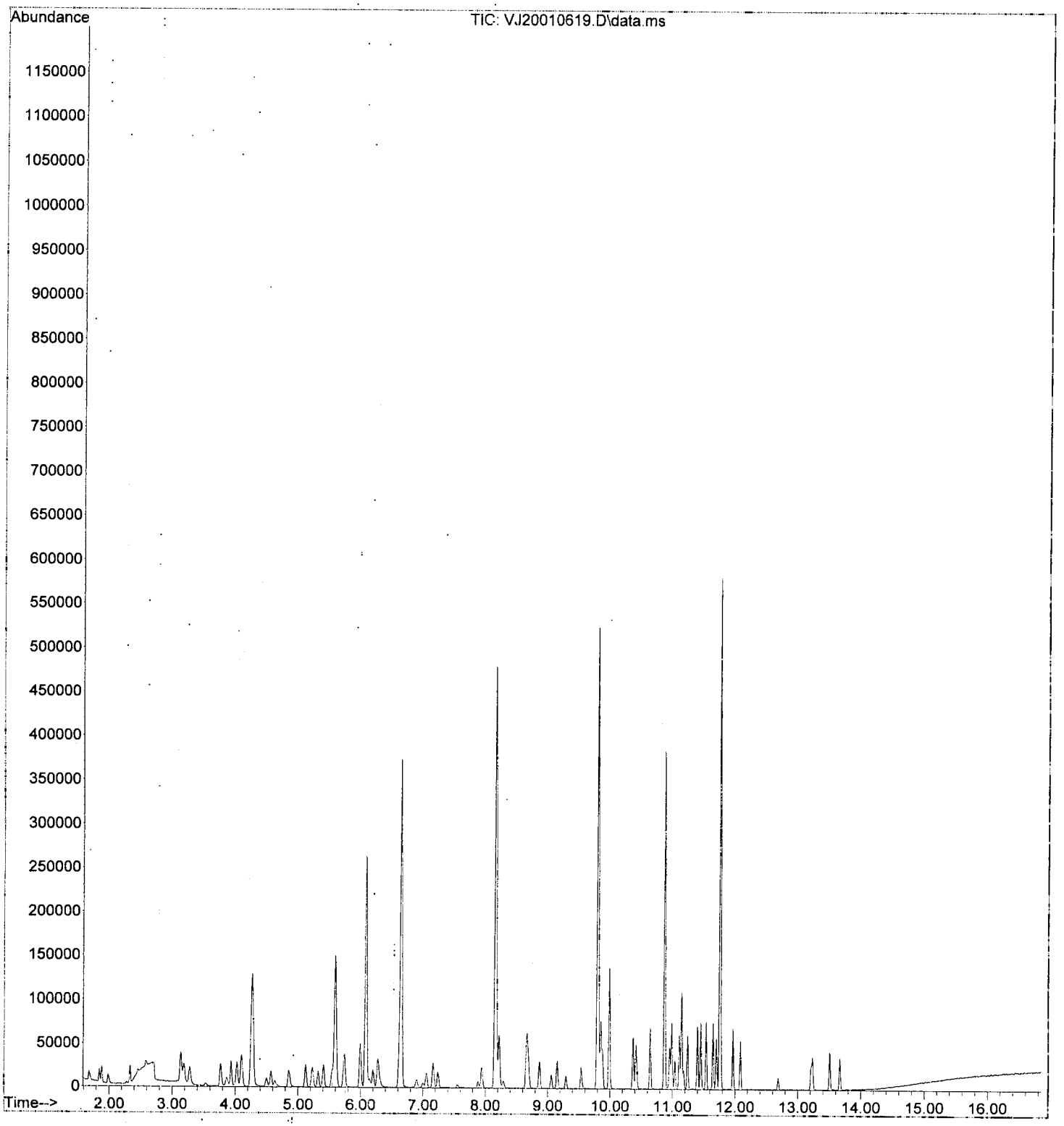
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	15519	4.36	ug/L		98
50) 1,1,2-Trichloroethane	8.869	97	10798	4.87	ug/L		95
51) Dibromochloromethane	9.058	129	9016	4.45	ug/L		90
52) 1,3-Dichloropropane	9.155	76	18904	4.90	ug/L		96
53) 1,2-Dibromoethane (EDB)	9.295	107	10465	4.71	ug/L		99
54) 2-Hexanone	9.539	43	16429	7.22	ug/L		95
55) Chlorobenzene	9.812	112	32096	4.99	ug/L		96
56) Ethylbenzene	9.849	91	52137	4.66	ug/L		100
57) 1,1,1,2-Tetrachloroethane	9.879	131	10529	4.86	ug/L		94
58) m,p-Xylenes (2)	9.989	91	72607	8.75	ug/L		98
59) o-Xylene	10.372	91	33335	4.28	ug/L		95
60) Styrene	10.415	104	21910	3.96	ug/L		96
61) Bromoform	10.433	173	5923	4.09	ug/L		97
62) Isopropylbenzene	10.646	105	40606	4.12	ug/L		96
65) Bromobenzene	10.956	156	11819	4.98	ug/L		86
66) n-Propylbenzene	10.987	91	52319	4.61	ug/L		96
67) 1,1,2,2-Tetrachloroethane	11.041	83	13376	4.59	ug/L		98
68) 2-Chlorotoluene	11.108	126	9710	4.47	ug/L		86
69) 1,3,5-Trimethylbenzene	11.151	105	36600	4.48	ug/L		94
70) 1,2,3-Trichloropropane	11.145	110	5081	4.73	ug/L		96
71) t-1,4-Dichloro-2-butene	11.181	88	1822	4.13	ug/L	#	70
72) 4-Chlorotoluene	11.242	91	31240	4.67	ug/L		96
73) tert-Butylbenzene	11.400	91	19450	4.48	ug/L		94
74) 1,2,4-Trimethylbenzene	11.455	105	35579	4.35	ug/L		95
75) sec-Butylbenzene	11.540	105	43743	4.52	ug/L		96
76) 4-Isopropyltoluene	11.650	119	34578	4.29	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	21401	4.84	ug/L		97
78) 1,4-Dichlorobenzene	11.771	146	22186	5.08	ug/L		97
79) n-Butylbenzene	11.966	91	31798	4.58	ug/L		95
80) 1,2-Dichlorobenzene	12.088	146	18907	4.67	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	3076	4.26	ug/L		66
82) Hexachlorobutadiene	13.207	223	3211	4.96	ug/L		91
83) 1,2,4-Trichlorobenzene	13.238	180	10371	4.22	ug/L		94
84) Naphthalene	13.505	128	31622	3.69	ug/L		96
85) 1,2,3-Trichlorobenzene	13.669	180	10894	4.20	ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	109312	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	270091	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	122018	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	89267	51.93	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	319667	50.83	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	371403	48.73	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	95713	50.80	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	9676	4.99	ug/L		95
3) Chloromethane	1.886	50	15325	5.25	ug/L		97
4) Vinyl Chloride	1.989	62	11467	4.90	ug/L		99
5) Bromomethane	2.336	96	9353	7.53	ug/L		98
6) Chloroethane	2.457	64	2663	5.18	ug/L		79
7) Trichlorofluoromethane	2.585	101	4190	5.15	ug/L		94
8) Ethanol	3.285	45	25232	380.57	ug/L		87
9) 1,1-Dichloroethene	3.133	61	12989	5.08	ug/L		98
10) Carbon Disulfide	3.145	76	22304	4.98	ug/L		98
11) Freon 113	3.187	101	9807	4.92	ug/L		97
12) Iodomethane	3.285	142	1801	4.48	ug/L		68
13) Methylene Chloride	3.771	84	12754	5.83	ug/L		97
14) Acetone	3.863	43	16091	12.46	ug/L		96
15) t-1,2-Dichloroethene	3.936	61	15967	4.99	ug/L		97
16) n-Hexane	4.027	86	2157	4.18	ug/L	#	81
17) Methyl-tert-butyl-ether	4.100	73	37490	4.72	ug/L		99
18) tert-Butanol (TBA)	4.270	59	191781	293.31	ug/L	#	94
19) Diisopropyl ether (DIPE)	4.501	45	8433	1.12	ug/L		98
20) 1,1-Dichloroethane	4.568	63	18804	5.01	ug/L		97
21) Acrylonitrile	4.629	53	6774	4.65	ug/L		97
22) Ethyl-tert-butyl ether...	4.867	59	8258	1.11	ug/L		93
23) c-1,2-Dichloroethene	5.122	61	15089	4.81	ug/L		96
24) 2,2-Dichloropropane	5.231	77	16923	4.88	ug/L		93
25) Bromochloromethane	5.323	49	9397	4.98	ug/L		90
26) Chloroform	5.408	83	20786	5.05	ug/L		95
27) Carbon Tetrachloride	5.542	117	13736	4.60	ug/L		97
28) Tetrahydrofuran	5.584	42	6459	4.81	ug/L		91
29) 1,1,1-Trichloroethane	5.615	97	19285	4.92	ug/L		98
31) 1,1-Dichloropropene	5.743	75	14954	4.57	ug/L		97
32) 2-Butanone (MEK)	5.730	43	21516	10.64	ug/L		95
33) Benzene	5.992	78	49577	4.93	ug/L		98
34) tert-Amyl methyl ether...	6.138	73	7869	1.25	ug/L		93
35) 1,2-Dichloroethane (EDC)	6.199	62	18324	5.11	ug/L		96
36) iso-Butyl Alcohol	6.278	43	25660	114.87	ug/L		88
38) Trichloroethene (TCE)	6.619	130	11743	4.83	ug/L		95
39) tert-Amyl ethyl ether ...	6.898	59	5290	1.15	ug/L		96
40) Dibromomethane	7.057	93	7254	5.04	ug/L		86
41) 1,2-Dichloropropane	7.166	63	11716	5.00	ug/L		88
42) Bromodichloromethane	7.245	83	13785	4.80	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	15807	4.34	ug/L		98
46) Toluene	8.219	91	50497	4.75	ug/L		95
47) Tetrachloroethene (PCE)	8.669	166	12115	4.68	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.663	43	25616	8.12	ug/L		97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

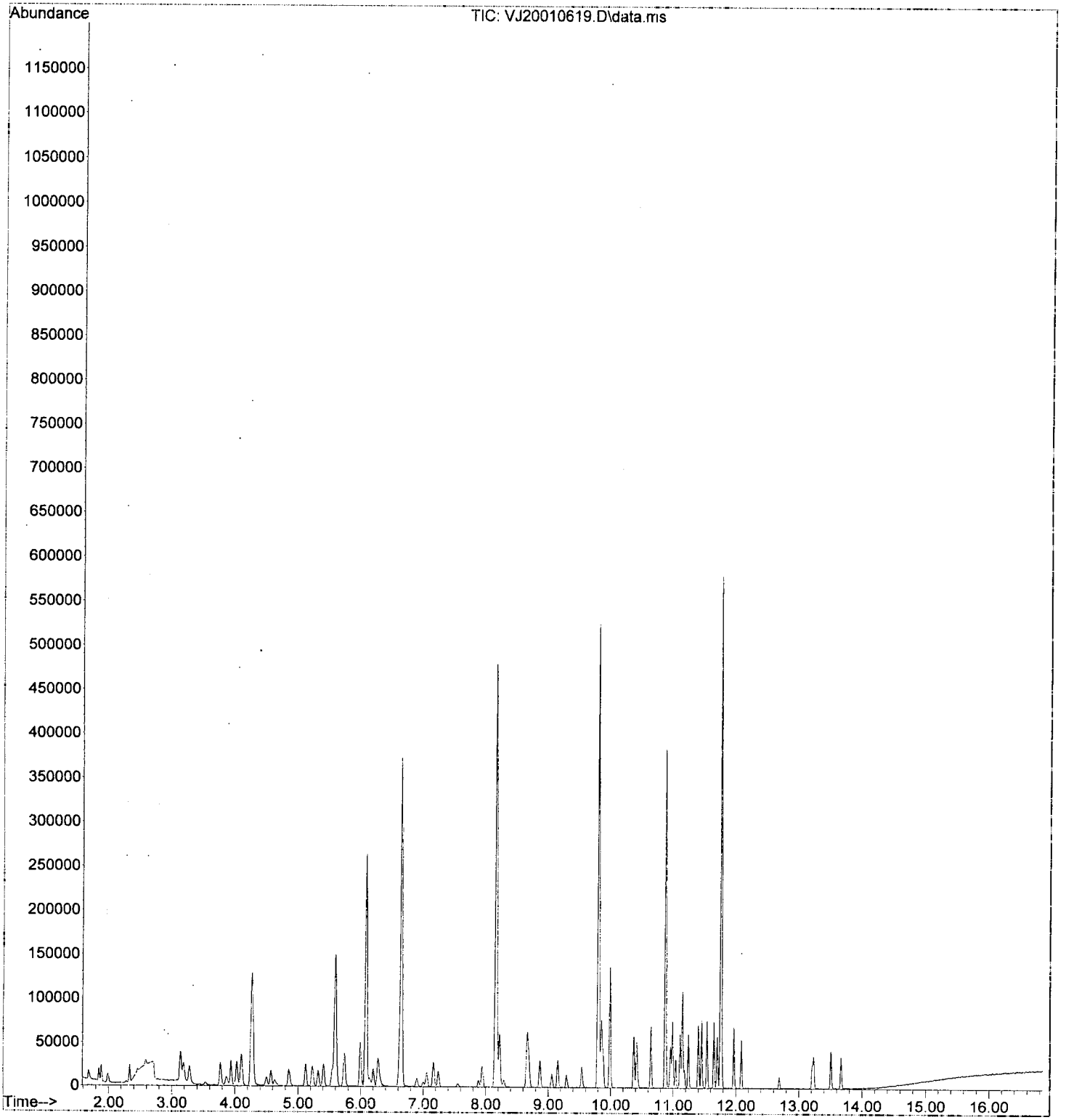
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	15519	4.36	ug/L		98
50) 1,1,2-Trichloroethane	8.869	97	10798	4.87	ug/L		95
51) Dibromochloromethane	9.058	129	9016	4.45	ug/L		90
52) 1,3-Dichloropropane	9.155	76	18904	4.90	ug/L		96
53) 1,2-Dibromoethane (EDB)	9.295	107	10465	4.71	ug/L		99
54) 2-Hexanone	9.539	43	16429	7.22	ug/L		95
55) Chlorobenzene	9.812	112	32096	4.99	ug/L		96
56) Ethylbenzene	9.849	91	52137	4.66	ug/L		100
57) 1,1,1,2-Tetrachloroethane	9.879	131	10529	4.86	ug/L		94
58) m,p-Xylenes (2)	9.989	91	72607	8.75	ug/L		98
59) o-Xylene	10.372	91	33335	4.28	ug/L		95
60) Styrene	10.415	104	21910	3.96	ug/L		96
61) Bromoform	10.433	173	5923	4.09	ug/L		97
62) Isopropylbenzene	10.646	105	40606	4.12	ug/L		96
65) Bromobenzene	10.956	156	11819	4.98	ug/L		86
66) n-Propylbenzene	10.987	91	52319	4.61	ug/L		96
67) 1,1,2,2-Tetrachloroethane	11.041	83	13376	4.59	ug/L		98
68) 2-Chlorotoluene	11.108	126	9710	4.47	ug/L		86
69) 1,3,5-Trimethylbenzene	11.151	105	36600	4.48	ug/L		94
70) 1,2,3-Trichloropropane	11.145	110	5081	4.73	ug/L		96
71) t-1,4-Dichloro-2-butene	11.181	88	1822	4.13	ug/L	#	70
72) 4-Chlorotoluene	11.242	91	31240	4.67	ug/L		96
73) tert-Butylbenzene	11.400	91	19450	4.48	ug/L		94
74) 1,2,4-Trimethylbenzene	11.455	105	35579	4.35	ug/L		95
75) sec-Butylbenzene	11.540	105	43743	4.52	ug/L		96
76) 4-Isopropyltoluene	11.650	119	34578	4.29	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	21401	4.84	ug/L		97
78) 1,4-Dichlorobenzene	11.771	146	22186	5.08	ug/L		97
79) n-Butylbenzene	11.966	91	31798	4.58	ug/L		95
80) 1,2-Dichlorobenzene	12.088	146	18907	4.67	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	3076	4.26	ug/L		66
82) Hexachlorobutadiene	13.207	223	3211	4.96	ug/L		91
83) 1,2,4-Trichlorobenzene	13.238	180	10371	4.22	ug/L		94
84) Naphthalene	13.505	128	31622	3.69	ug/L		96
85) 1,2,3-Trichlorobenzene	13.669	180	10894	4.20	ug/L		98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 14:57:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	105104	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	256667	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	122138	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	86039	52.06	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	303283	50.20	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	357128	49.36	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	91761	48.66	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	19171	10.28	ug/L		96
3) Chloromethane	1.892	50	28319	10.09	ug/L		99
4) Vinyl Chloride	1.995	62	22243	9.88	ug/L		93
5) Bromomethane	2.336	96	14130	11.84	ug/L		97
6) Chloroethane	2.457	64	5109	10.34	ug/L		95
7) Trichlorofluoromethane	2.591	101	8153	10.42	ug/L		98
8) Ethanol	3.260	45	40033m	627.98	ug/L		
9) 1,1-Dichloroethene	3.139	61	25020	10.19	ug/L		99
10) Carbon Disulfide	3.151	76	43573	10.13	ug/L		98
11) Freon 113	3.194	101	19246	10.04	ug/L		99
12) Iodomethane	3.291	142	3523	9.11	ug/L		94
13) Methylene Chloride	3.772	84	22826	10.86	ug/L		98
14) Acetone	3.863	43	26202m	21.10	ug/L		
15) t-1,2-Dichloroethene	3.942	61	31429	10.22	ug/L		97
16) n-Hexane	4.033	86	4668	9.40	ug/L	#	89
17) Methyl-tert-butyl-ether	4.100	73	75246	9.85	ug/L		87
18) tert-Butanol (TBA)	4.252	59	380675m	605.51	ug/L		
19) Diisopropyl ether (DIPE)	4.495	45	17671	2.43	ug/L		95
20) 1,1-Dichloroethane	4.575	63	37310	10.34	ug/L		97
21) Acrylonitrile	4.623	53	13757m	9.82	ug/L		
22) Ethyl-tert-butyl ether...	4.867	59	17105	2.40	ug/L		94
23) c-1,2-Dichloroethene	5.128	61	30607	10.15	ug/L		99
24) 2,2-Dichloropropane	5.232	77	33201	9.96	ug/L		99
25) Bromochloromethane	5.323	49	18916	10.43	ug/L		92
26) Chloroform	5.408	83	40679	10.28	ug/L		97
27) Carbon Tetrachloride	5.548	117	28141	9.80	ug/L		98
28) Tetrahydrofuran	5.584	42	12516	9.69	ug/L		92
29) 1,1,1-Trichloroethane	5.615	97	37707	10.01	ug/L		94
31) 1,1-Dichloropropene	5.743	75	29838	9.48	ug/L		98
32) 2-Butanone (MEK)	5.724	43	39626	20.88	ug/L		97
33) Benzene	5.998	78	96046	9.93	ug/L		98
34) tert-Amyl methyl ether...	6.144	73	15488	2.57	ug/L		94
35) 1,2-Dichloroethane (EDC)	6.199	62	35220	10.22	ug/L		99
36) iso-Butyl Alcohol	6.272	43	51460m	239.60	ug/L		
38) Trichloroethene (TCE)	6.613	130	23199	9.92	ug/L		96
39) tert-Amyl ethyl ether ...	6.892	59	10793	2.44	ug/L		95
40) Dibromomethane	7.051	93	13851	10.01	ug/L		92
41) 1,2-Dichloropropane	7.166	63	22439	9.96	ug/L		90
42) Bromodichloromethane	7.239	83	26524	9.60	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	31802	9.18	ug/L		99
46) Toluene	8.219	91	99117	9.81	ug/L		99
47) Tetrachloroethene (PCE)	8.675	166	23746	9.66	ug/L		97
48) 4-Methyl-2-Pentanone (...	8.663	43	52984	17.67	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 14:57:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

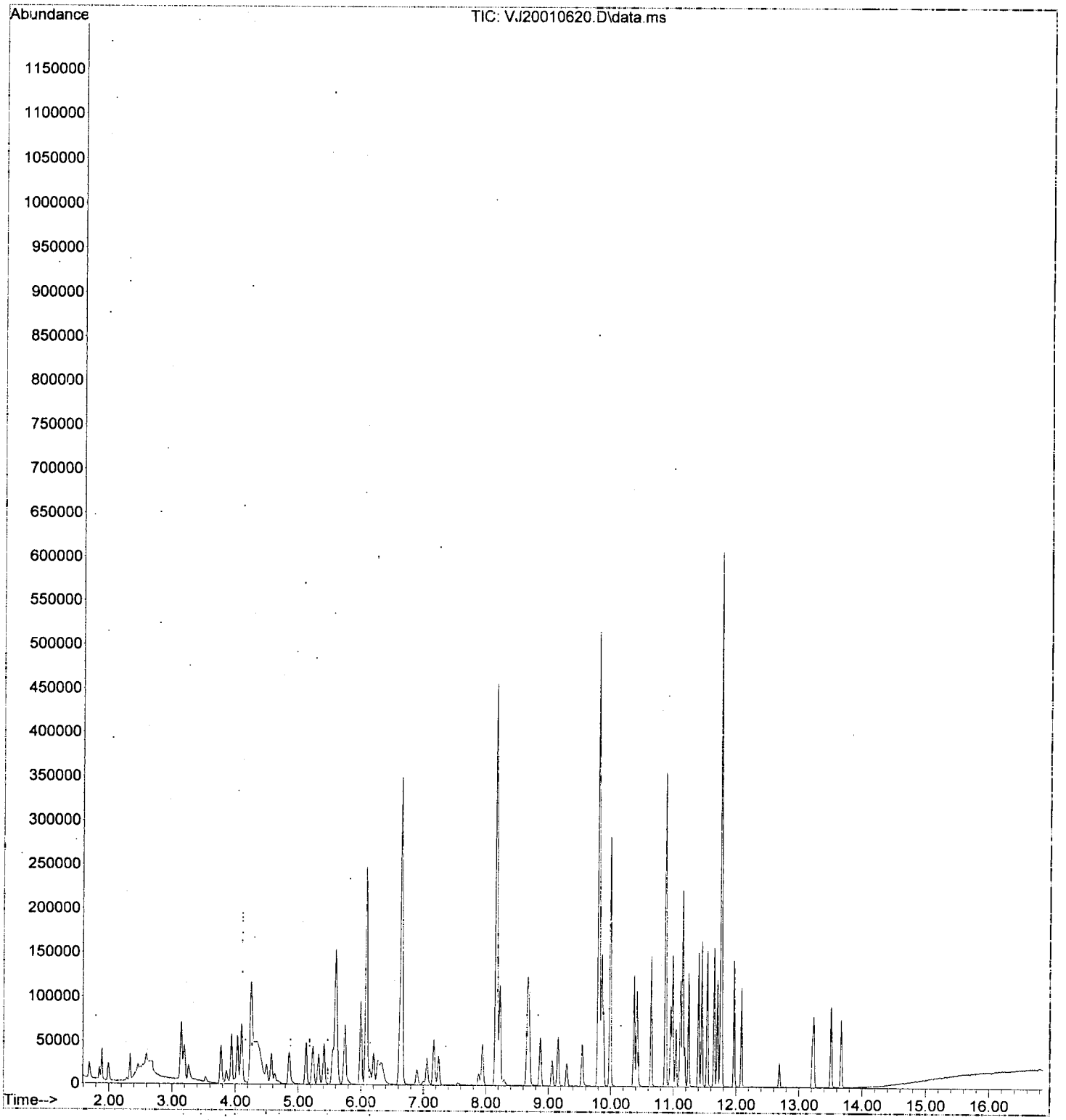
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	30984	9.15	ug/L		97
50) 1,1,2-Trichloroethane	8.870	97	20750	9.86	ug/L		93
51) Dibromochloromethane	9.058	129	18046	9.37	ug/L		99
52) 1,3-Dichloropropane	9.155	76	36128	9.86	ug/L		97
53) 1,2-Dibromoethane (EDB)	9.295	107	20354	9.64	ug/L		100
54) 2-Hexanone	9.539	43	37094	17.15	ug/L		98
55) Chlorobenzene	9.819	112	60211	9.85	ug/L		98
56) Ethylbenzene	9.855	91	103298	9.72	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	20894	10.15	ug/L		100
58) m,p-Xylenes (2)	9.989	91	150111	19.03	ug/L		97
59) o-Xylene	10.372	91	67509	9.13	ug/L		95
60) Styrene	10.415	104	47163	8.96	ug/L		100
61) Bromoform	10.433	173	12623	9.16	ug/L		97
62) Isopropylbenzene	10.646	105	86843	9.28	ug/L		98
65) Bromobenzene	10.962	156	23107	9.72	ug/L		94
66) n-Propylbenzene	10.987	91	106920	9.41	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.041	83	28029	9.62	ug/L		95
68) 2-Chlorotoluene	11.114	126	20381	9.38	ug/L		91
69) 1,3,5-Trimethylbenzene	11.151	105	75905	9.29	ug/L		93
70) 1,2,3-Trichloropropane	11.145	110	10290	9.57	ug/L		94
71) t-1,4-Dichloro-2-butene	11.181	88	3884	8.80	ug/L	#	83
72) 4-Chlorotoluene	11.242	91	64835	9.67	ug/L		94
73) tert-Butylbenzene	11.400	91	40173	9.24	ug/L		90
74) 1,2,4-Trimethylbenzene	11.455	105	75834	9.26	ug/L		96
75) sec-Butylbenzene	11.540	105	90653	9.35	ug/L		97
76) 4-Isopropyltoluene	11.650	119	73953	9.16	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	42611	9.63	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	42971	9.84	ug/L		94
79) n-Butylbenzene	11.966	91	65286	9.39	ug/L		95
80) 1,2-Dichlorobenzene	12.088	146	37998	9.38	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	6494	8.98	ug/L		72
82) Hexachlorobutadiene	13.213	223	5995	9.24	ug/L		94
83) 1,2,4-Trichlorobenzene	13.238	180	22199	9.02	ug/L		98
84) Naphthalene	13.511	128	71917	8.38	ug/L		97
85) 1,2,3-Trichlorobenzene	13.669	180	23796	9.17	ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 14:57:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene (I)	6.083	99	105104	50.00	ug/L		0.00	
43) Chlorobenzene-d5 (I)	9.800	117	256667	50.00	ug/L		0.00	
63) 1,4-Dichlorobenzene-d4...	11.759	152	122138	50.00	ug/L		0.00	
System Monitoring Compounds								
30) Dibromofluoromethane (S)	5.590	111	86039	52.06	ug/L		0.00	
37) 1,4-Difluorobenzene (S)	6.649	114	303283	50.20	ug/L		0.00	
45) Toluene-d8 (S)	8.164	98	357128	49.36	ug/L		0.00	
64) 4-Bromofluorobenzene (S)	10.877	174	91761	48.66	ug/L		0.00	
Target Compounds							Qvalue	
2) Dichlorodifluoromethane	1.691	85	19171	10.28	ug/L		96	
3) Chloromethane	1.892	50	28319	10.09	ug/L		99	
4) Vinyl Chloride	1.995	62	22243	9.88	ug/L		93	
5) Bromomethane	2.336	96	14130	11.84	ug/L		97	
6) Chloroethane	2.457	64	5109	10.34	ug/L		95	
7) Trichlorofluoromethane	2.591	101	8153	10.42	ug/L		98	
8) Ethanol	3.260	45	~~26102~~	~~409.15~~	~~ug/L~~		~~88~~	MI
9) 1,1-Dichloroethene	3.139	61	25020	10.19	ug/L		99	
10) Carbon Disulfide	3.151	76	43573	10.13	ug/L		98	
11) Freon 113	3.194	101	19246	10.04	ug/L		99	
12) Iodomethane	3.291	142	3523	9.11	ug/L		94	
13) Methylene Chloride	3.772	84	22826	10.86	ug/L		98	
14) Acetone	3.863	43	~~20741~~	~~16.70~~	~~ug/L~~		~~98~~	MI
15) t-1,2-Dichloroethene	3.942	61	31429	10.22	ug/L		97	
16) n-Hexane	4.033	86	4668	9.40	ug/L	#	89	
17) Methyl-tert-butyl-ether	4.100	73	75246	9.85	ug/L		87	
18) tert-Butanol (TBA)	4.252	59	~~224073~~	~~356.42~~	~~ug/L~~	#	~~93~~	MI
19) Diisopropyl ether (DIPE)	4.495	45	17671	2.43	ug/L		95	
20) 1,1-Dichloroethane	4.575	63	37310	10.34	ug/L		97	
21) Acrylonitrile	4.623	53	~~11532~~	~~8.23~~	~~ug/L~~		~~97~~	MI
22) Ethyl-tert-butyl ether...	4.867	59	17105	2.40	ug/L		94	
23) c-1,2-Dichloroethene	5.128	61	30607	10.15	ug/L		99	
24) 2,2-Dichloropropane	5.232	77	33201	9.96	ug/L		99	
25) Bromochloromethane	5.323	49	18916	10.43	ug/L		92	
26) Chloroform	5.408	83	40679	10.28	ug/L		97	
27) Carbon Tetrachloride	5.548	117	28141	9.80	ug/L		98	
28) Tetrahydrofuran	5.584	42	12516	9.69	ug/L		92	
29) 1,1,1-Trichloroethane	5.615	97	37707	10.01	ug/L		94	
31) 1,1-Dichloropropene	5.743	75	29838	9.48	ug/L		98	
32) 2-Butanone (MEK)	5.724	43	39626	20.38	ug/L		97	
33) Benzene	5.998	78	96046	9.93	ug/L		98	
34) tert-Amyl methyl ether...	6.144	73	15488	2.57	ug/L		94	
35) 1,2-Dichloroethane (EDC)	6.199	62	35220	10.22	ug/L		99	
36) iso-Butyl Alcohol	6.272	43	~~23571~~	~~109.75~~	~~ug/L~~		~~84~~	MI
38) Trichloroethene (TCE)	6.613	130	23199	9.92	ug/L		96	
39) tert-Amyl ethyl ether ...	6.892	59	10793	2.44	ug/L		95	
40) Dibromomethane	7.051	93	13851	10.01	ug/L		92	
41) 1,2-Dichloropropane	7.166	63	22439	9.96	ug/L		90	
42) Bromodichloromethane	7.239	83	26524	9.60	ug/L		96	
44) c-1,3-Dichloropropene	7.945	75	31802	9.18	ug/L		99	
46) Toluene	8.219	91	99117	9.81	ug/L		99	
47) Tetrachloroethene (PCE)	8.675	166	23746	9.66	ug/L		97	
48) 4-Methyl-2-Pentanone (...	8.663	43	52984	17.67	ug/L		98	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

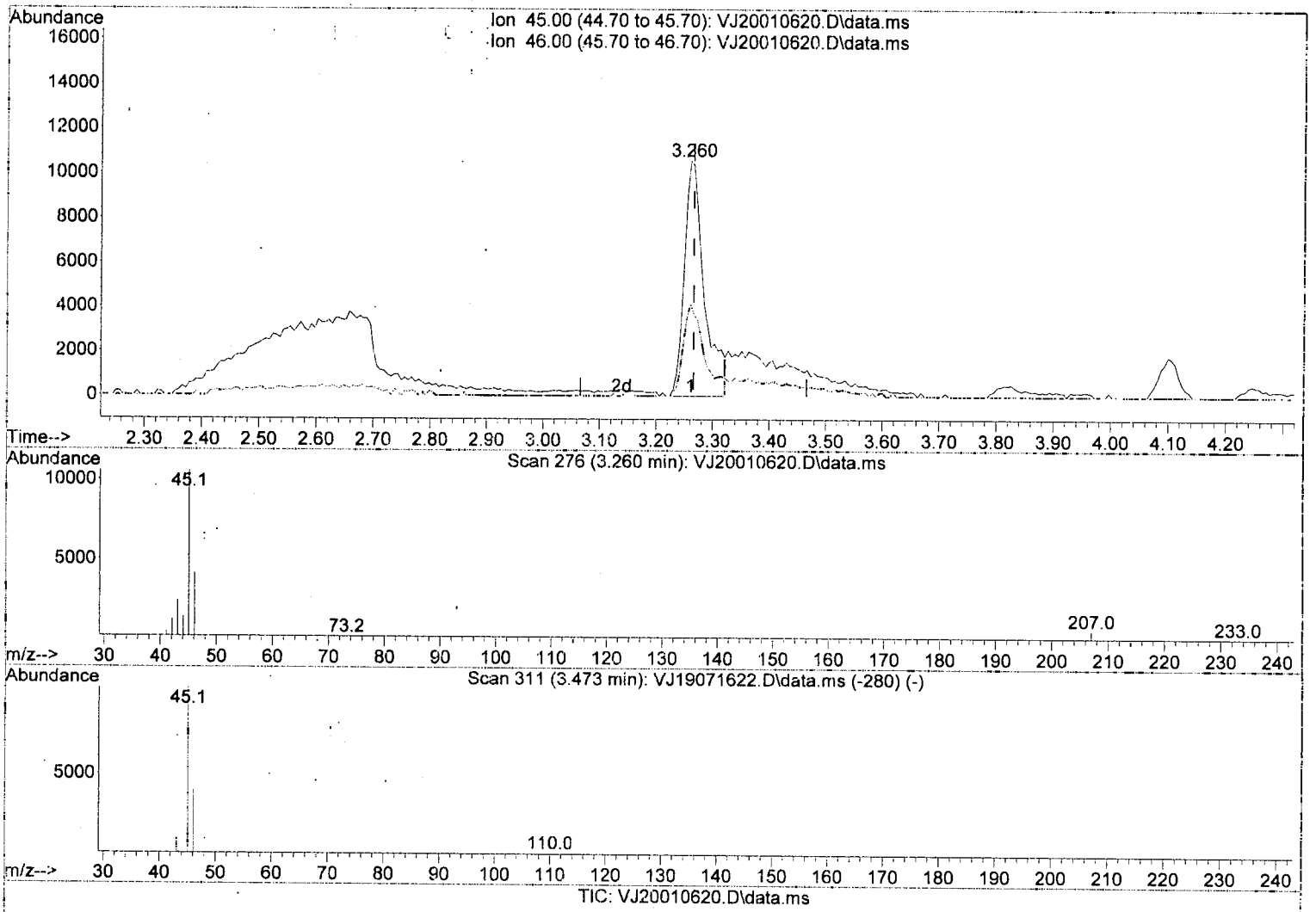
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	30984	9.15	ug/L		97
50) 1,1,2-Trichloroethane	8.870	97	20750	9.86	ug/L		93
51) Dibromochloromethane	9.058	129	18046	9.37	ug/L		99
52) 1,3-Dichloropropane	9.155	76	36128	9.86	ug/L		97
53) 1,2-Dibromoethane (EDB)	9.295	107	20354	9.64	ug/L		100
54) 2-Hexanone	9.539	43	37094	17.15	ug/L		98
55) Chlorobenzene	9.819	112	60211	9.85	ug/L		98
56) Ethylbenzene	9.855	91	103298	9.72	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	20894	10.15	ug/L		100
58) m,p-Xylenes (2)	9.989	91	150111	19.03	ug/L		97
59) o-Xylene	10.372	91	67509	9.13	ug/L		95
60) Styrene	10.415	104	47163	8.96	ug/L		100
61) Bromoform	10.433	173	12623	9.16	ug/L		97
62) Isopropylbenzene	10.646	105	86843	9.28	ug/L		98
65) Bromobenzene	10.962	156	23107	9.72	ug/L		94
66) n-Propylbenzene	10.987	91	106920	9.41	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.041	83	28029	9.62	ug/L		95
68) 2-Chlorotoluene	11.114	126	20381	9.38	ug/L		91
69) 1,3,5-Trimethylbenzene	11.151	105	75905	9.29	ug/L		93
70) 1,2,3-Trichloropropane	11.145	110	10290	9.57	ug/L		94
71) t-1,4-Dichloro-2-butene	11.181	88	3884	8.80	ug/L	#	83
72) 4-Chlorotoluene	11.242	91	64835	9.67	ug/L		94
73) tert-Butylbenzene	11.400	91	40173	9.24	ug/L		90
74) 1,2,4-Trimethylbenzene	11.455	105	75834	9.26	ug/L		96
75) sec-Butylbenzene	11.540	105	90653	9.35	ug/L		97
76) 4-Isopropyltoluene	11.650	119	73953	9.16	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	42611	9.63	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	42971	9.84	ug/L		94
79) n-Butylbenzene	11.966	91	65286	9.39	ug/L		95
80) 1,2-Dichlorobenzene	12.088	146	37998	9.38	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	6494	8.98	ug/L		72
82) Hexachlorobutadiene	13.213	223	5995	9.24	ug/L		94
83) 1,2,4-Trichlorobenzene	13.238	180	22199	9.02	ug/L		98
84) Naphthalene	13.511	128	71917	8.38	ug/L		97
85) 1,2,3-Trichlorobenzene	13.669	180	23796	9.17	ug/L		98

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL' 10ppb' DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



TIC: VJ20010620.D\data.ms

(8) Ethanol

3.260min (-0.006) 409.45 ug/L

response 26102

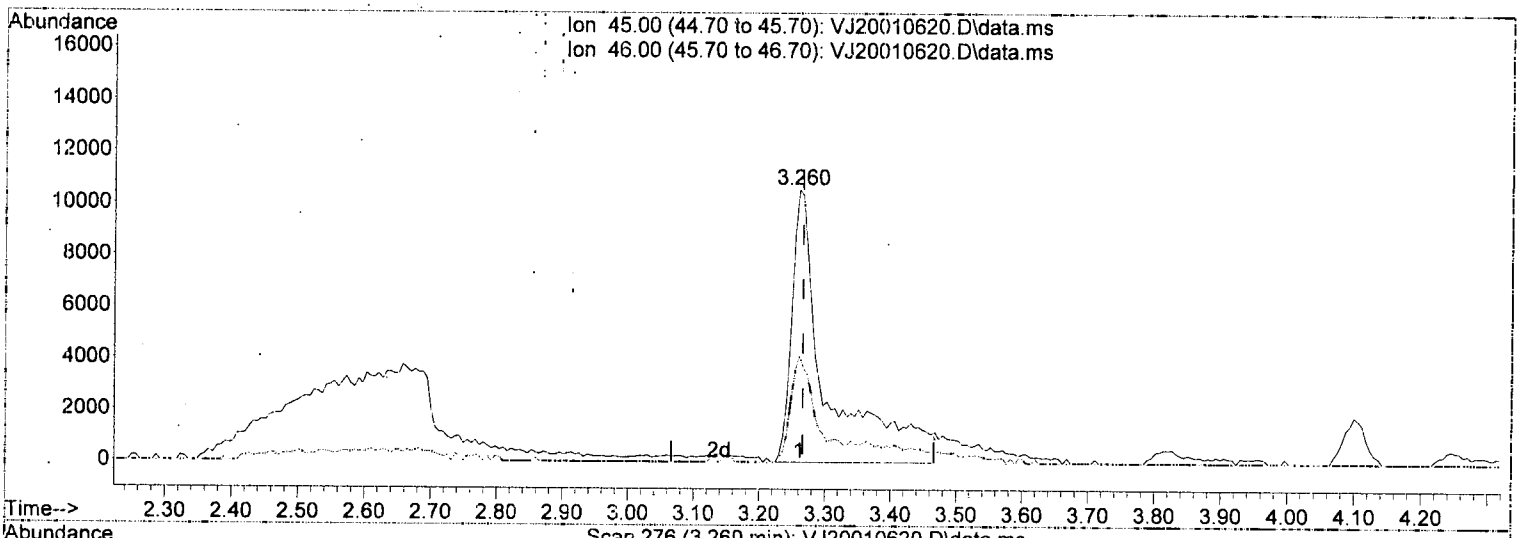
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.40
0.00	0.00	0.00
0.00	0.00	0.00

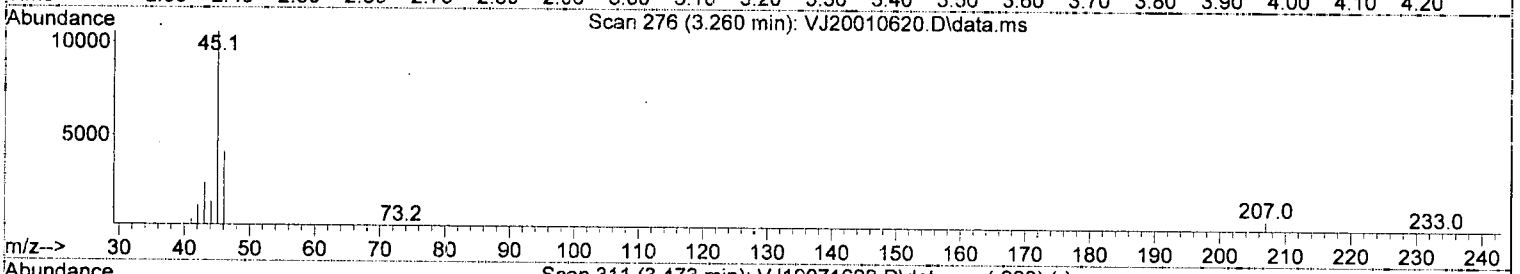
MF

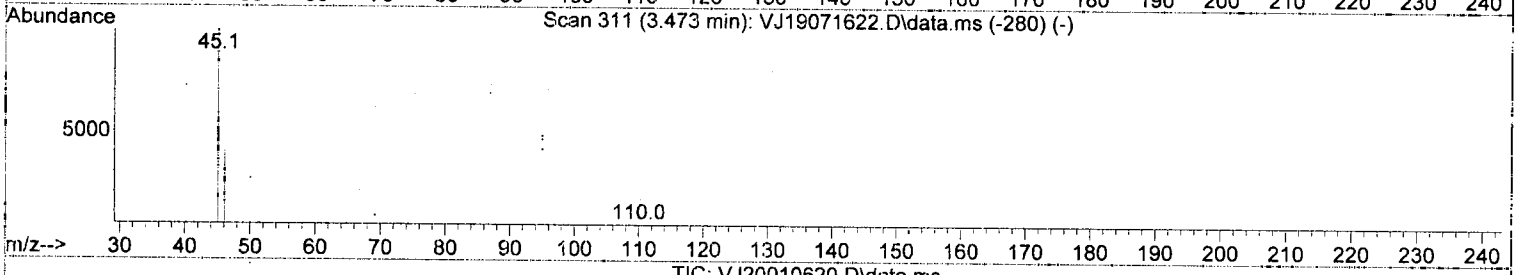
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(8) Ethanol

3.260min (-0.006) 627.98 ug/L m

response 40033

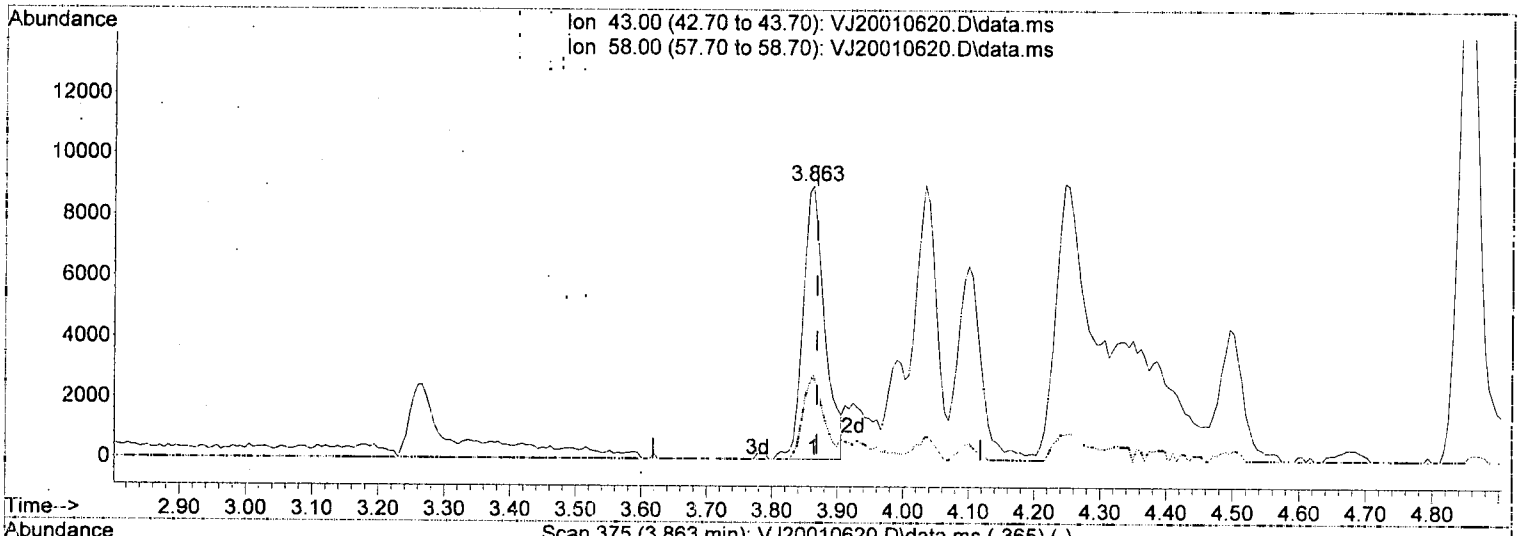
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.40
0.00	0.00	0.00
0.00	0.00	0.00

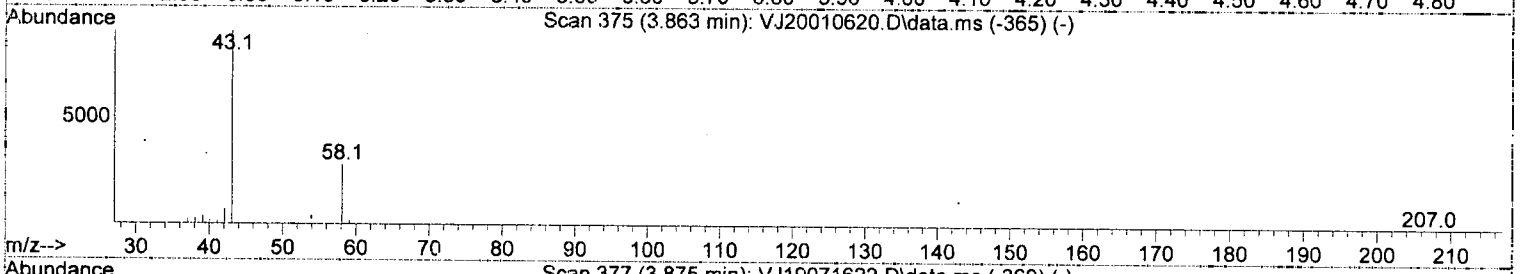
1/7/20

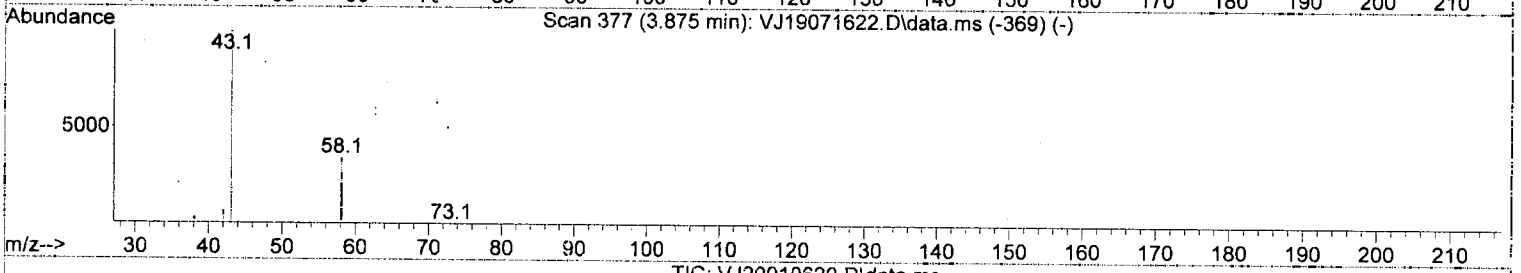
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL: 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(14) Acetone

3.863min (-0.005) 16.70 ug/L

response 20741

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.08
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
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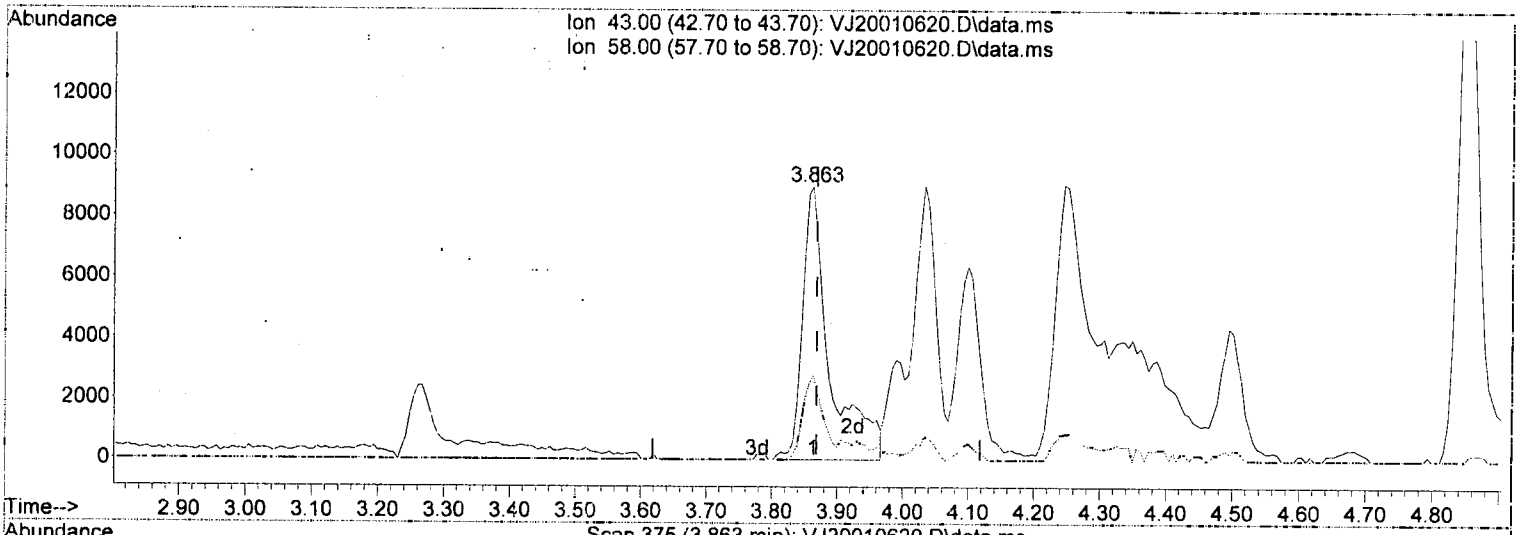
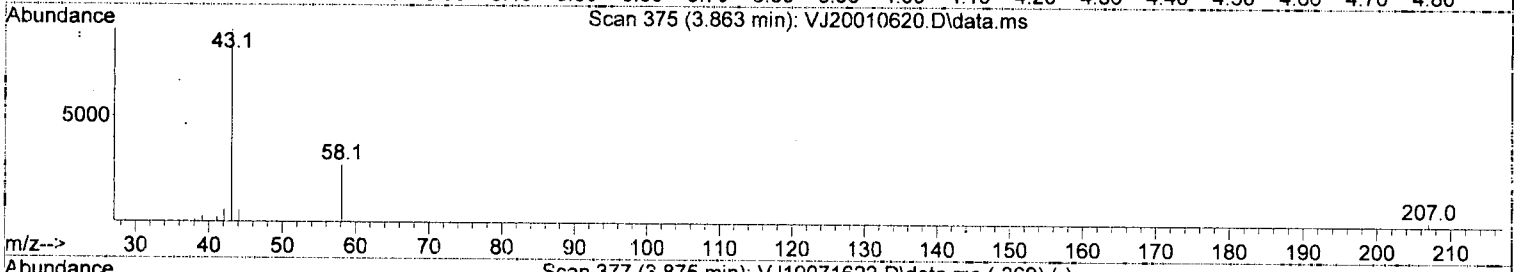
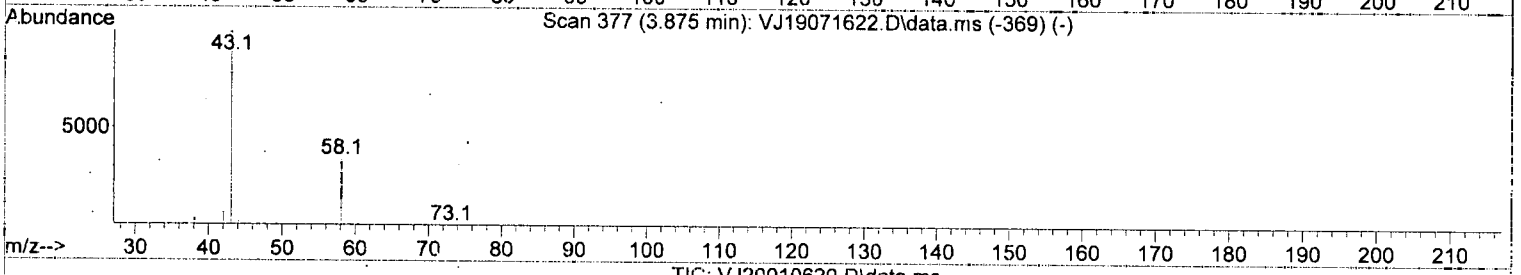






TIC: VJ20010620.D\data.ms

(14) Acetone

3.863min (-0.005) 21.10 ug/L m

1/7/20

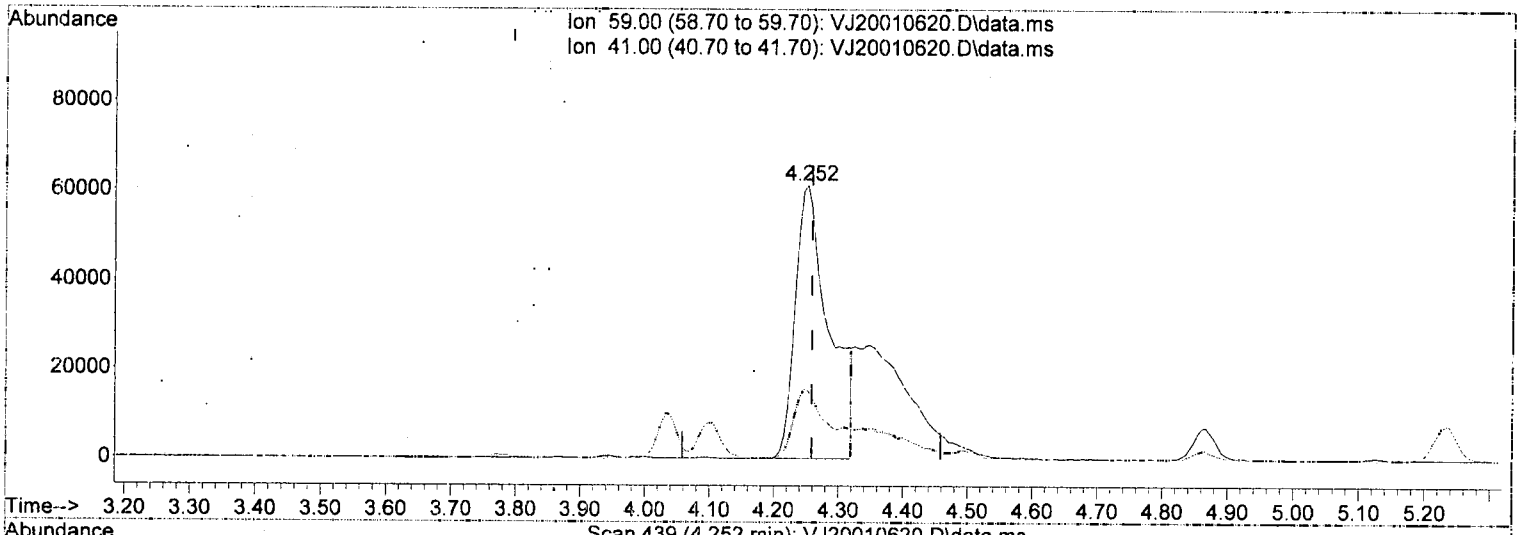
response 26202

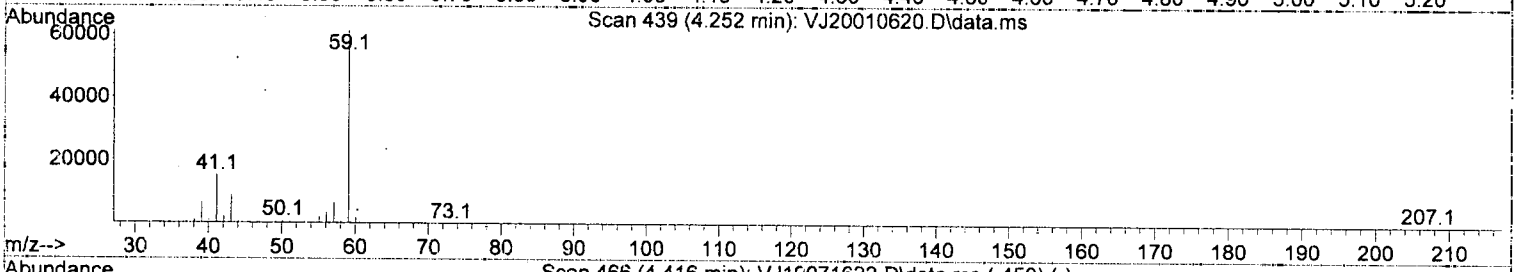
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.08
0.00	0.00	0.00
0.00	0.00	0.00

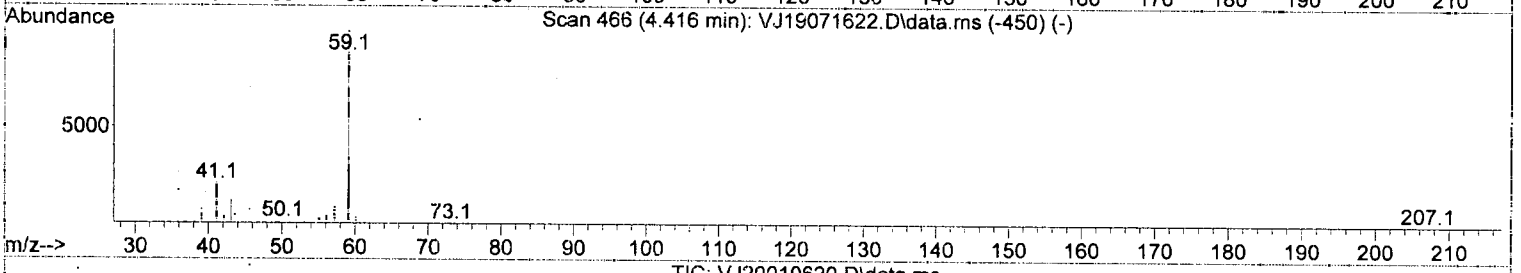
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 356.42 ug/L

response 224073

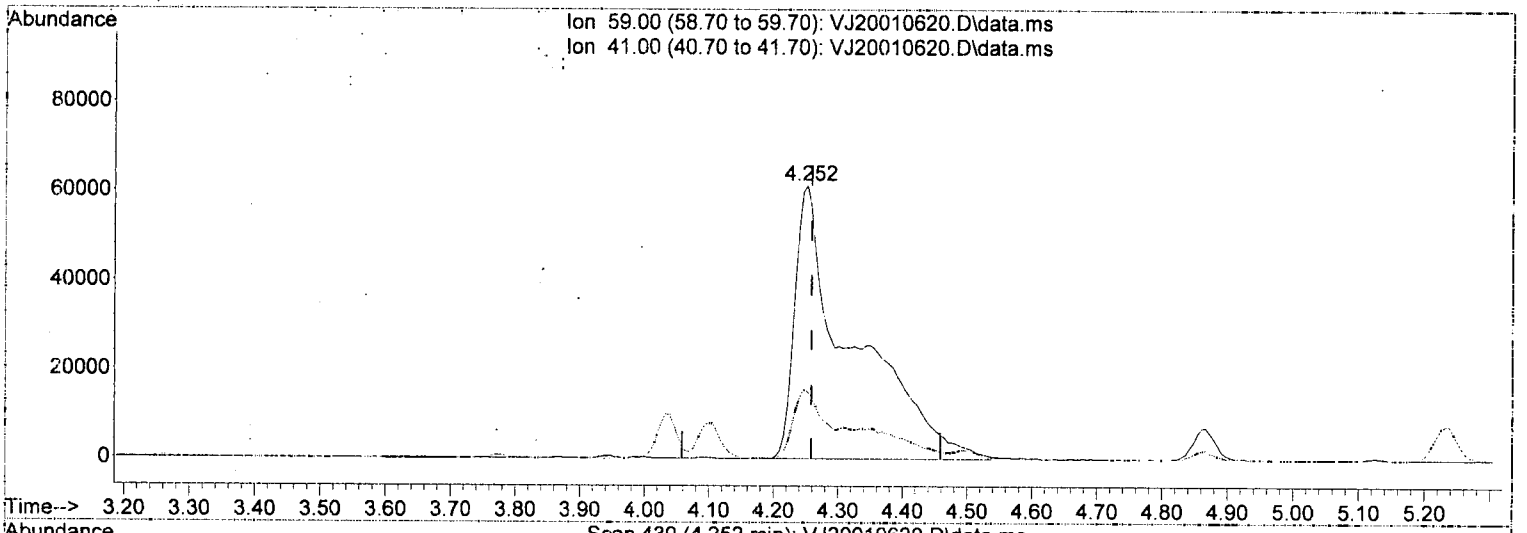
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	24.93#
0.00	0.00	0.00
0.00	0.00	0.00

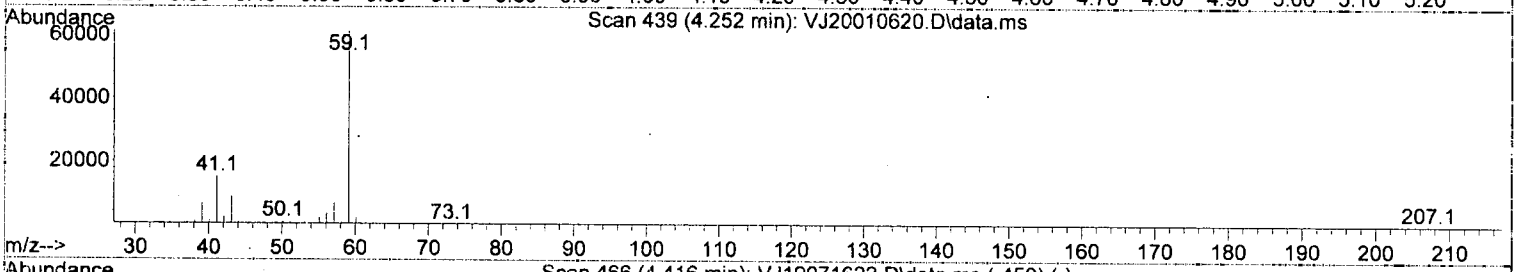
MI

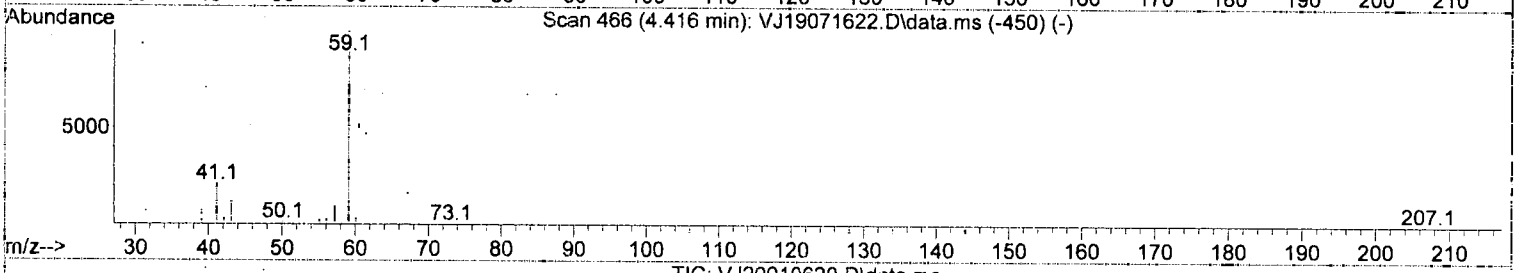
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 605.51 ug/L m

response 380675

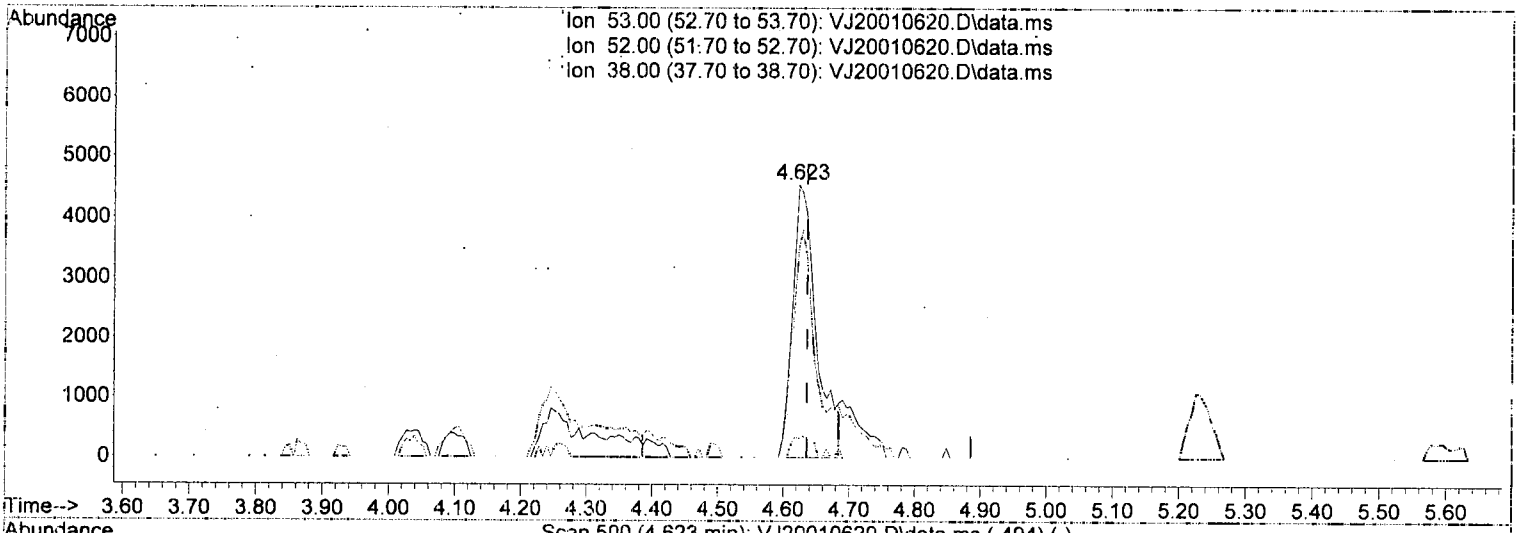
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	24.93#
0.00	0.00	0.00
0.00	0.00	0.00

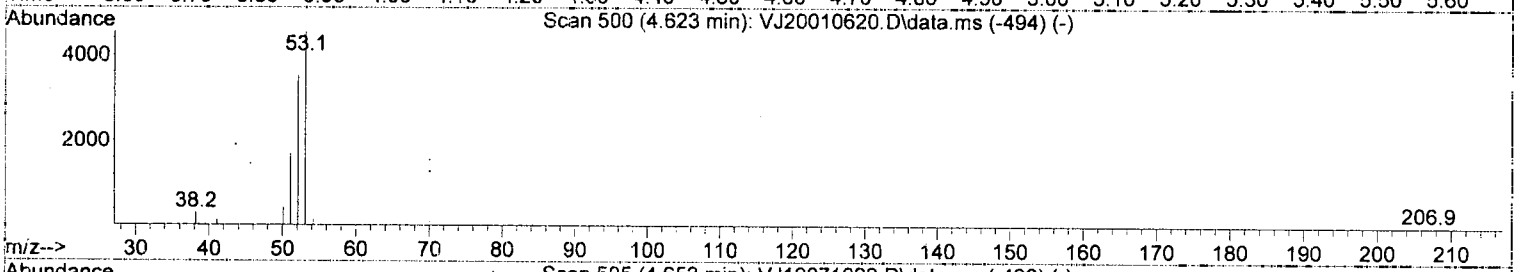
1/7/20

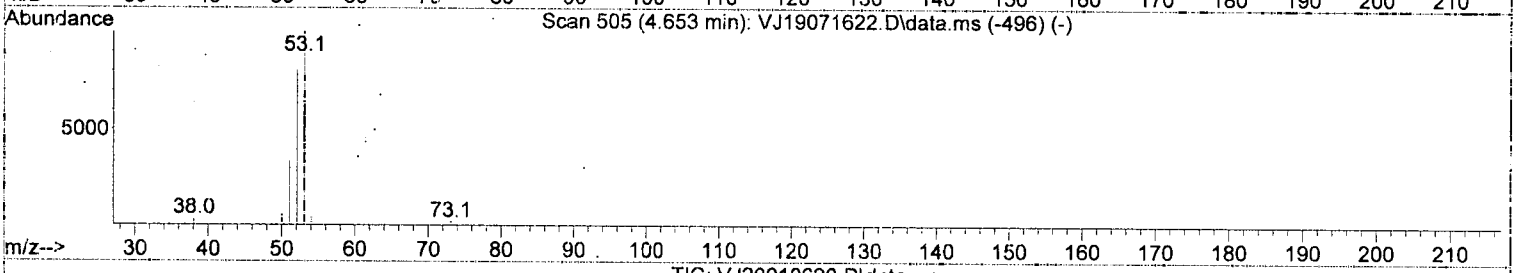
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(21) Acrylonitrile

4.623min (-0.012) 8.23 ug/L

response 11532

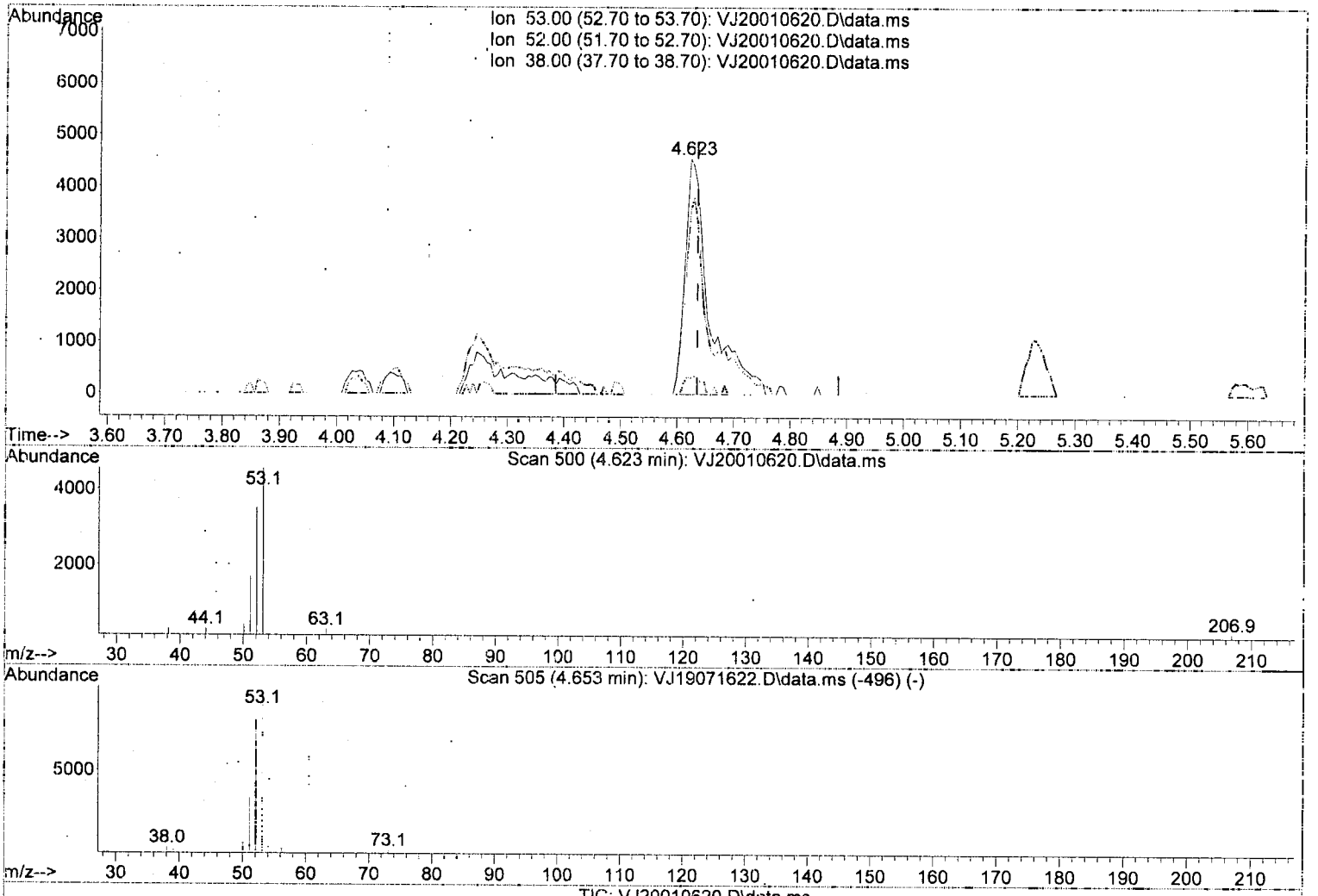
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.51
38.00	5.50	7.00
0.00	0.00	0.00

MI

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



(21) Acrylonitrile

4.623min (-0.012) 9.82 ug/L (m)

1/7/20

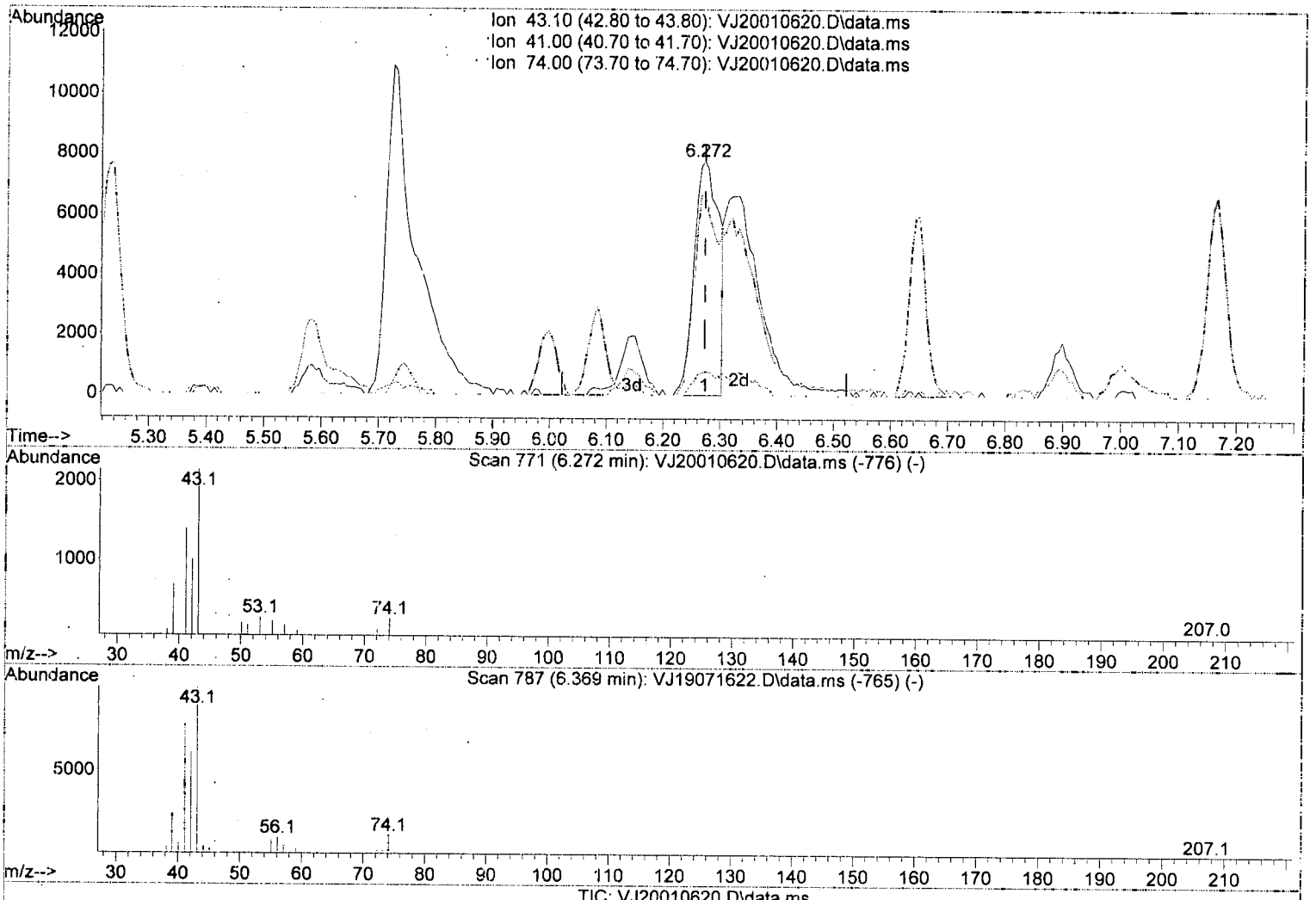
response 13757

Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.51
38.00	5.50	7.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



TIC: VJ20010620.D\data.ms

(36) iso-Butyl Alcohol

6.272min (+ 0.000) 109.75 ug/L

response 23571

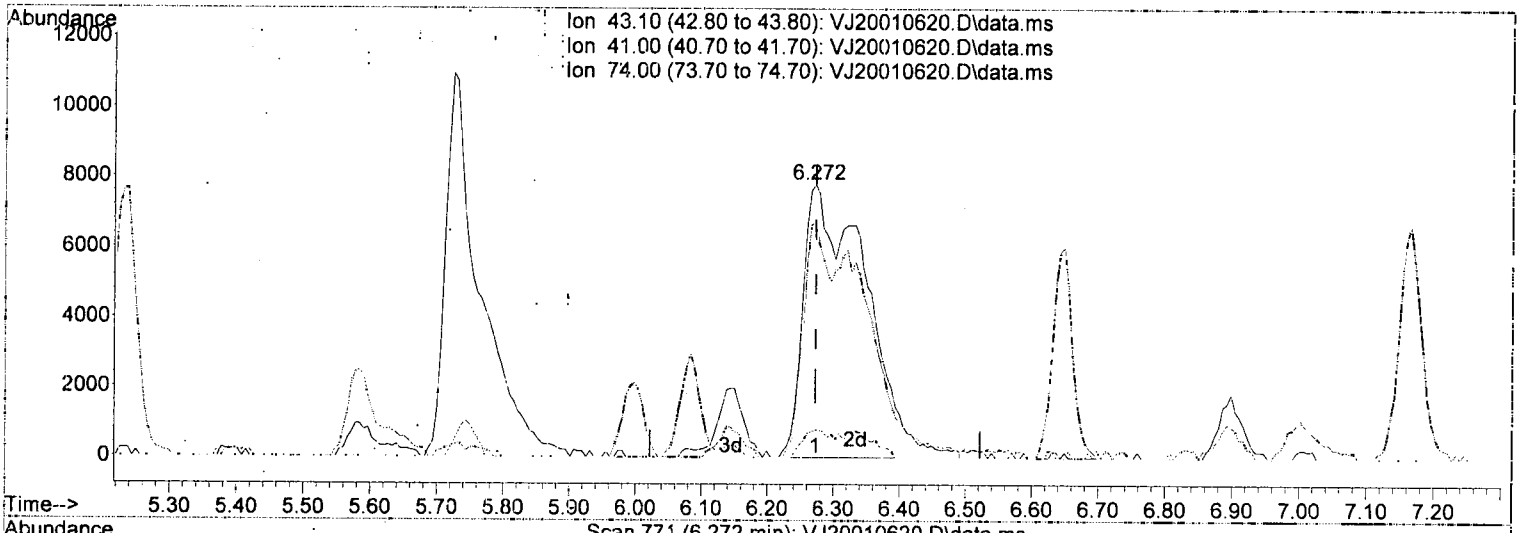
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	86.62
74.00	11.60	10.18
0.00	0.00	0.00

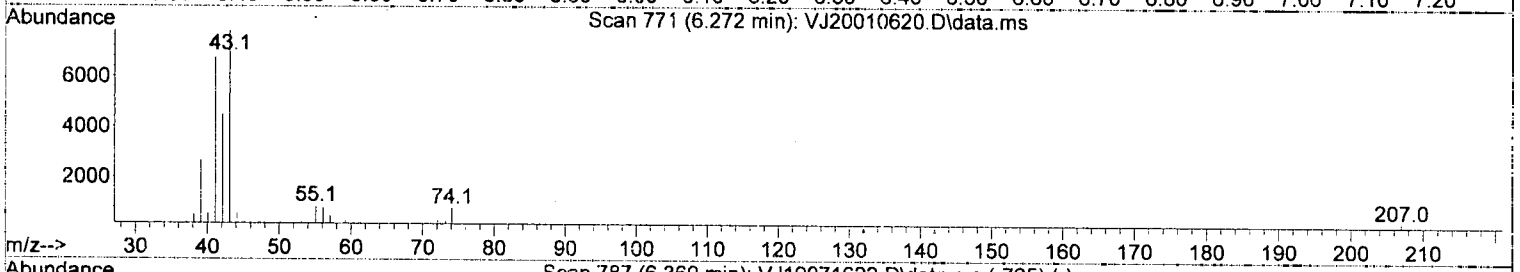
MI

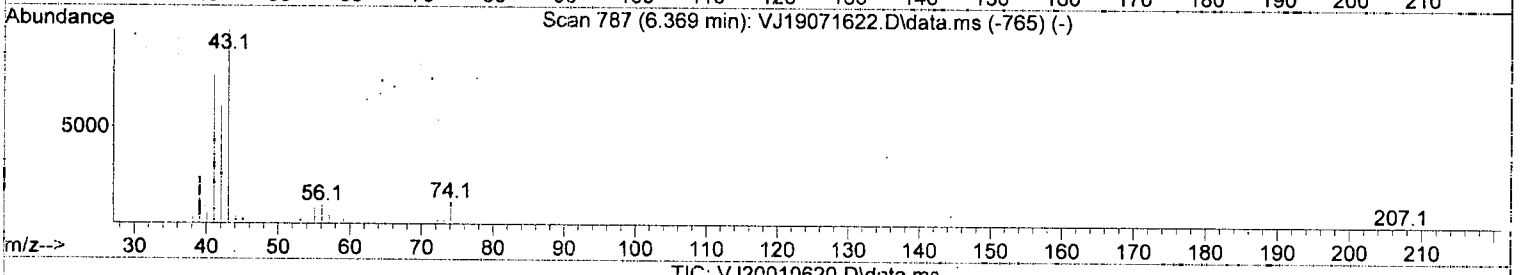
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(36) iso-Butyl Alcohol

6.272min (+ 0.000) 239.60 ug/L m

response 51460

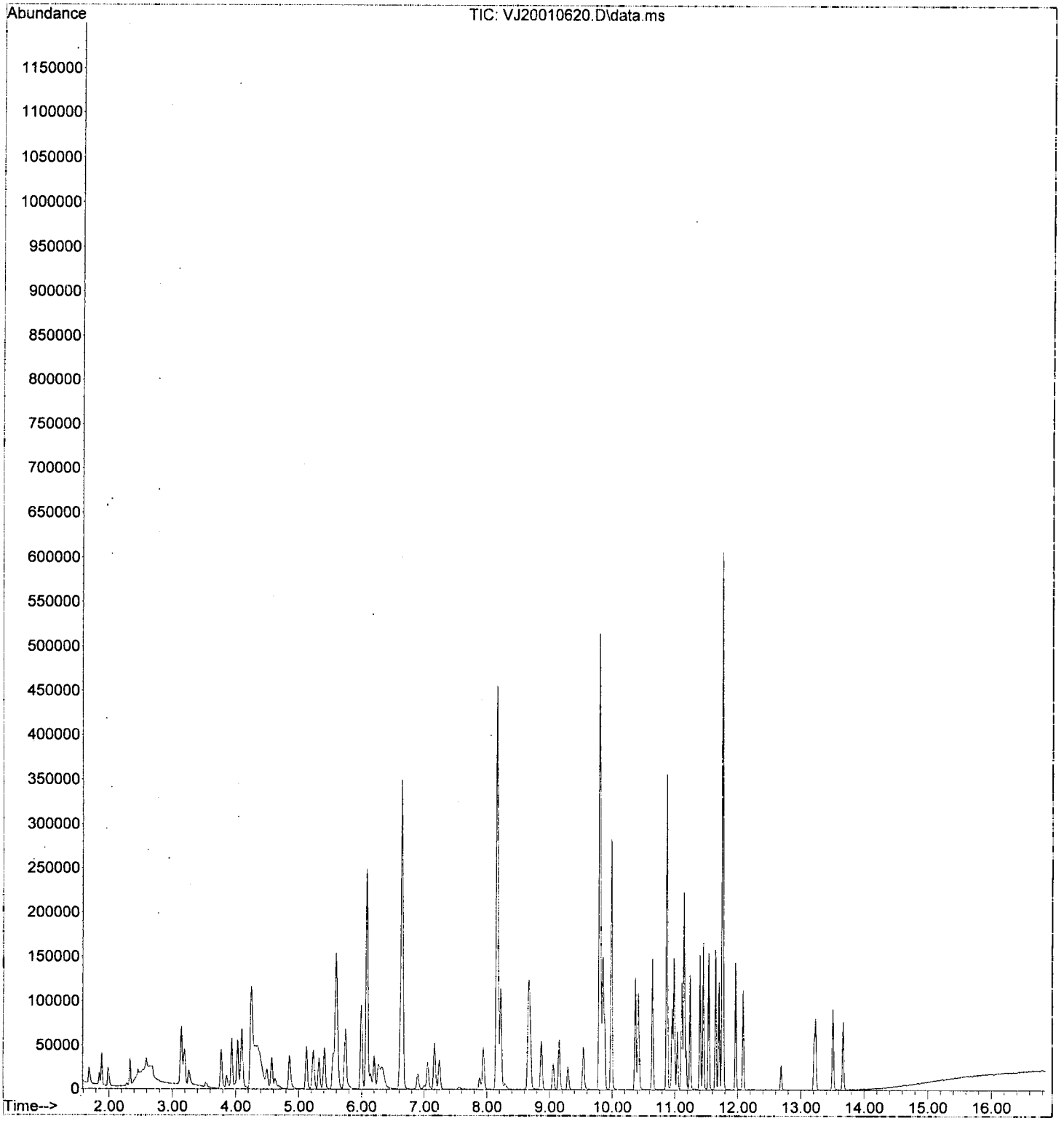
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	86.62
74.00	11.60	10.18
0.00	0.00	0.00

1/7/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 15:00:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	108585	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	257589	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	120591	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	85376	50.00	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	312074	50.00	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	363051	50.00	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	93096	50.00	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	38529	20.00	ug/L		99
3) Chloromethane	1.886	50	58016	20.00	ug/L		98
4) Vinyl Chloride	1.989	62	46537	20.00	ug/L		94
5) Bromomethane	2.330	96	24661	20.00	ug/L		99
6) Chloroethane	2.457	64	10213	20.00	ug/L		93
7) Trichlorofluoromethane	2.585	101	16168	20.00	ug/L		94
8) Ethanol	3.267	45	82383m	1250.88	ug/L		
9) 1,1-Dichloroethene	3.133	61	50753	20.00	ug/L		94
10) Carbon Disulfide	3.145	76	88914	20.00	ug/L		97
11) Freon 113	3.187	101	39592	20.00	ug/L		99
12) Iodomethane	3.285	142	7988	20.00	ug/L		87
13) Methylene Chloride	3.772	84	43446	20.00	ug/L		98
14) Acetone	3.857	43	50344m	39.24	ug/L		
15) t-1,2-Dichloroethene	3.936	61	63531	20.00	ug/L		98
16) n-Hexane	4.033	86	10258	20.00	ug/L	#	89
17) Methyl-tert-butyl-ether	4.100	73	157914	20.00	ug/L		83
18) tert-Butanol (TBA)	4.252	59	810615m	1248.06	ug/L		
19) Diisopropyl ether (DIPE)	4.495	45	37517	5.00	ug/L		96
20) 1,1-Dichloroethane	4.575	63	74578	20.00	ug/L		98
21) Acrylonitrile	4.629	53	28955m	20.00	ug/L		
22) Ethyl-tert-butyl ether...	4.860	59	36823	5.00	ug/L		97
23) c-1,2-Dichloroethene	5.122	61	62311	20.00	ug/L		99
24) 2,2-Dichloropropane	5.232	77	68911	20.00	ug/L		98
25) Bromochloromethane	5.317	49	37485	20.00	ug/L		91
26) Chloroform	5.408	83	81758	20.00	ug/L		96
27) Carbon Tetrachloride	5.548	117	59324	20.00	ug/L		97
28) Tetrahydrofuran	5.578	42	26681	20.00	ug/L		92
29) 1,1,1-Trichloroethane	5.615	97	77869	20.00	ug/L		97
31) 1,1-Dichloropropene	5.743	75	65020	20.00	ug/L		93
32) 2-Butanone (MEK)	5.724	43	80360	40.00	ug/L		99
33) Benzene	5.998	78	199822	20.00	ug/L		99
34) tert-Amyl methyl ether...	6.150	73	31171	5.00	ug/L		100
35) 1,2-Dichloroethane (EDC)	6.199	62	71205	20.00	ug/L		98
36) iso-Butyl Alcohol	6.272	43	110835m	499.50	ug/L		
38) Trichloroethene (TCE)	6.613	130	48339	20.00	ug/L		93
39) tert-Amyl ethyl ether ...	6.898	59	22830	5.00	ug/L		94
40) Dibromomethane	7.057	93	28602	20.00	ug/L		93
41) 1,2-Dichloropropane	7.166	63	46552	20.00	ug/L		93
42) Bromodichloromethane	7.239	83	57072	20.00	ug/L		98
44) c-1,3-Dichloropropene	7.945	75	69513	20.00	ug/L		99
46) Toluene	8.219	91	202797	20.00	ug/L		99
47) Tetrachloroethene (PCE)	8.669	166	49335	20.00	ug/L		94
48) 4-Methyl-2-Pentanone (...	8.663	43	120371	40.00	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 15:00:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

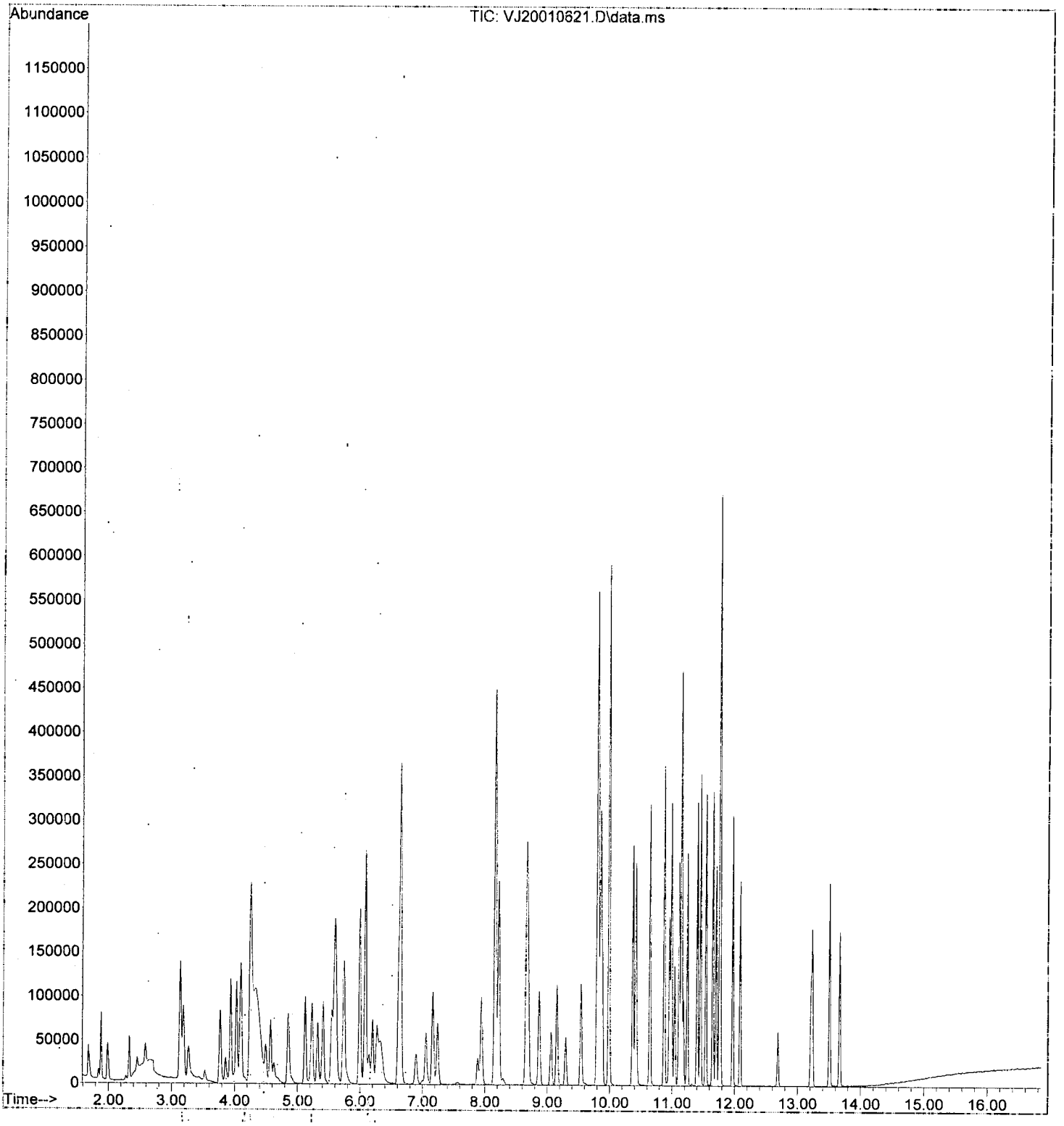
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	67947	20.00	ug/L		96
50) 1,1,2-Trichloroethane	8.870	97	42261	20.00	ug/L		96
51) Dibromochloromethane	9.058	129	38652	20.00	ug/L		99
52) 1,3-Dichloropropane	9.155	76	73561	20.00	ug/L		98
53) 1,2-Dibromoethane (EDB)	9.295	107	42367	20.00	ug/L		94
54) 2-Hexanone	9.539	43	86807	40.00	ug/L		96
55) Chlorobenzene	9.819	112	122718	20.00	ug/L		97
56) Ethylbenzene	9.849	91	213322	20.00	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	41303	20.00	ug/L		98
58) m,p-Xylenes (2)	9.989	91	316584	40.00	ug/L		98
59) o-Xylene	10.372	91	148399	20.00	ug/L		95
60) Styrene	10.415	104	105595	20.00	ug/L		97
61) Bromoform	10.433	173	27653	20.00	ug/L		97
62) Isopropylbenzene	10.646	105	187864	20.00	ug/L		98
65) Bromobenzene	10.956	156	46956	20.00	ug/L	#	84
66) n-Propylbenzene	10.987	91	224394	20.00	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.041	83	57542	20.00	ug/L		98
68) 2-Chlorotoluene	11.114	126	42921	20.00	ug/L		96
69) 1,3,5-Trimethylbenzene	11.151	105	161340	20.00	ug/L		95
70) 1,2,3-Trichloropropane	11.145	110	21237	20.00	ug/L		94
71) t-1,4-Dichloro-2-butene	11.181	88	8711	20.00	ug/L	#	86
72) 4-Chlorotoluene	11.242	91	132335	20.00	ug/L		95
73) tert-Butylbenzene	11.400	91	85895	20.00	ug/L		94
74) 1,2,4-Trimethylbenzene	11.455	105	161792	20.00	ug/L		98
75) sec-Butylbenzene	11.540	105	191481	20.00	ug/L		98
76) 4-Isopropyltoluene	11.650	119	159437	20.00	ug/L		98
77) 1,3-Dichlorobenzene	11.704	146	87350	20.00	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	86262	20.00	ug/L		96
79) n-Butylbenzene	11.966	91	137345	20.00	ug/L		96
80) 1,2-Dichlorobenzene	12.088	146	79965	20.00	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	14277	20.00	ug/L		84
82) Hexachlorobutadiene	13.213	223	12808	20.00	ug/L		94
83) 1,2,4-Trichlorobenzene	13.231	180	48617	20.00	ug/L		95
84) Naphthalene	13.505	128	169409	20.00	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	51239	20.00	ug/L		97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 15:00:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene (I)	6.083	99	108585	50.00	ug/L		0.00	
43) Chlorobenzene-d5 (I)	9.800	117	257589	50.00	ug/L		0.00	
63) 1,4-Dichlorobenzene-d4...	11.759	152	120591	50.00	ug/L		0.00	
System Monitoring Compounds								
30) Dibromofluoromethane (S)	5.590	111	85376	50.00	ug/L		0.00	
37) 1,4-Difluorobenzene (S)	6.643	114	312074	50.00	ug/L		0.00	
45) Toluene-d8 (S)	8.164	98	363051	50.00	ug/L		0.00	
64) 4-Bromofluorobenzene (S)	10.877	174	93096	50.00	ug/L		0.00	
Target Compounds							Qvalue	
2) Dichlorodifluoromethane	1.685	85	38529	20.00	ug/L		99	
3) Chloromethane	1.886	50	58016	20.00	ug/L		98	
4) Vinyl Chloride	1.989	62	46537	20.00	ug/L		94	
5) Bromomethane	2.330	96	24661	20.00	ug/L		99	
6) Chloroethane	2.457	64	10213	20.00	ug/L		93	
7) Trichlorofluoromethane	2.585	101	16168	20.00	ug/L		94	
8) Ethanol	3.267	45	~~71306~~	~~1082.69~~	~~ug/L~~		~~92~~	MI
9) 1,1-Dichloroethene	3.133	61	50753	20.00	ug/L		94	
10) Carbon Disulfide	3.145	76	88914	20.00	ug/L		97	
11) Freon 113	3.187	101	39592	20.00	ug/L		99	
12) Iodomethane	3.285	142	7988	20.00	ug/L		87	
13) Methylene Chloride	3.772	84	43446	20.00	ug/L		98	
14) Acetone	3.857	43	~~40619~~	~~31.66~~	~~ug/L~~		~~99~~	MI
15) t-1,2-Dichloroethene	3.936	61	63531	20.00	ug/L		98	
16) n-Hexane	4.033	86	10258	20.00	ug/L	#	89	
17) Methyl-tert-butyl-ether	4.100	73	157914	20.00	ug/L		83	
18) tert-Butanol (TBA)	4.252	59	~~411040~~	~~632.87~~	~~ug/L~~	#	~~92~~	MI
19) Diisopropyl ether (DIPE)	4.495	45	37517	5.00	ug/L		96	
20) 1,1-Dichloroethane	4.575	63	74578	20.00	ug/L		98	
21) Acrylonitrile	4.629	53	~~23575~~	~~16.28~~	~~ug/L~~		~~98~~	MI
22) Ethyl-tert-butyl ether...	4.860	59	36823	5.00	ug/L		97	
23) c-1,2-Dichloroethene	5.122	61	62311	20.00	ug/L		99	
24) 2,2-Dichloropropane	5.232	77	68911	20.00	ug/L		98	
25) Bromochloromethane	5.317	49	37485	20.00	ug/L		91	
26) Chloroform	5.408	83	81758	20.00	ug/L		96	
27) Carbon Tetrachloride	5.548	117	59324	20.00	ug/L		97	
28) Tetrahydrofuran	5.578	42	26681	20.00	ug/L		92	
29) 1,1,1-Trichloroethane	5.615	97	77869	20.00	ug/L		97	
31) 1,1-Dichloropropene	5.743	75	65020	20.00	ug/L		93	
32) 2-Butanone (MEK)	5.724	43	80360	40.00	ug/L		99	
33) Benzene	5.998	78	199822	20.00	ug/L		99	
34) tert-Amyl methyl ether...	6.150	73	31171	5.00	ug/L		100	
35) 1,2-Dichloroethane (EDC)	6.199	62	71205	20.00	ug/L		98	
36) iso-Butyl Alcohol	6.272	43	~~55196~~	~~248.75~~	~~ug/L~~		~~90~~	MI
38) Trichloroethene (TCE)	6.613	130	48339	20.00	ug/L		93	
39) tert-Amyl ethyl ether ...	6.898	59	22830	5.00	ug/L		94	
40) Dibromomethane	7.057	93	28602	20.00	ug/L		93	
41) 1,2-Dichloropropane	7.166	63	46552	20.00	ug/L		93	
42) Bromodichloromethane	7.239	83	57072	20.00	ug/L		98	
44) c-1,3-Dichloropropene	7.945	75	69513	20.00	ug/L		99	
46) Toluene	8.219	91	202797	20.00	ug/L		99	
47) Tetrachloroethene (PCE)	8.669	166	49335	20.00	ug/L		94	
48) 4-Methyl-2-Pentanone (...	8.663	43	120371	40.00	ug/L		98	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

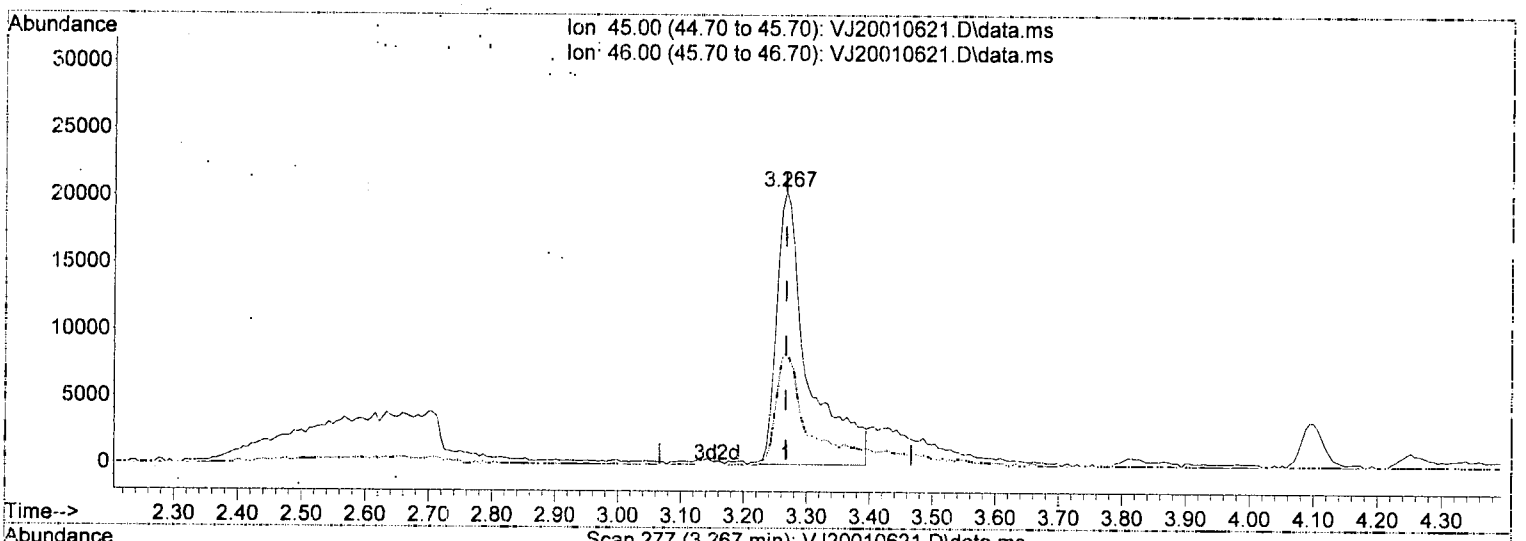
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	67947	20.00	ug/L		96
50) 1,1,2-Trichloroethane	8.870	97	42261	20.00	ug/L		96
51) Dibromochloromethane	9.058	129	38652	20.00	ug/L		99
52) 1,3-Dichloropropane	9.155	76	73561	20.00	ug/L		98
53) 1,2-Dibromoethane (EDB)	9.295	107	42367	20.00	ug/L		94
54) 2-Hexanone	9.539	43	86807	40.00	ug/L		96
55) Chlorobenzene	9.819	112	122718	20.00	ug/L		97
56) Ethylbenzene	9.849	91	213322	20.00	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	41303	20.00	ug/L		98
58) m,p-Xylenes (2)	9.989	91	316584	40.00	ug/L		98
59) o-Xylene	10.372	91	148399	20.00	ug/L		95
60) Styrene	10.415	104	105595	20.00	ug/L		97
61) Bromoform	10.433	173	27653	20.00	ug/L		97
62) Isopropylbenzene	10.646	105	187864	20.00	ug/L		98
65) Bromobenzene	10.956	156	46956	20.00	ug/L	#	84
66) n-Propylbenzene	10.987	91	224394	20.00	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.041	83	57542	20.00	ug/L		98
68) 2-Chlorotoluene	11.114	126	42921	20.00	ug/L		96
69) 1,3,5-Trimethylbenzene	11.151	105	161340	20.00	ug/L		95
70) 1,2,3-Trichloropropane	11.145	110	21237	20.00	ug/L		94
71) t-1,4-Dichloro-2-butene	11.181	88	8711	20.00	ug/L	#	86
72) 4-Chlorotoluene	11.242	91	132335	20.00	ug/L		95
73) tert-Butylbenzene	11.400	91	85895	20.00	ug/L		94
74) 1,2,4-Trimethylbenzene	11.455	105	161792	20.00	ug/L		98
75) sec-Butylbenzene	11.540	105	191481	20.00	ug/L		98
76) 4-Isopropyltoluene	11.650	119	159437	20.00	ug/L		98
77) 1,3-Dichlorobenzene	11.704	146	87350	20.00	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	86262	20.00	ug/L		96
79) n-Butylbenzene	11.966	91	137345	20.00	ug/L		96
80) 1,2-Dichlorobenzene	12.088	146	79965	20.00	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	14277	20.00	ug/L		84
82) Hexachlorobutadiene	13.213	223	12808	20.00	ug/L		94
83) 1,2,4-Trichlorobenzene	13.231	180	48617	20.00	ug/L		95
84) Naphthalene	13.505	128	169409	20.00	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	51239	20.00	ug/L		97

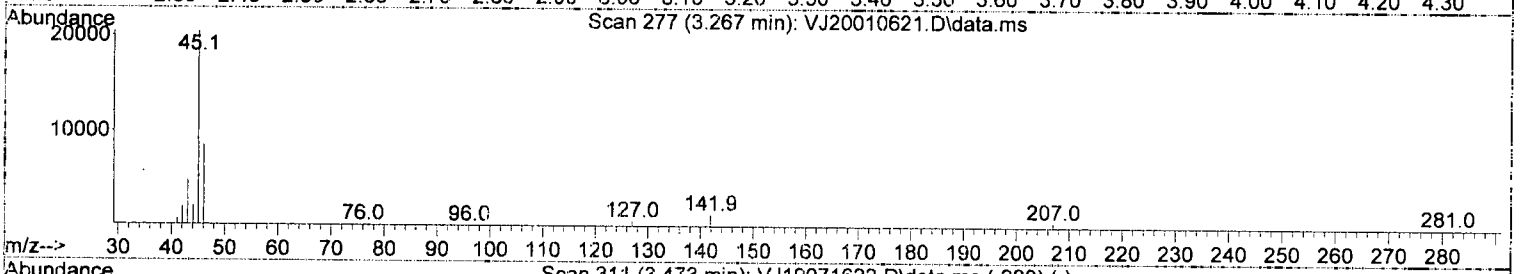
(#) = qualifier out of range (m) = manual integration (+) = signals summed

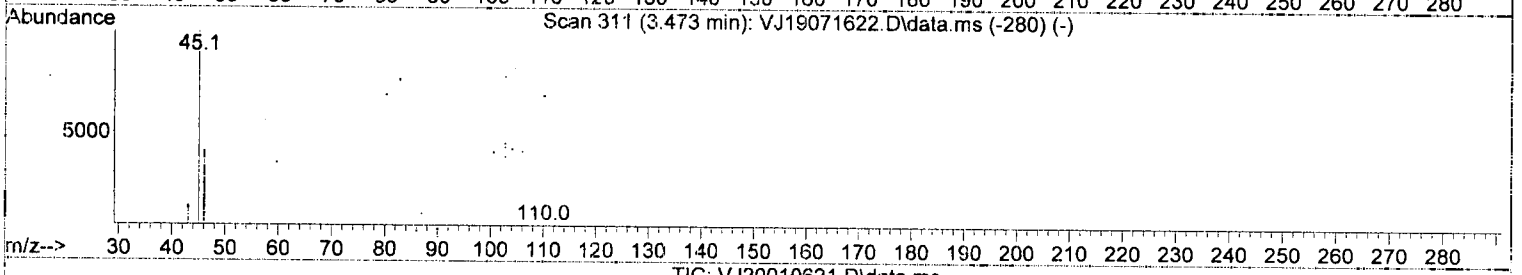
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(8) Ethanol

3.267min (+ 0.001) 1082.69 ug/L

response 71306

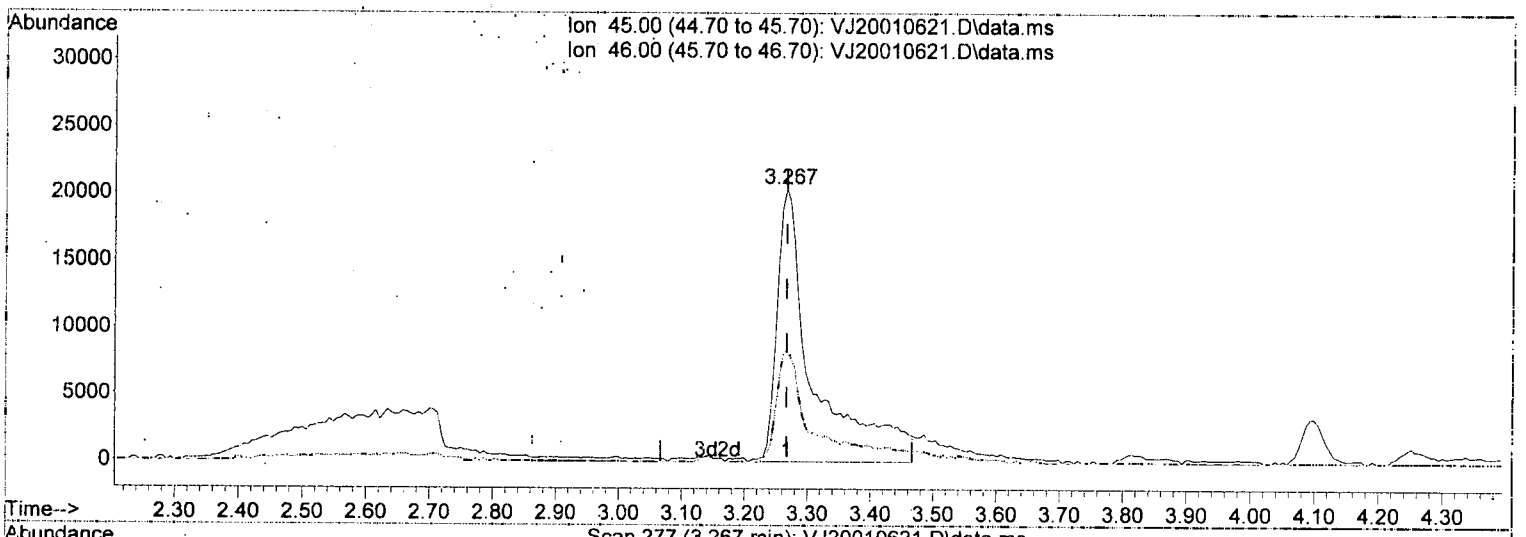
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	41.81
0.00	0.00	0.00
0.00	0.00	0.00

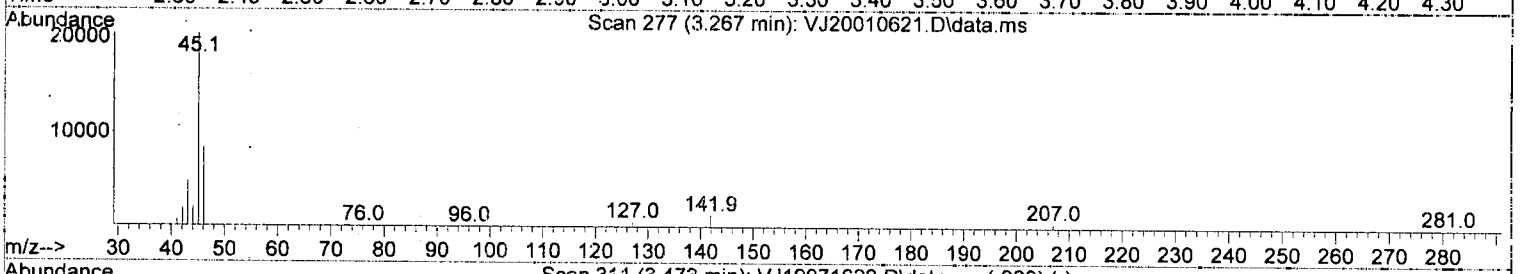
MI

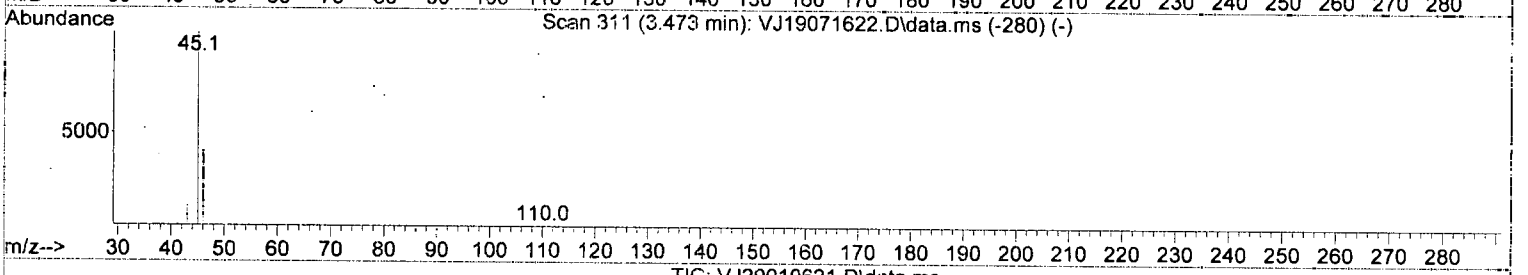
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(8) Ethanol

3.267min (+ 0.001) 1250.88 ug/L (m)

response 82383

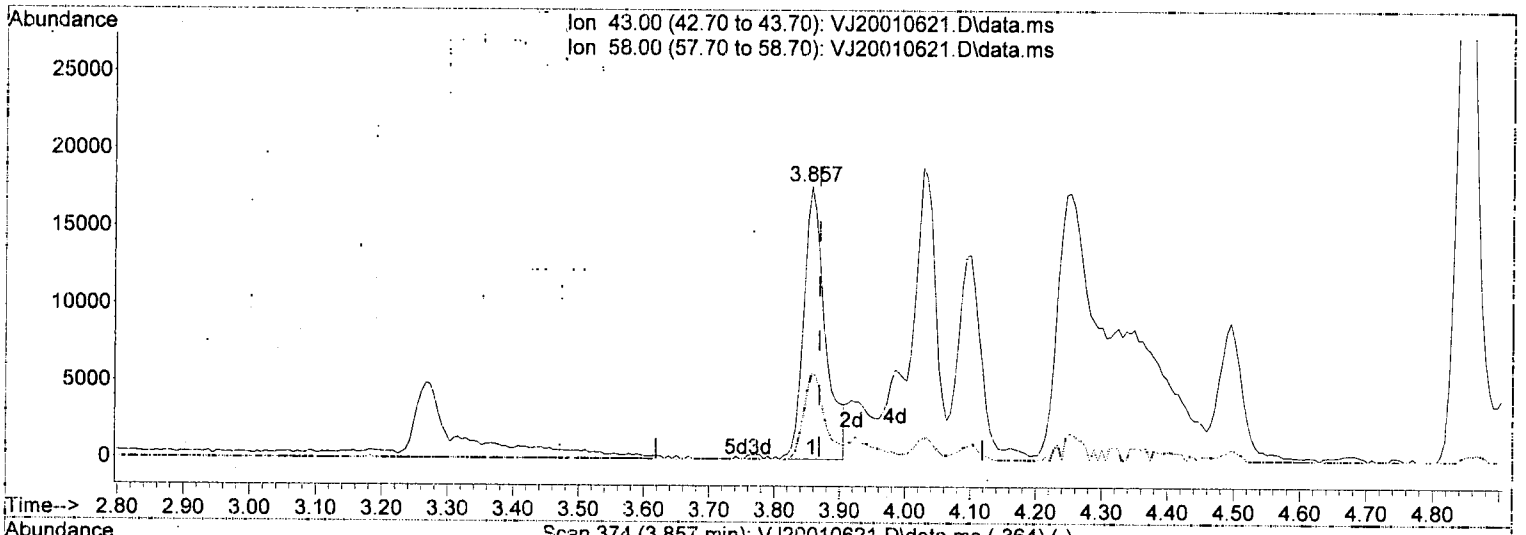
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	41.81
0.00	0.00	0.00
0.00	0.00	0.00

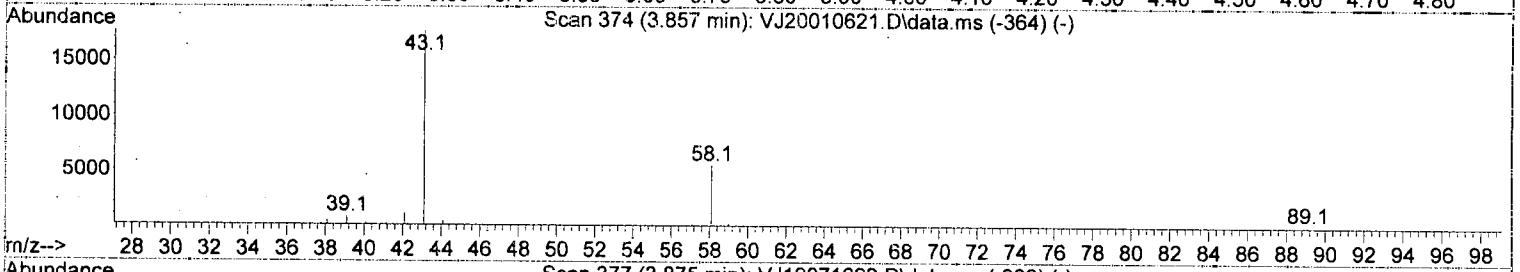
1/7/20

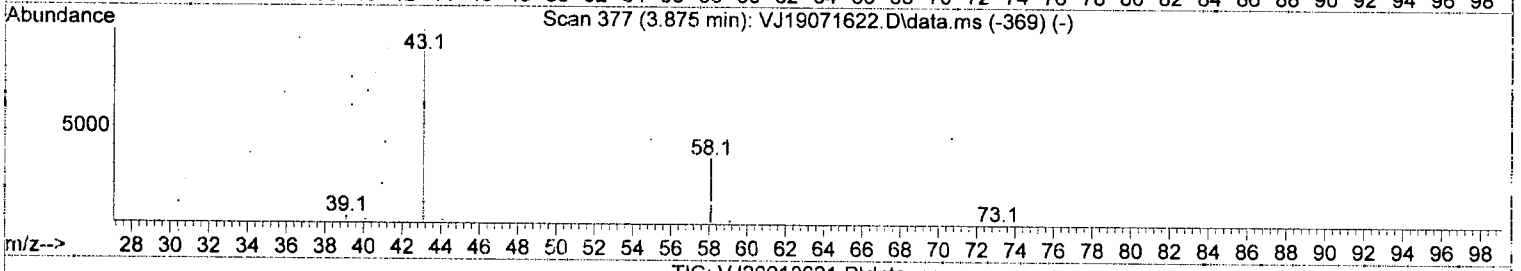
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL; 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(14) Acetone

3.857min (-0.011) 31.66 ug/L

response 40619

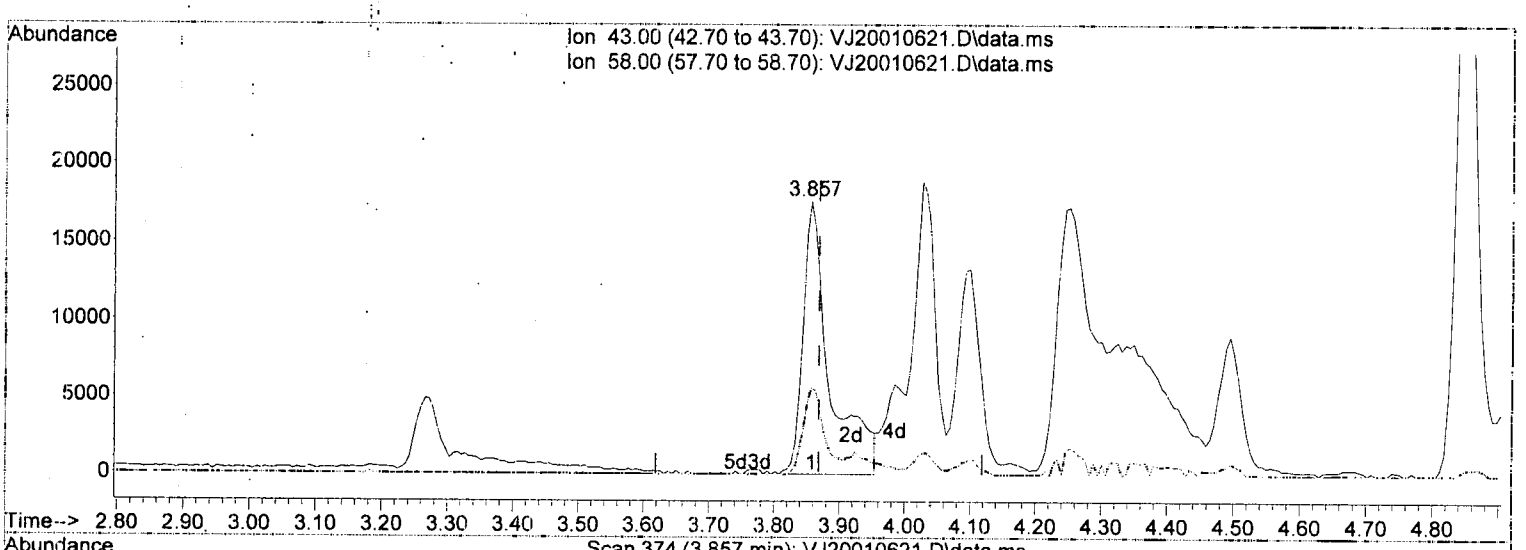
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.68
0.00	0.00	0.00
0.00	0.00	0.00

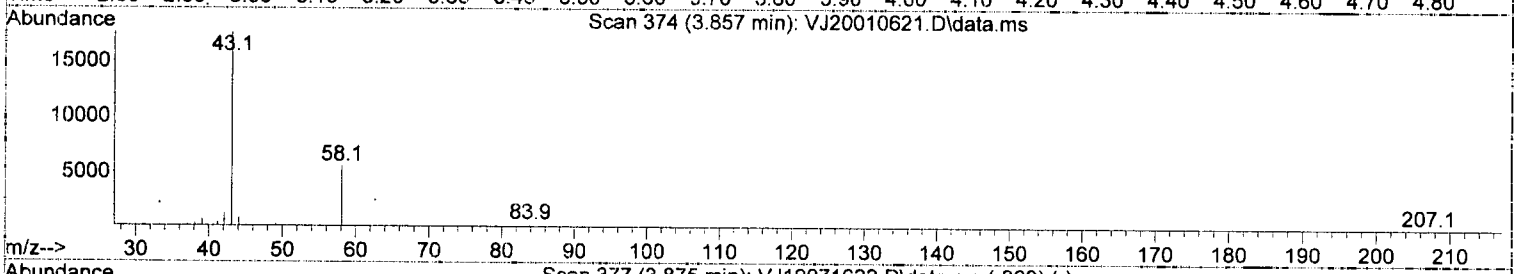
MI

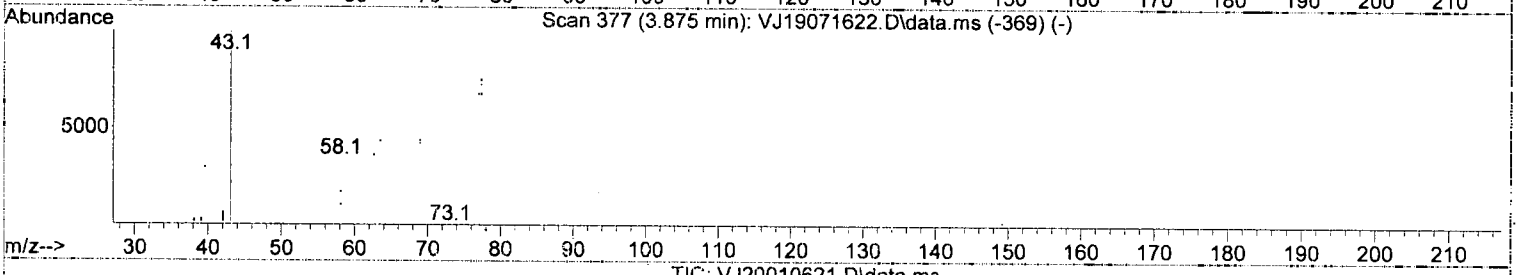
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL; 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(14) Acetone

3.857min (-0.011) 39.24 ug/L m

response 50344

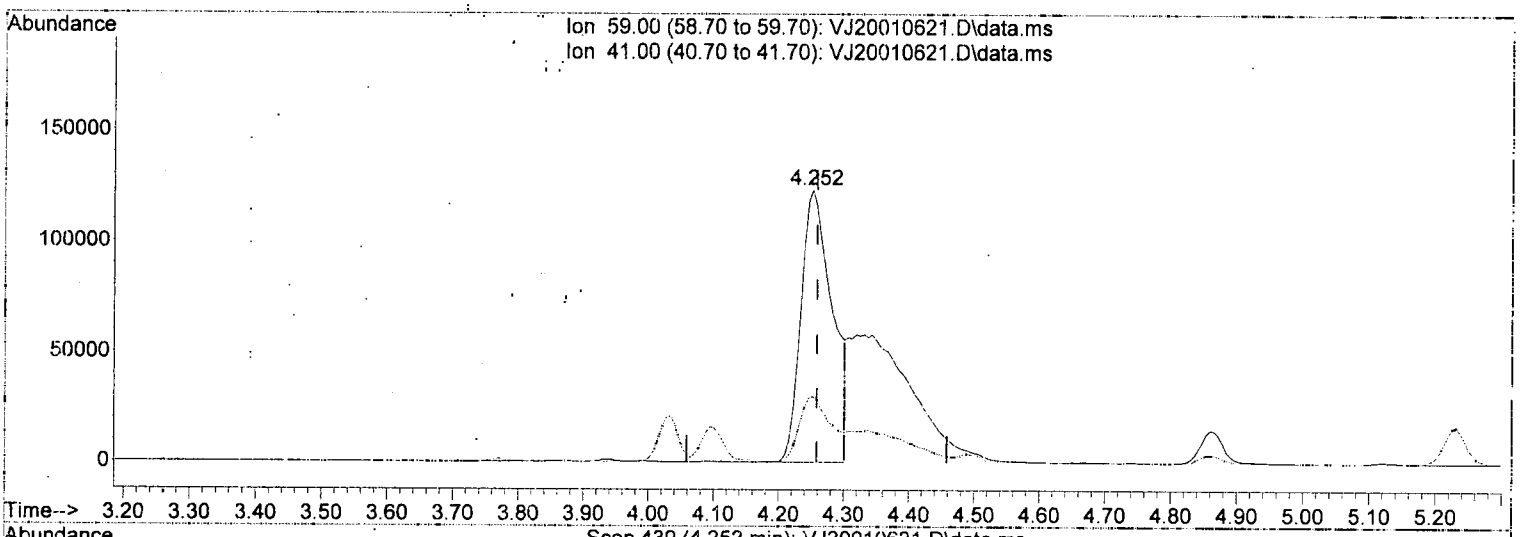
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.68
0.00	0.00	0.00
0.00	0.00	0.00

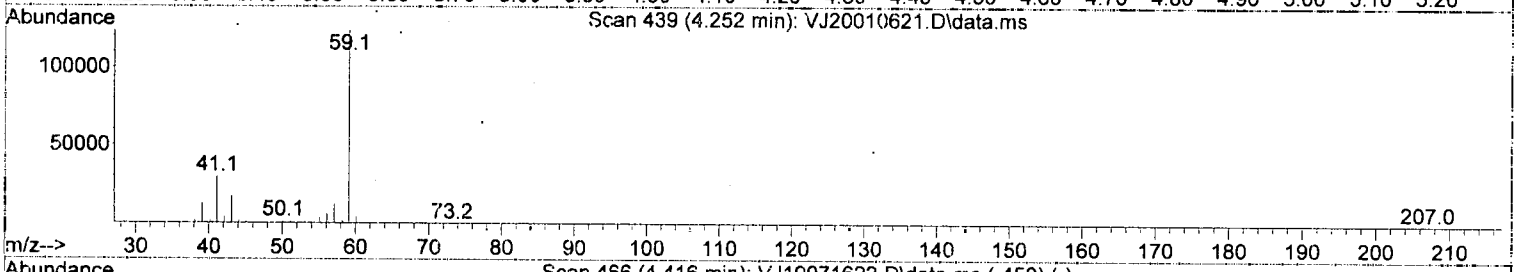
1/7/20

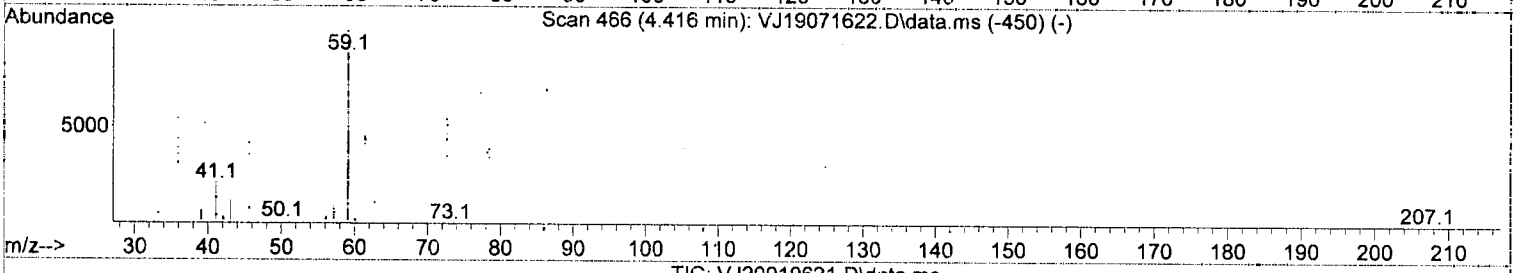
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 632.87 ug/L

response 411048

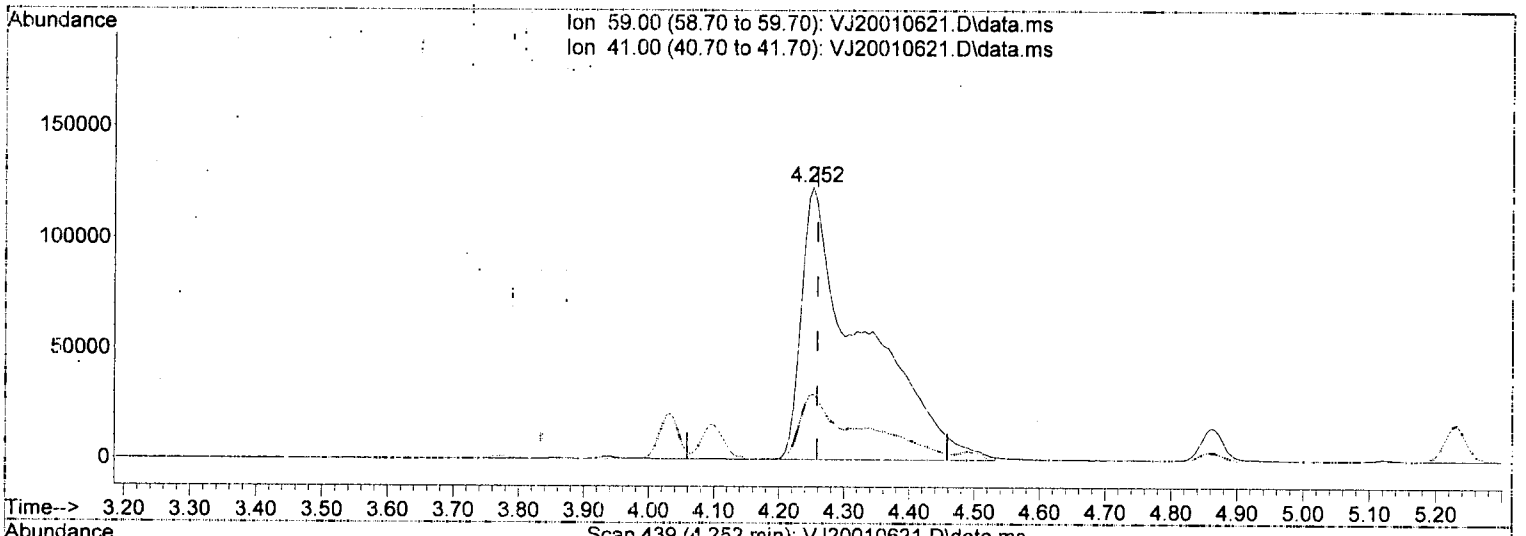
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	24.32#
0.00	0.00	0.00
0.00	0.00	0.00

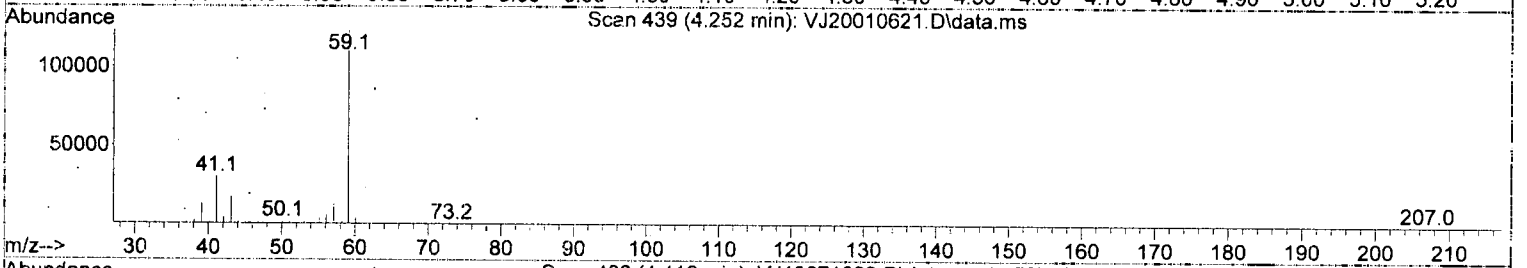
MI

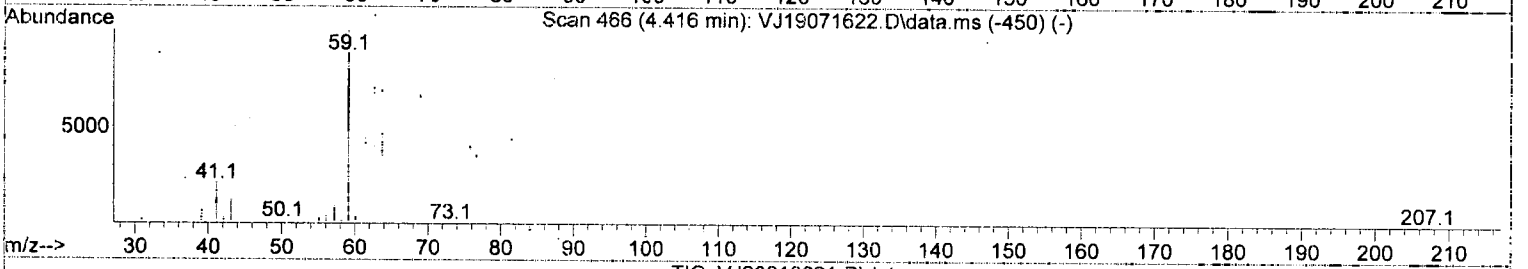
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 1248.06 ug/L (m)

response 810615

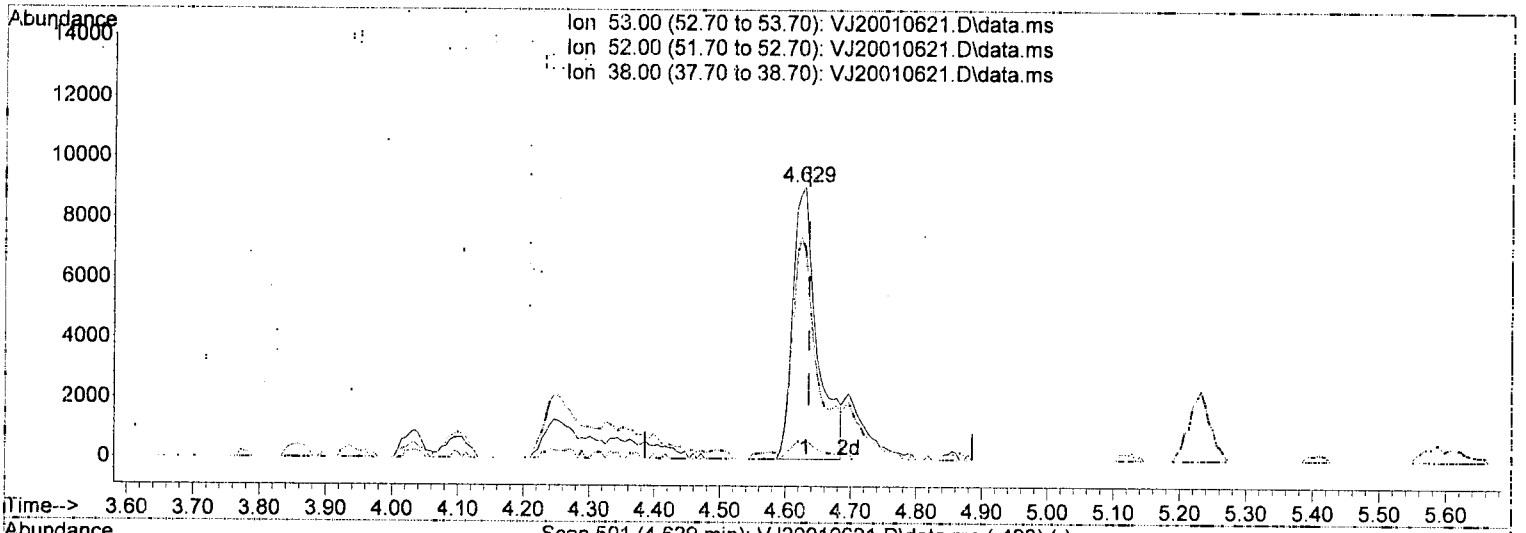
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	24.32#
0.00	0.00	0.00
0.00	0.00	0.00

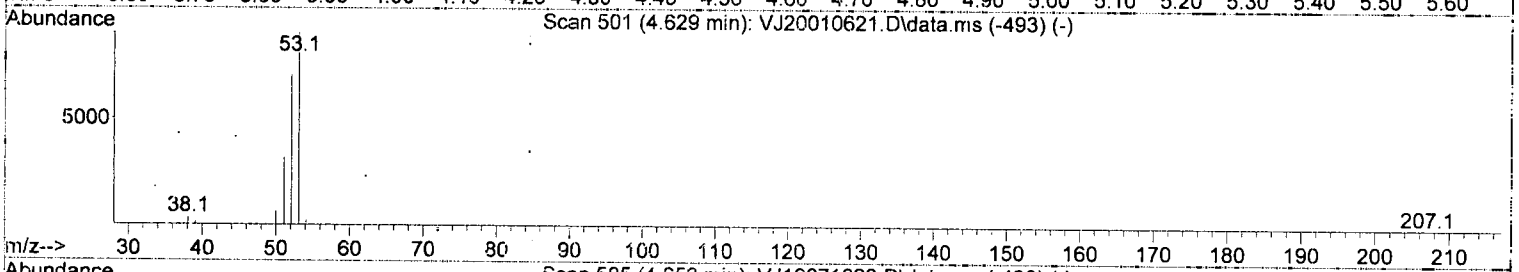
1/7/20

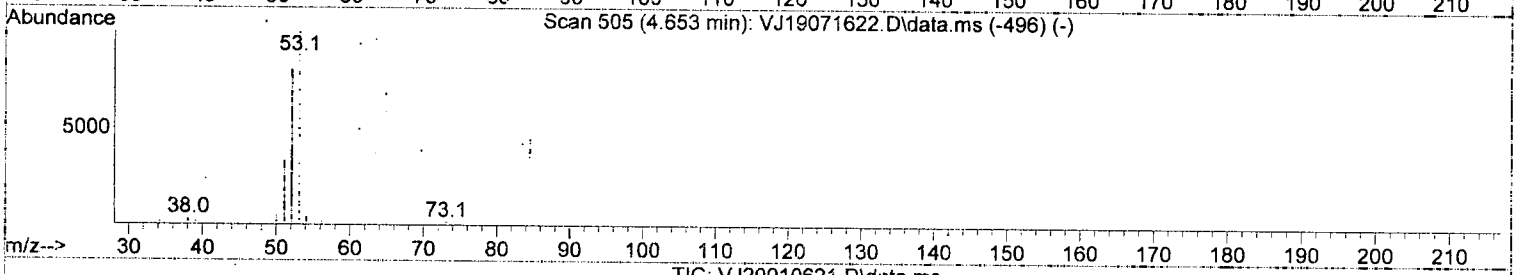
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 16.28 ug/L

response 23575

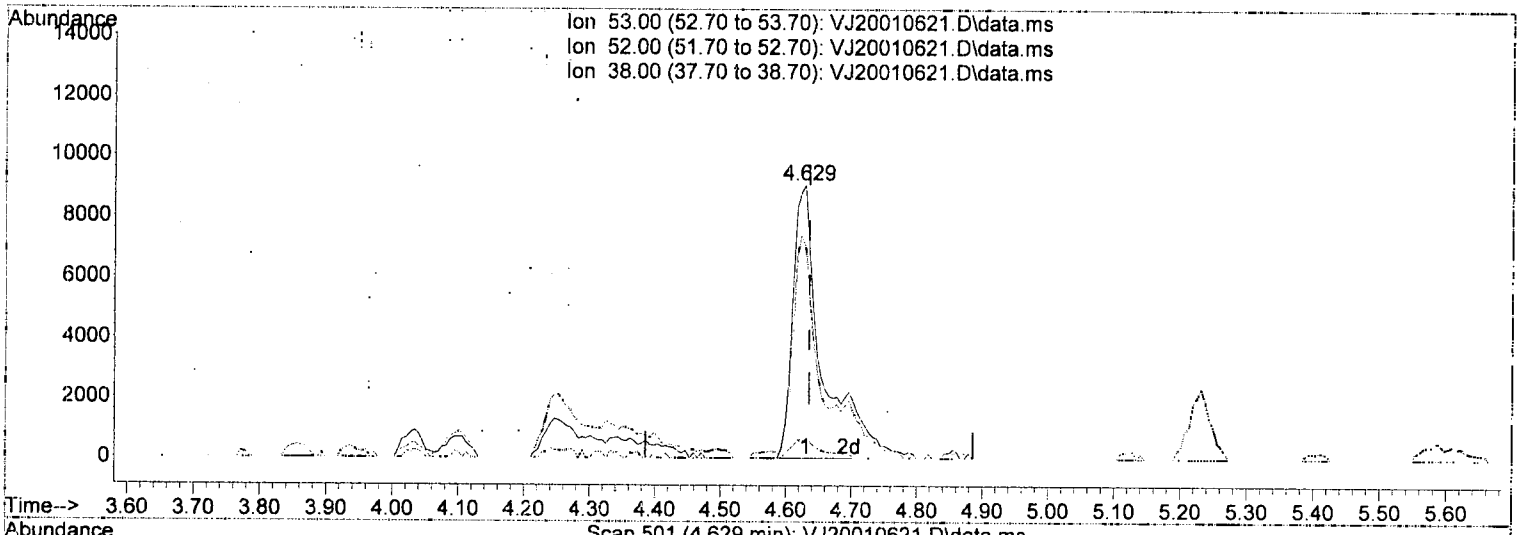
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.69
38.00	5.50	4.50
0.00	0.00	0.00

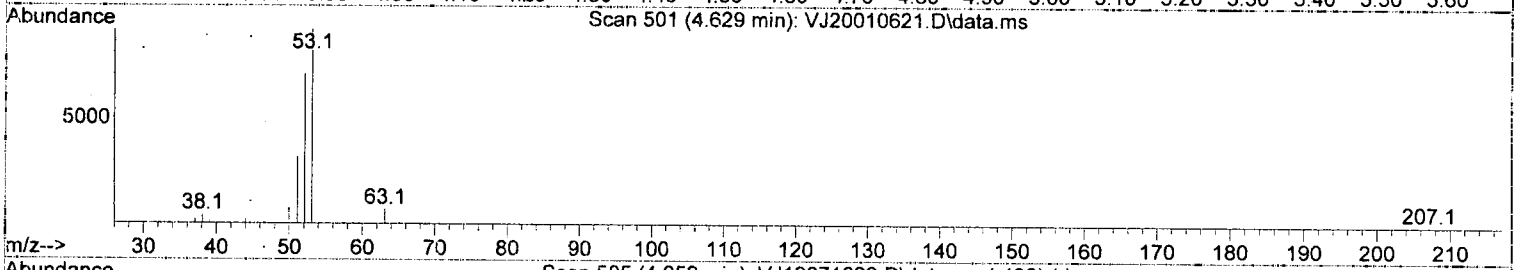
MI

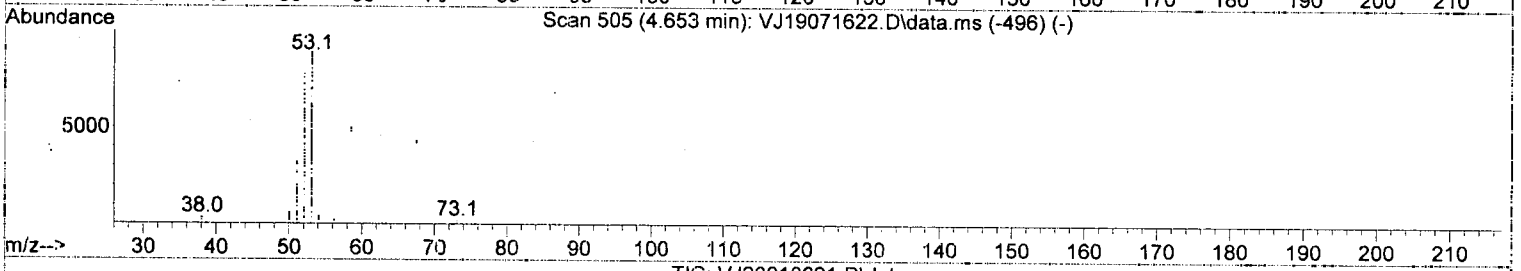
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 20.00 ug/L m

response 28955

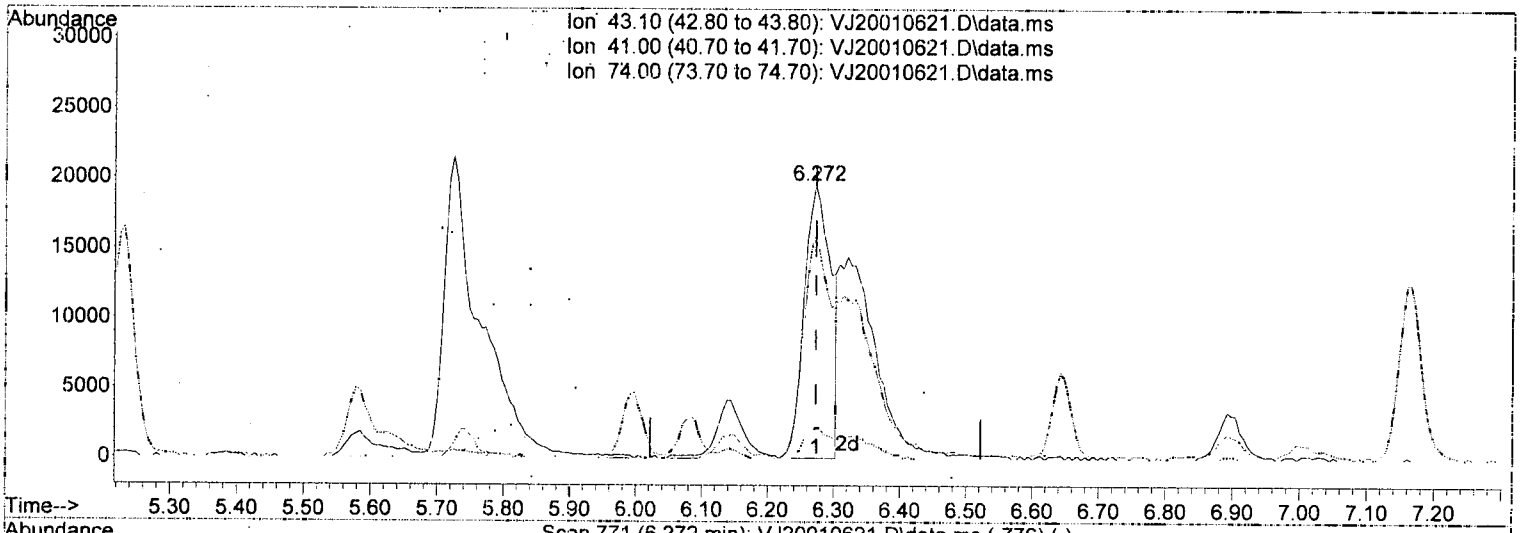
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.69
38.00	5.50	6.49
0.00	0.00	0.00

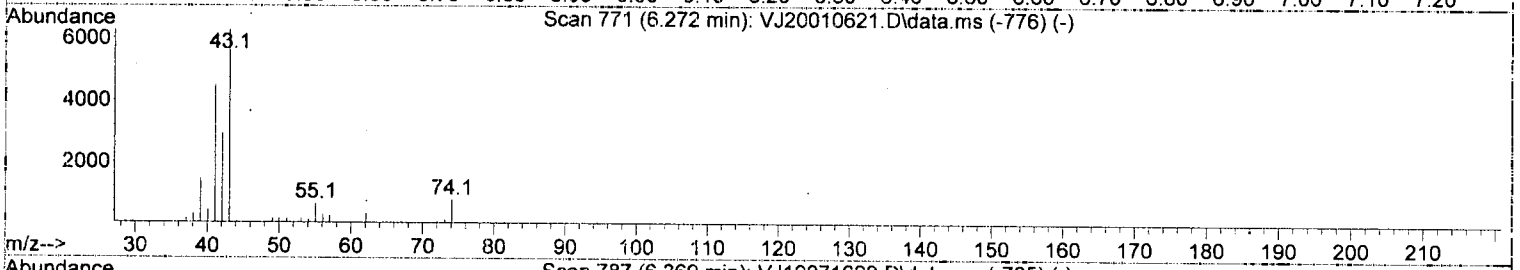
1/7/20

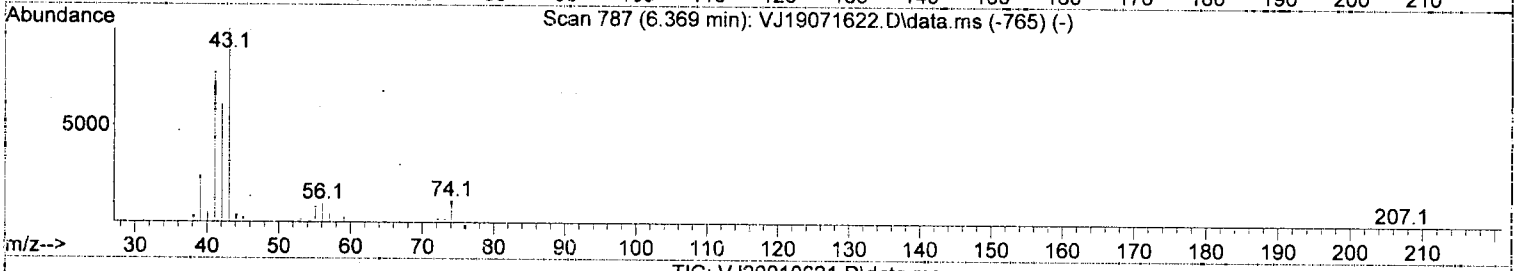
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(36) iso-Butyl Alcohol

6.272min (+ 0.000) 248.75 ug/L

response 55196

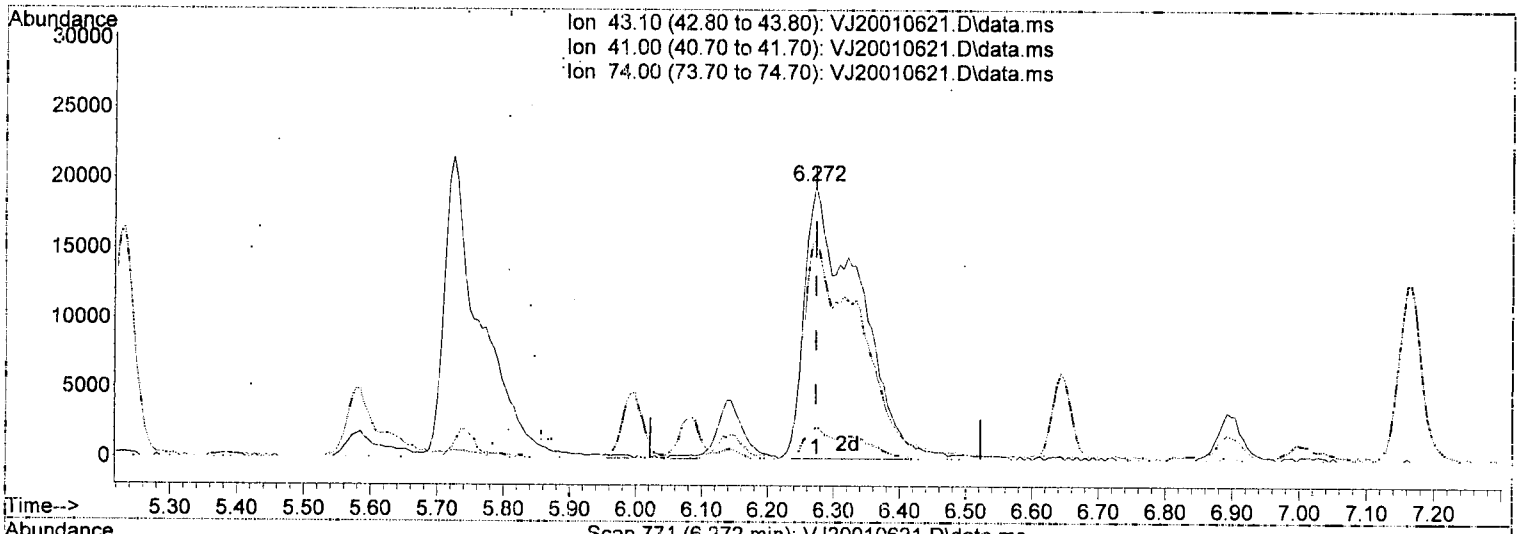
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	80.95
74.00	11.60	11.26
0.00	0.00	0.00

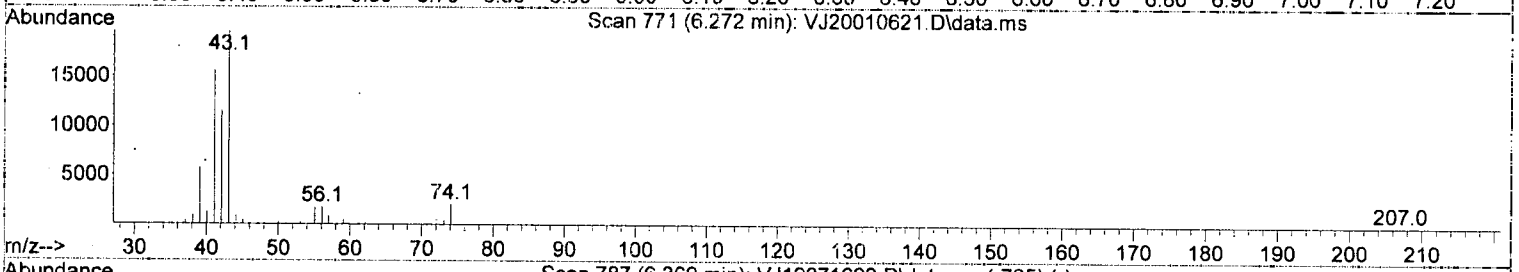
MI

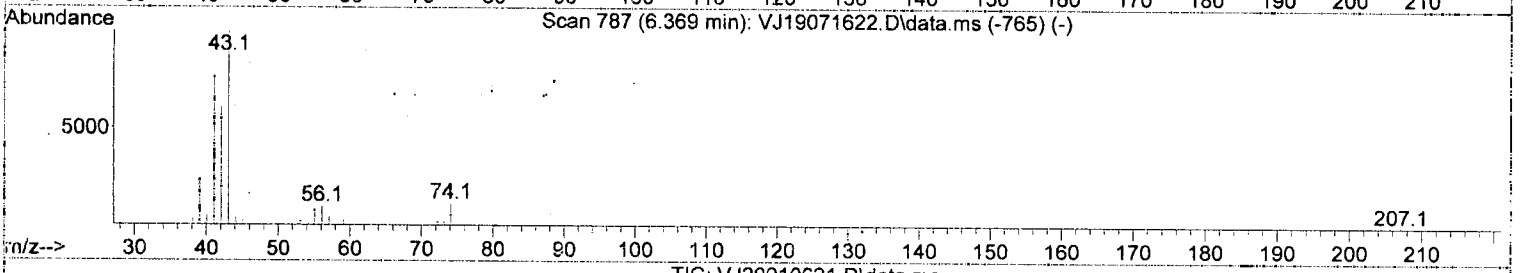
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(36) iso-Butyl Alcohol

6.272min (+ 0.000) 499.50 ug/L (m)

11/7/20

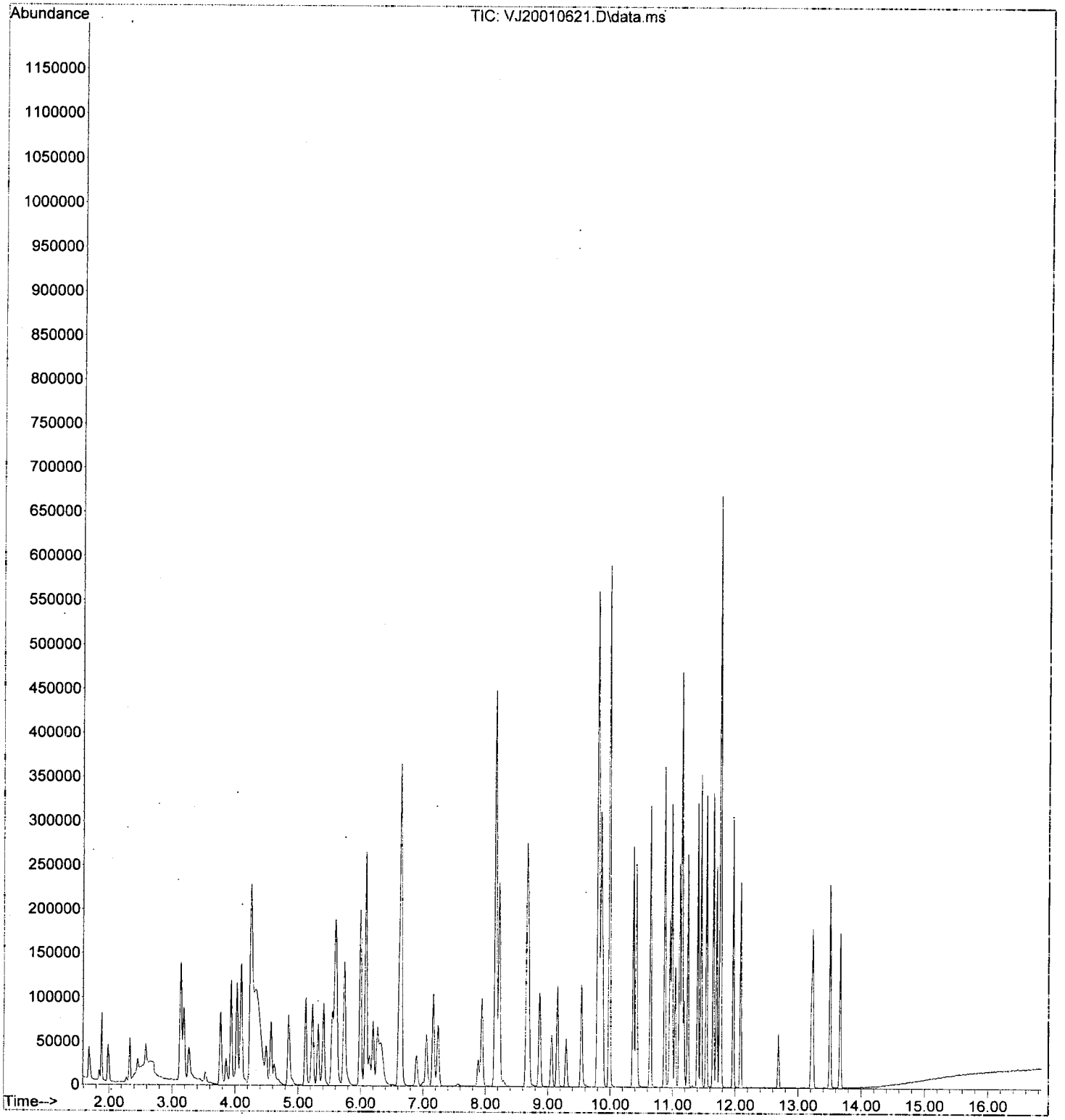
response 110835

Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	80.95
74.00	11.60	11.26
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

1/7/20

Quant Time: Jan 07 15:01:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	109944	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	263462	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	127339	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88107	50.96	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	323337	51.16	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366647	49.37	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	98126	49.91	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	133544	68.46	ug/L		98
3) Chloromethane	1.885	50	167097	56.89	ug/L		99
4) Vinyl Chloride	1.989	62	134342	57.02	ug/L		94
5) Bromomethane	2.336	96	56169	44.99	ug/L		96
6) Chloroethane	2.457	64	30532	59.05	ug/L		98
7) Trichlorofluoromethane	2.591	101	45598	55.71	ug/L		100
8) Ethanol	3.273	45	170551m	2557.59	ug/L		
9) 1,1-Dichloroethene	3.133	61	135159	52.60	ug/L		97
10) Carbon Disulfide	3.145	76	244493	54.32	ug/L		98
11) Freon 113	3.187	101	103618	51.70	ug/L		99
12) Iodomethane	3.291	142	29149	72.08	ug/L		92
13) Methylene Chloride	3.771	84	110204	50.10	ug/L		98
14) Acetone	3.857	43	142899m	110.00	ug/L		
15) t-1,2-Dichloroethene	3.942	61	165597	51.49	ug/L		98
16) n-Hexane	4.033	86	28595	55.06	ug/L		94
17) Methyl-tert-butyl-ether	4.100	73	417641	52.24	ug/L		73
18) tert-Butanol (TBA)	4.252	59	1662623	2528.20	ug/L	#	89
19) Diisopropyl ether (DIPE)	4.495	45	71778	9.45	ug/L		98
20) 1,1-Dichloroethane	4.574	63	199104	52.73	ug/L		99
21) Acrylonitrile	4.623	53	76346	52.08	ug/L		93
22) Ethyl-tert-butyl ether...	4.866	59	67581	9.06	ug/L		96
23) c-1,2-Dichloroethene	5.122	61	163860	51.94	ug/L		99
24) 2,2-Dichloropropane	5.231	77	178479	51.16	ug/L		100
25) Bromochloromethane	5.323	49	96440	50.82	ug/L		96
26) Chloroform	5.408	83	212235	51.28	ug/L		97
27) Carbon Tetrachloride	5.548	117	163003	54.27	ug/L		96
28) Tetrahydrofuran	5.578	42	71504	52.94	ug/L		96
29) 1,1,1-Trichloroethane	5.615	97	203751	51.68	ug/L		98
31) 1,1-Dichloropropene	5.742	75	173054	52.57	ug/L		95
32) 2-Butanone (MEK)	5.724	43	212809	104.62	ug/L		99
33) Benzene	5.998	78	519107	51.31	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	61806	9.79	ug/L		100
35) 1,2-Dichloroethane (EDC)	6.199	62	182611	50.66	ug/L		98
36) iso-Butyl Alcohol	6.272	43	313482	1395.31	ug/L		96
38) Trichloroethene (TCE)	6.612	130	127363	52.04	ug/L		98
39) tert-Amyl ethyl ether ...	6.898	59	46132	9.98	ug/L		90
40) Dibromomethane	7.056	93	74740	51.62	ug/L		93
41) 1,2-Dichloropropane	7.166	63	124220	52.71	ug/L		94
42) Bromodichloromethane	7.239	83	156309	54.10	ug/L		98
44) c-1,3-Dichloropropene	7.945	75	179213	50.41	ug/L		100
46) Toluene	8.218	91	527429	50.86	ug/L		99
47) Tetrachloroethene (PCE)	8.669	166	128862	51.08	ug/L		93
48) 4-Methyl-2-Pentanone (...	8.663	43	335118	108.88	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 15:01:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

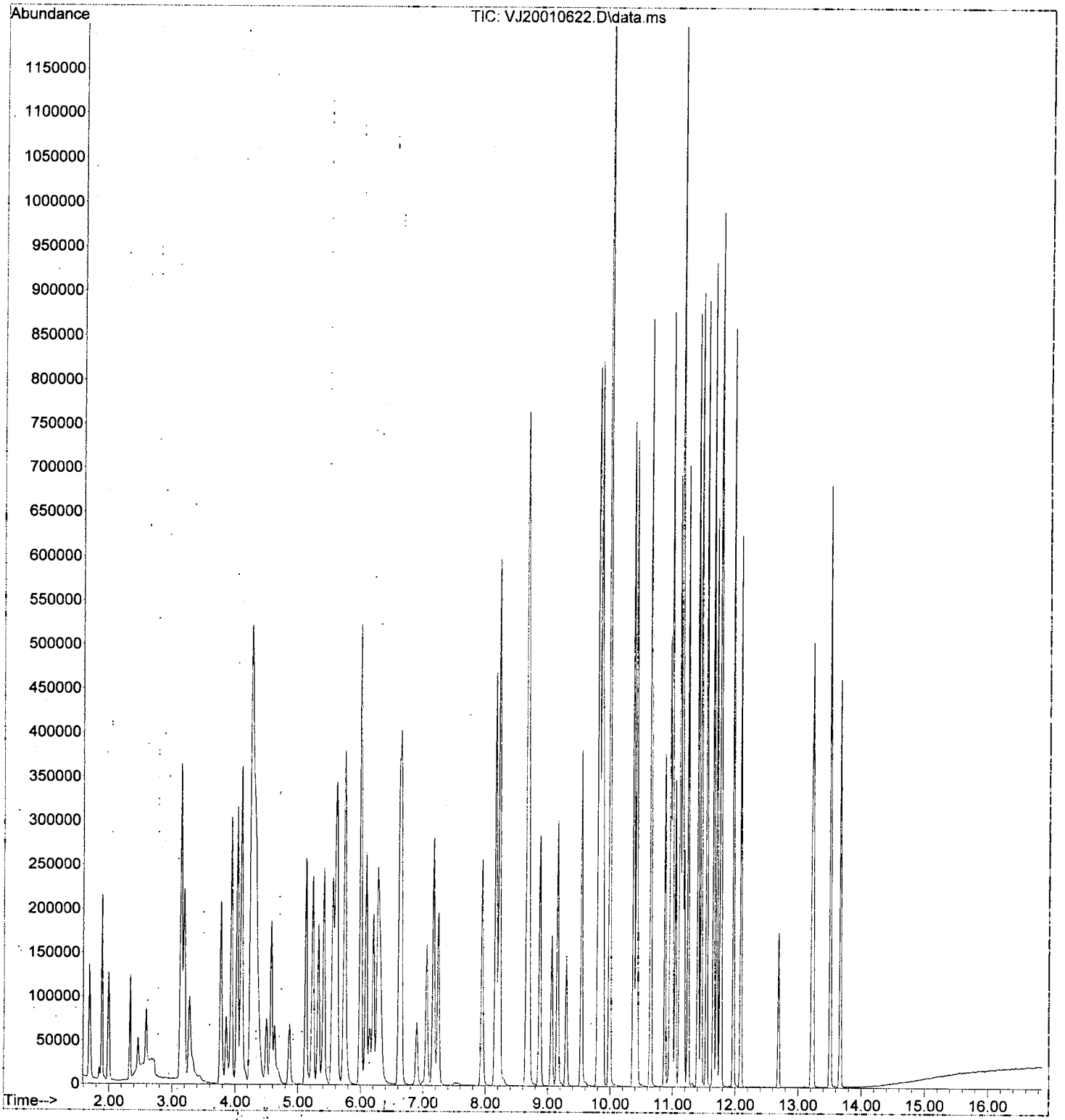
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	181998	52.38	ug/L	98
50) 1,1,2-Trichloroethane	8.869	97	108807	50.36	ug/L	97
51) Dibromochloromethane	9.058	129	107752	54.51	ug/L	98
52) 1,3-Dichloropropane	9.155	76	197608	52.53	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	115102	53.12	ug/L	97
54) 2-Hexanone	9.539	43	255220	114.98	ug/L	99
55) Chlorobenzene	9.812	112	316184	50.38	ug/L	97
56) Ethylbenzene	9.849	91	565519	51.84	ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.879	131	111798	52.93	ug/L	99
58) m,p-Xylenes (2)	9.989	91	841910	104.00	ug/L	98
59) o-Xylene	10.372	91	410782	54.13	ug/L	96
60) Styrene	10.415	104	305455	56.56	ug/L	97
61) Bromoform	10.433	173	78801	55.72	ug/L	98
62) Isopropylbenzene	10.646	105	518688	53.99	ug/L	98
65) Bromobenzene	10.956	156	125364	50.57	ug/L	87
66) n-Propylbenzene	10.986	91	599088	50.57	ug/L	96
67) 1,1,2,2-Tetrachloroethane	11.041	83	148641	48.93	ug/L	98
68) 2-Chlorotoluene	11.114	126	113827	50.23	ug/L	96
69) 1,3,5-Trimethylbenzene	11.151	105	430440	50.53	ug/L	98
70) 1,2,3-Trichloropropane	11.145	110	55741	49.71	ug/L	89
71) t-1,4-Dichloro-2-butene	11.181	88	25245	54.89	ug/L	92
72) 4-Chlorotoluene	11.242	91	353161	50.55	ug/L	94
73) tert-Butylbenzene	11.400	91	232884	51.35	ug/L	93
74) 1,2,4-Trimethylbenzene	11.455	105	429588	50.29	ug/L	99
75) sec-Butylbenzene	11.540	105	513113	50.75	ug/L	97
76) 4-Isopropyltoluene	11.650	119	441545	52.45	ug/L	98
77) 1,3-Dichlorobenzene	11.704	146	225400	48.87	ug/L	97
78) 1,4-Dichlorobenzene	11.771	146	227356	49.92	ug/L	97
79) n-Butylbenzene	11.966	91	378474	52.19	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	211241	50.03	ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	40894	54.25	ug/L	81
82) Hexachlorobutadiene	13.213	223	33881	50.10	ug/L	96
83) 1,2,4-Trichlorobenzene	13.231	180	136960	53.36	ug/L	97
84) Naphthalene	13.505	128	494428	55.28	ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	140414	51.90	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 15:01:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

B 1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	109944	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	263462	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	127339	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88107	50.96	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	323337	51.16	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366647	49.37	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	98126	49.91	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	133544	68.46	ug/L		98
3) Chloromethane	1.885	50	167097	56.89	ug/L		99
4) Vinyl Chloride	1.989	62	134342	57.02	ug/L		94
5) Bromomethane	2.336	96	56169	44.99	ug/L		96
6) Chloroethane	2.457	64	30532	59.05	ug/L		98
7) Trichlorofluoromethane	2.591	101	45598	55.71	ug/L		100
8) Ethanol	3.273	45	~~166638~~	~~2498.91~~	~~ug/L~~		~~90~~ MI
9) 1,1-Dichloroethene	3.133	61	135159	52.60	ug/L		97
10) Carbon Disulfide	3.145	76	244493	54.32	ug/L		98
11) Freon 113	3.187	101	103618	51.70	ug/L		99
12) Iodomethane	3.291	142	29149	72.08	ug/L		92
13) Methylene Chloride	3.771	84	110204	50.10	ug/L		98
14) Acetone	3.857	43	~~104777~~	~~80.65~~	~~ug/L~~		~~98~~ MI
15) t-1,2-Dichloroethene	3.942	61	165597	51.49	ug/L		98
16) n-Hexane	4.033	86	28595	55.06	ug/L		94
17) Methyl-tert-butyl-ether	4.100	73	417641	52.24	ug/L		73
18) tert-Butanol (TBA)	4.252	59	1662623	2528.20	ug/L	#	89
19) Diisopropyl ether (DIPE)	4.495	45	71778	9.45	ug/L		98
20) 1,1-Dichloroethane	4.574	63	199104	52.73	ug/L		99
21) Acrylonitrile	4.623	53	76346	52.08	ug/L		93
22) Ethyl-tert-butyl ether...	4.866	59	67581	9.06	ug/L		96
23) c-1,2-Dichloroethene	5.122	61	163860	51.94	ug/L		99
24) 2,2-Dichloropropane	5.231	77	178479	51.16	ug/L		100
25) Bromochloromethane	5.323	49	96440	50.82	ug/L		96
26) Chloroform	5.408	83	212235	51.28	ug/L		97
27) Carbon Tetrachloride	5.548	117	163003	54.27	ug/L		96
28) Tetrahydrofuran	5.578	42	71504	52.94	ug/L		96
29) 1,1,1-Trichloroethane	5.615	97	203751	51.68	ug/L		98
31) 1,1-Dichloropropene	5.742	75	173054	52.57	ug/L		95
32) 2-Butanone (MEK)	5.724	43	212809	104.62	ug/L		99
33) Benzene	5.998	78	519107	51.31	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	61806	9.79	ug/L		100
35) 1,2-Dichloroethane (EDC)	6.199	62	182611	50.66	ug/L		98
36) iso-Butyl Alcohol	6.272	43	313482	1395.31	ug/L		96
38) Trichloroethene (TCE)	6.612	130	127363	52.04	ug/L		98
39) tert-Amyl ethyl ether ...	6.898	59	46132	9.98	ug/L		90
40) Dibromomethane	7.056	93	74740	51.62	ug/L		93
41) 1,2-Dichloropropane	7.166	63	124220	52.71	ug/L		94
42) Bromodichloromethane	7.239	83	156309	54.10	ug/L		98
44) c-1,3-Dichloropropene	7.945	75	179213	50.41	ug/L		100
46) Toluene	8.218	91	527429	50.86	ug/L		99
47) Tetrachloroethene (PCE)	8.669	166	128862	51.08	ug/L		93
48) 4-Methyl-2-Pentanone (...	8.663	43	335118	108.88	ug/L		97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

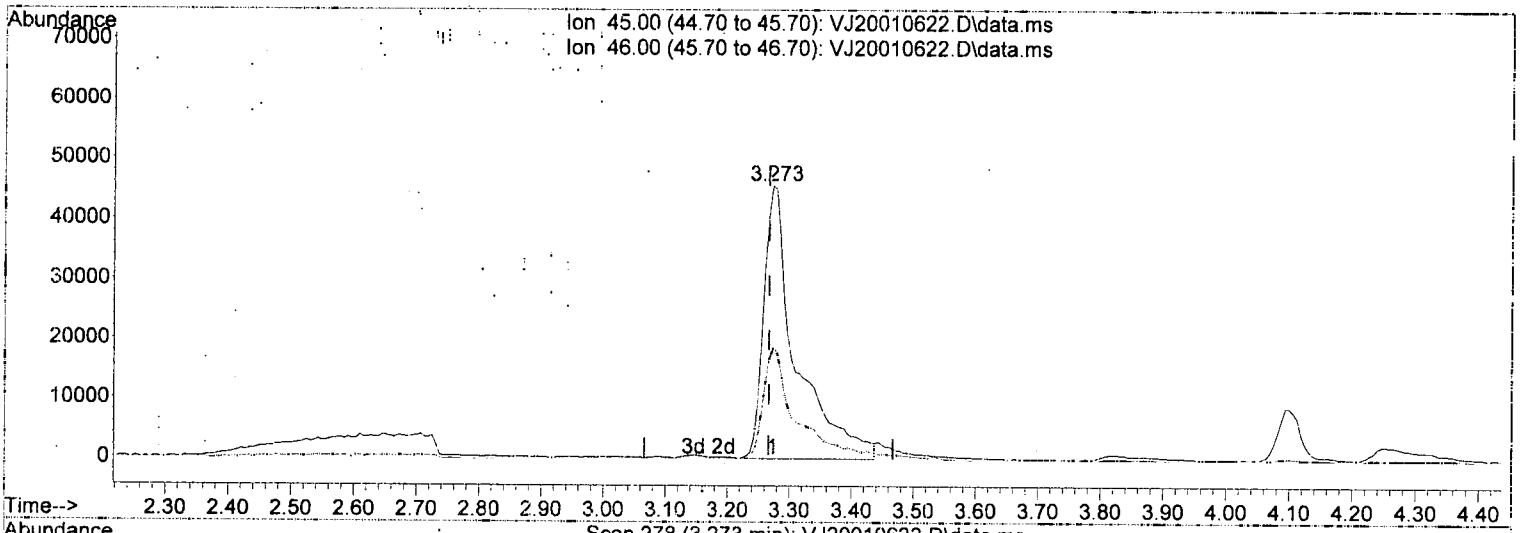
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	181998	52.38	ug/L	98
50) 1,1,2-Trichloroethane	8.869	97	108807	50.35	ug/L	97
51) Dibromochloromethane	9.058	129	107752	54.51	ug/L	98
52) 1,3-Dichloropropane	9.155	76	197608	52.53	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	115102	53.12	ug/L	97
54) 2-Hexanone	9.539	43	255220	114.98	ug/L	99
55) Chlorobenzene	9.812	112	316184	50.38	ug/L	97
56) Ethylbenzene	9.849	91	565519	51.84	ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.879	131	111798	52.93	ug/L	99
58) m,p-Xylenes (2)	9.989	91	841910	104.00	ug/L	98
59) o-Xylene	10.372	91	410782	54.13	ug/L	96
60) Styrene	10.415	104	305455	56.56	ug/L	97
61) Bromoform	10.433	173	78801	55.72	ug/L	98
62) Isopropylbenzene	10.646	105	518688	53.99	ug/L	98
65) Bromobenzene	10.956	156	125364	50.57	ug/L	87
66) n-Propylbenzene	10.986	91	599088	50.57	ug/L	96
67) 1,1,2,2-Tetrachloroethane	11.041	83	148641	48.93	ug/L	98
68) 2-Chlorotoluene	11.114	126	113827	50.23	ug/L	96
69) 1,3,5-Trimethylbenzene	11.151	105	430440	50.53	ug/L	98
70) 1,2,3-Trichloropropane	11.145	110	55741	49.71	ug/L	89
71) t-1,4-Dichloro-2-butene	11.181	88	25245	54.89	ug/L	92
72) 4-Chlorotoluene	11.242	91	353161	50.55	ug/L	94
73) tert-Butylbenzene	11.400	91	232884	51.35	ug/L	93
74) 1,2,4-Trimethylbenzene	11.455	105	429588	50.29	ug/L	99
75) sec-Butylbenzene	11.540	105	513113	50.75	ug/L	97
76) 4-Isopropyltoluene	11.650	119	441545	52.45	ug/L	98
77) 1,3-Dichlorobenzene	11.704	146	225400	48.87	ug/L	97
78) 1,4-Dichlorobenzene	11.771	146	227356	49.92	ug/L	97
79) n-Butylbenzene	11.966	91	378474	52.19	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	211241	50.03	ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	40894	54.25	ug/L	81
82) Hexachlorobutadiene	13.213	223	33881	50.10	ug/L	96
83) 1,2,4-Trichlorobenzene	13.231	180	136960	53.36	ug/L	97
84) Naphthalene	13.505	128	494428	55.28	ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	140414	51.90	ug/L	97

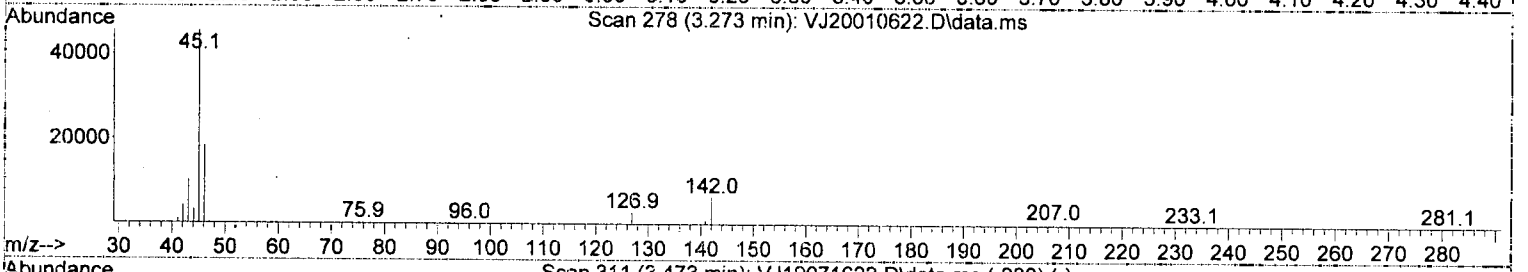
(#) = qualifier out of range (m) = manual integration (+) = signals summed

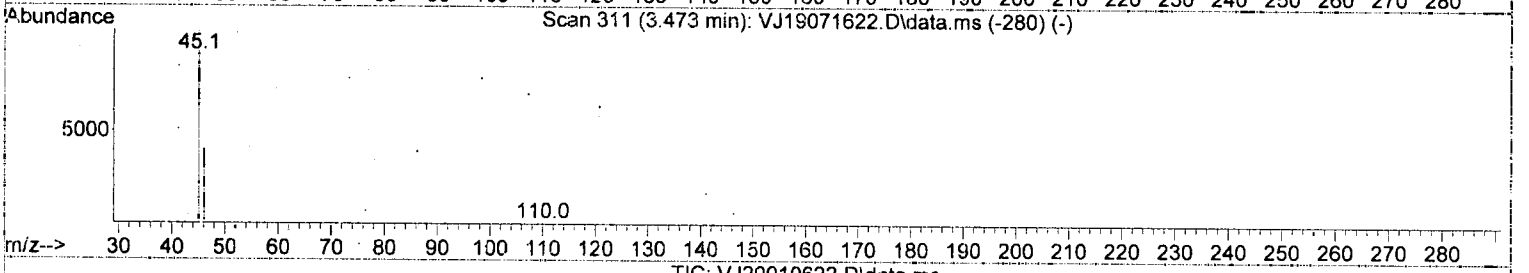
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL; 50ppb; DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010622.D\data.ms

(8) Ethanol

3.273min (+ 0.006) 2498.91 ug/L

response 166638

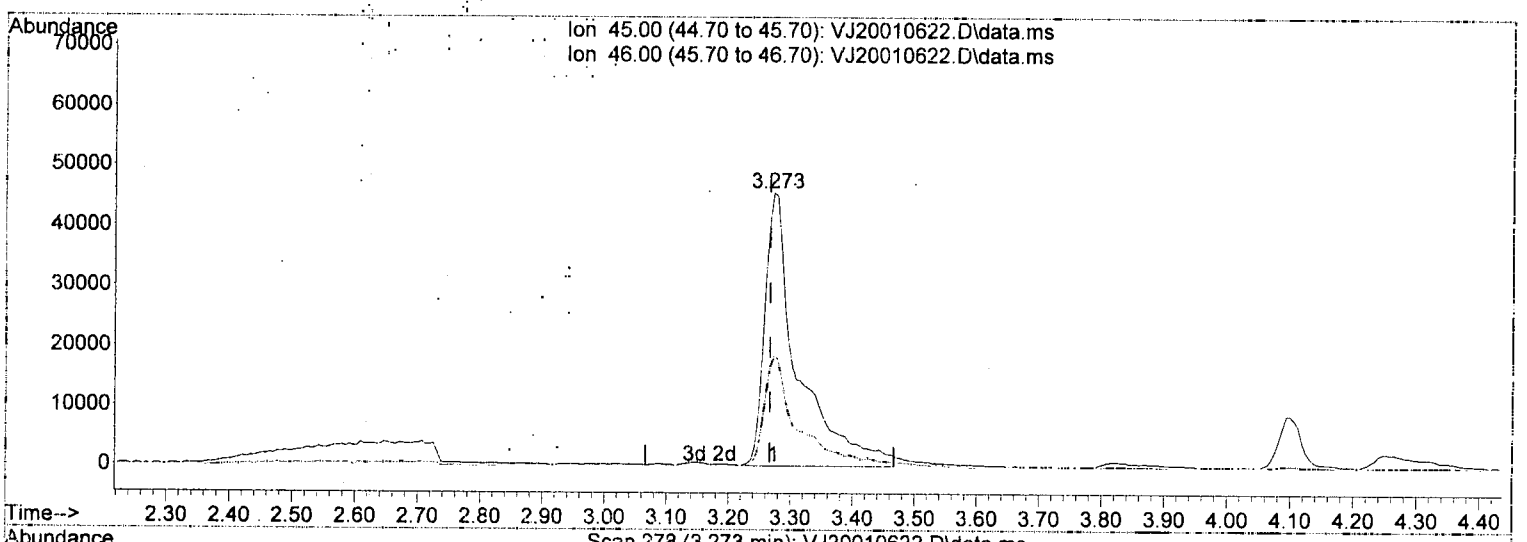
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	40.54
0.00	0.00	0.00
0.00	0.00	0.00

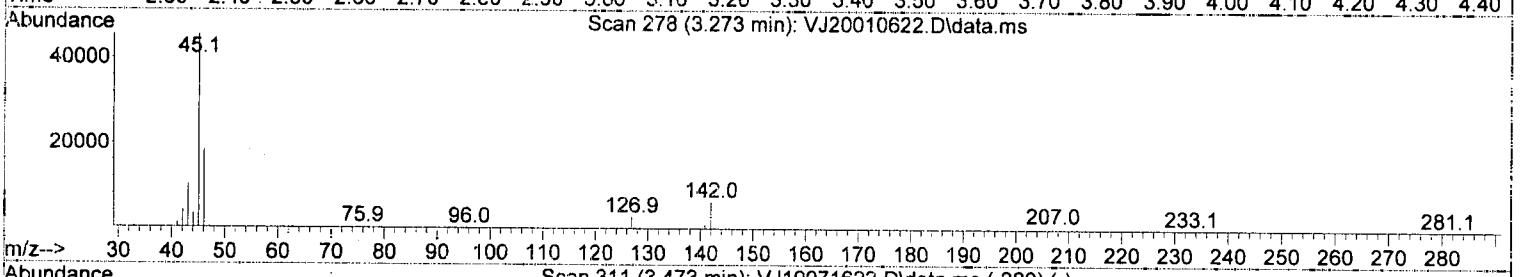
MT

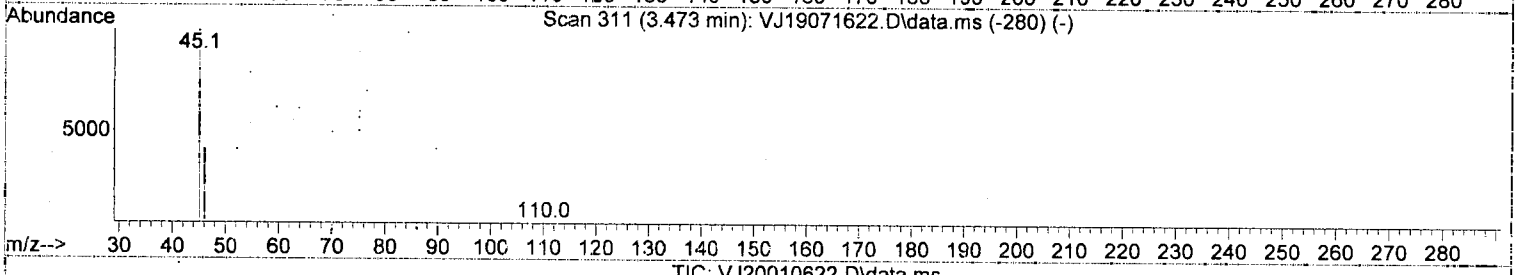
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010622.D\data.ms

(8) Ethanol

3.273min (+ 0.006) 2557.59 ug/L

response 170551

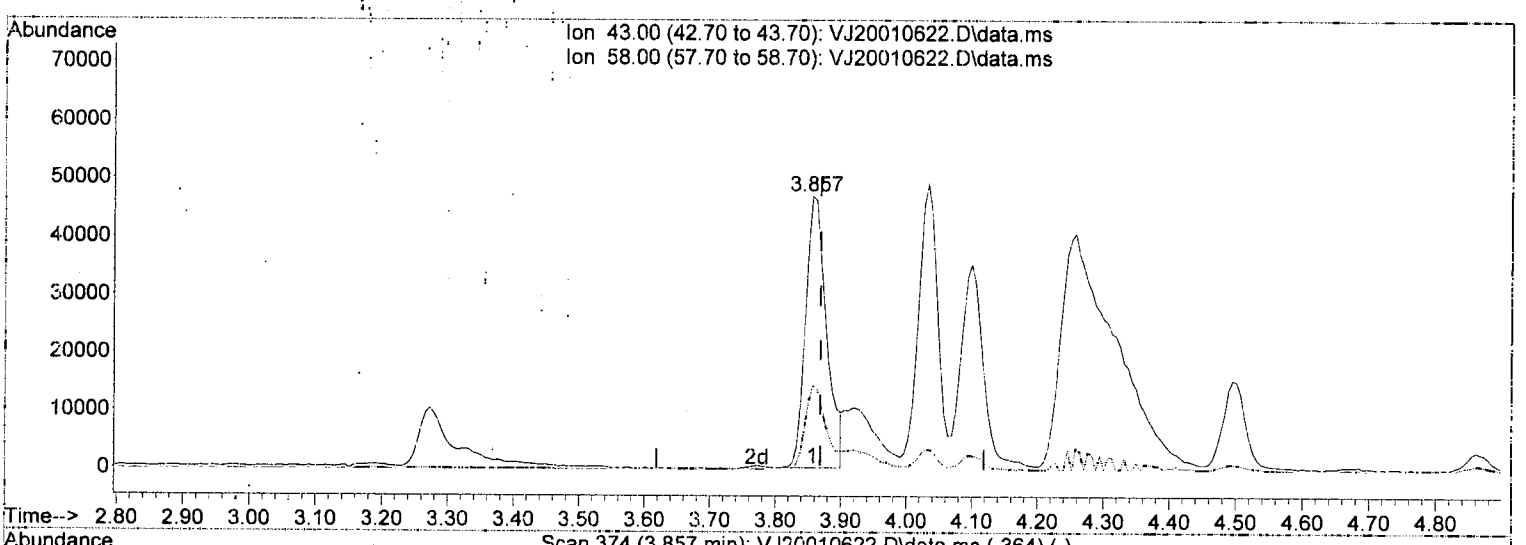
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	40.54
0.00	0.00	0.00
0.00	0.00	0.00

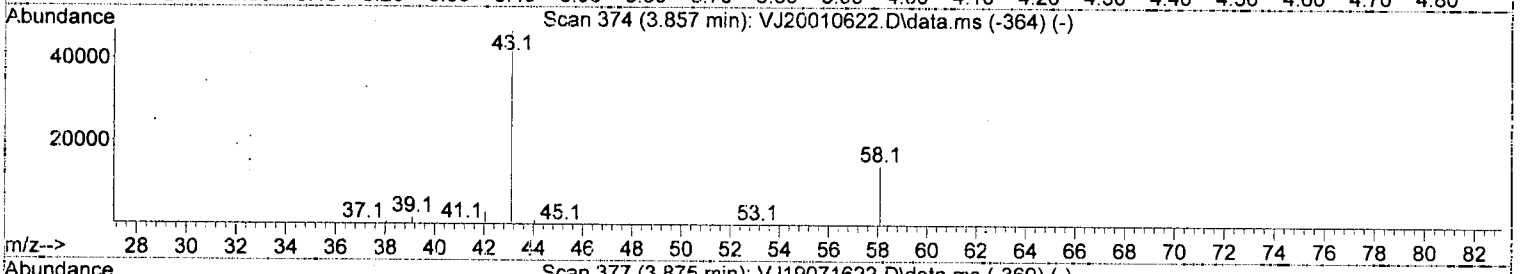
1/7/20

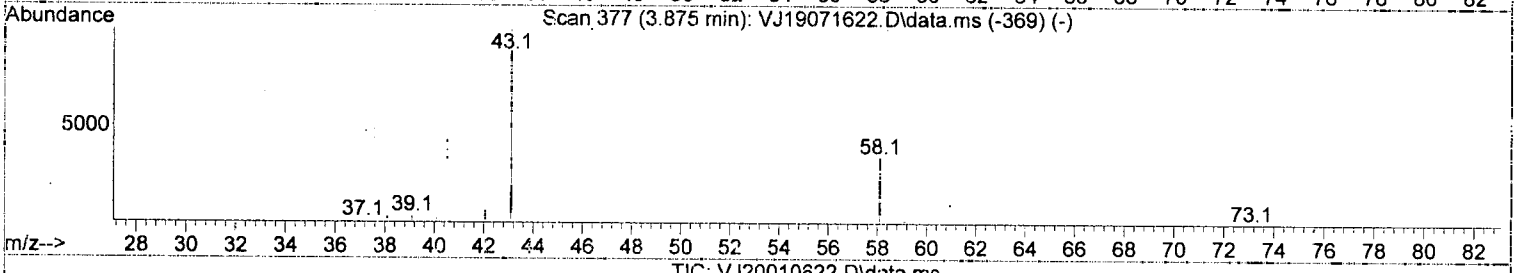
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010622.D\data.ms

(14) Acetone

3.857min (-0.011) 80.65 ug/L

response 104777

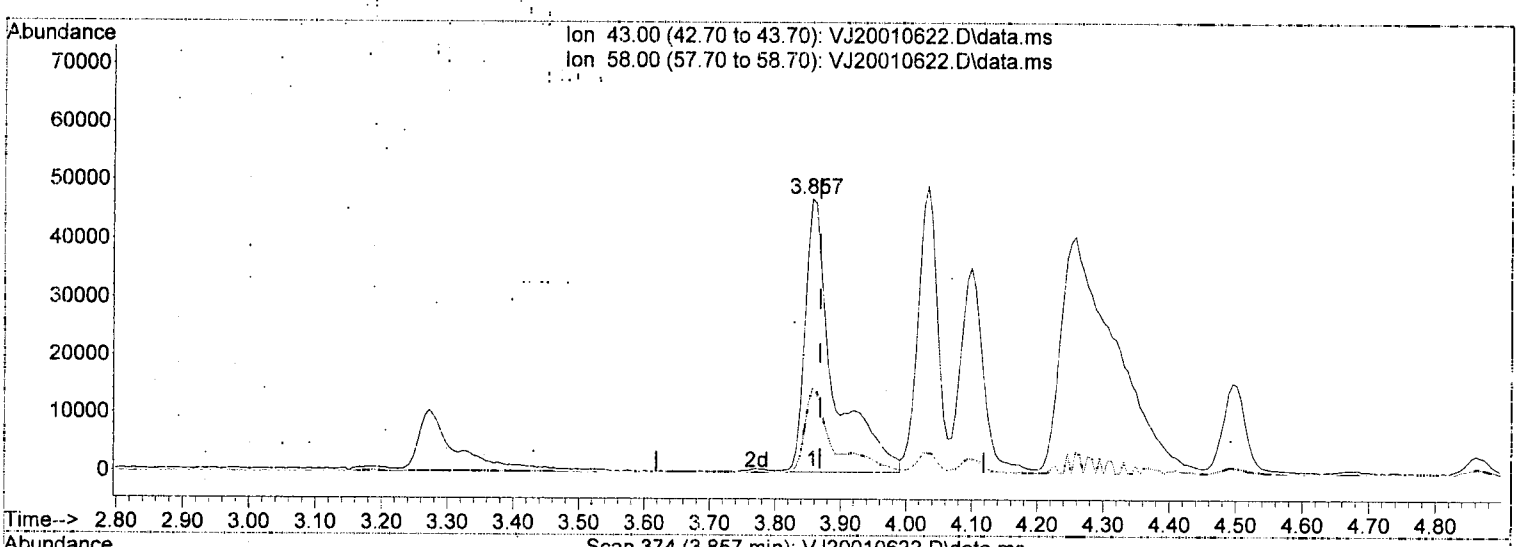
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.88
0.00	0.00	0.00
0.00	0.00	0.00

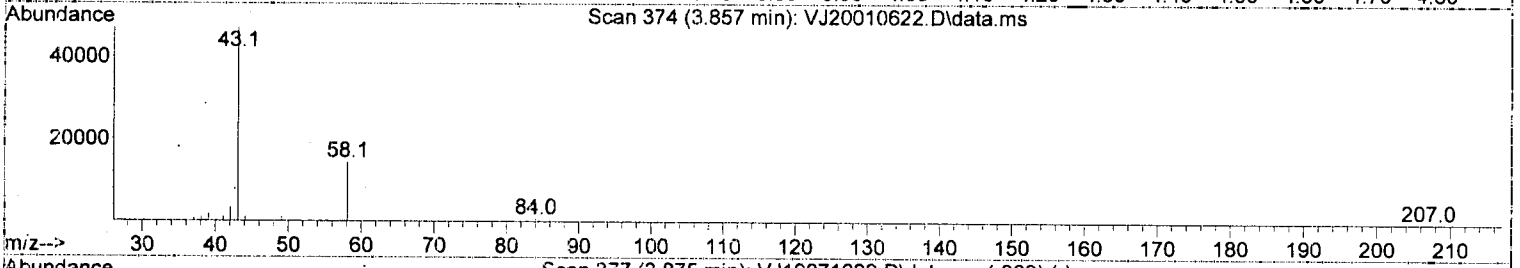
MI

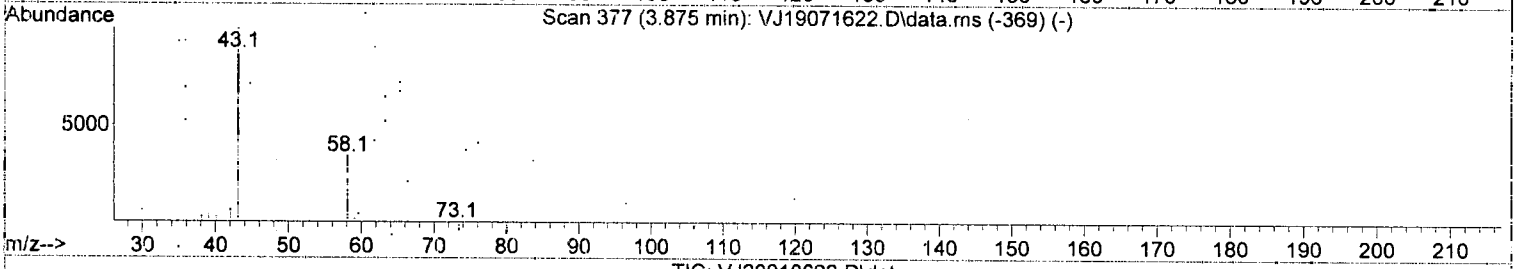
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL .50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010622.D\data.ms

(14) Acetone

3.857min (-0.011) 110.00 ug/L m

response 142899

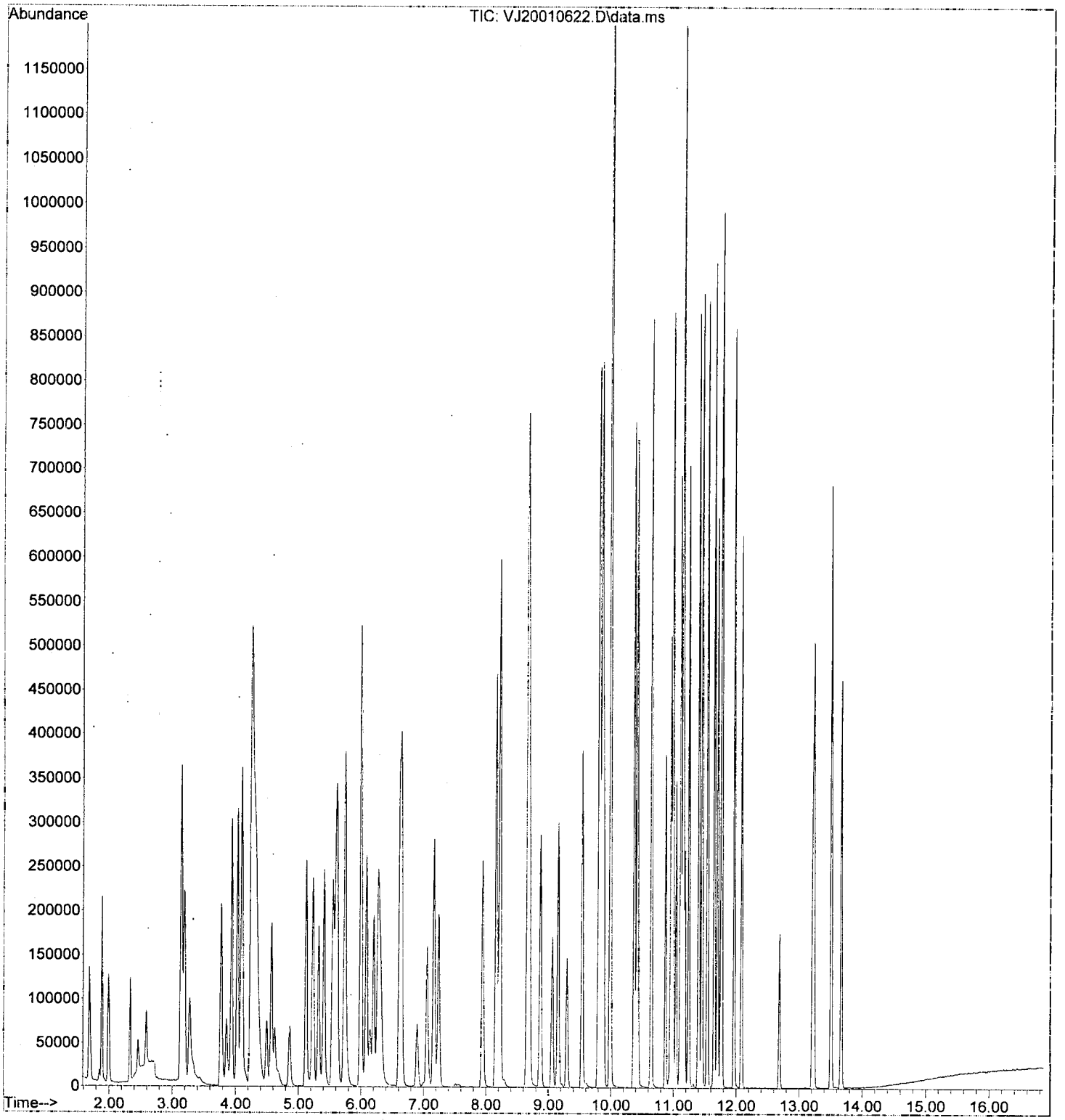
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.73
0.00	0.00	0.00
0.00	0.00	0.00

1/7/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010623.D
Acq On : 6 Jan 2020 9:14 pm
Operator : tb
Sample : 0A06051-IBL2
Misc : 1X ; 5mL DI+MeOH
ALS Vial : 13 ; Sample Multiplier: 1

Quant Time: Jan 08 10:51:34 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

NR

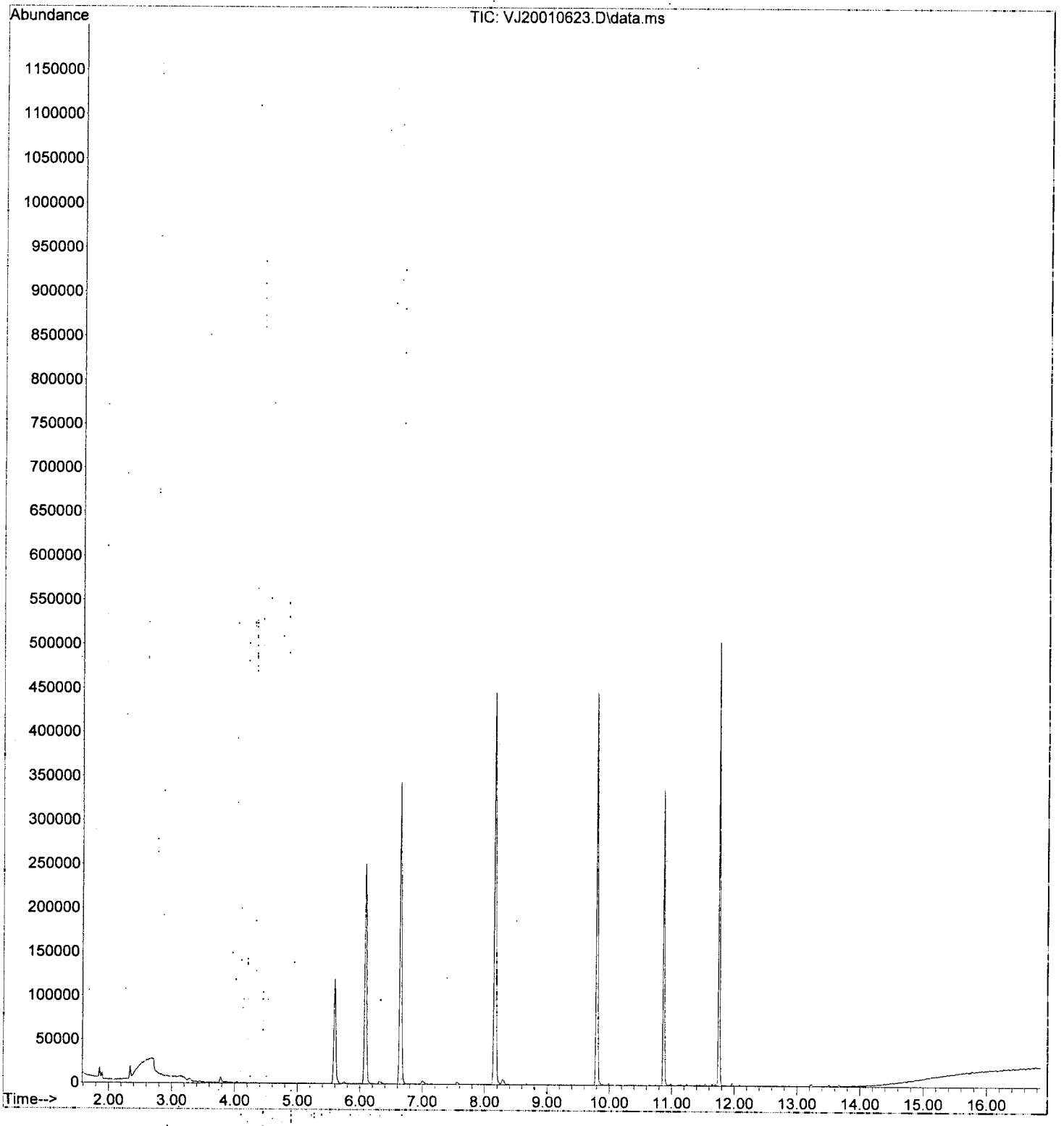
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.089	99	104203	50.00 ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	245180	50.00 ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	107574	50.00 ug/L		0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.596	111	82513	49.02 ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	301846	49.66 ug/L		0.00
45) Toluene-d8 (S)	8.164	98	344140	50.63 ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	85372	51.41 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.703	85	209	0.10 ug/L	#	51
3) Chloromethane	1.897	50	4933	1.65 ug/L		97
5) Bromomethane	2.348	96	6488	3.06 ug/L		98
6) Chloroethane	2.463	64	55	0.10 ug/L	#	50
8) Ethanol	3.272	45	2273	Below Cal		81
10) Carbon Disulfide	3.157	76	1729	0.38 ug/L		90
11) Freon 113	3.205	101	189	0.10 ug/L	#	66
12) Iodomethane	3.297	142	2687	7.26 ug/L		88
13) Methylene Chloride	3.777	84	3107	0.51 ug/L		87
14) Acetone	3.875	43	1409	1.07 ug/L		61
15) t-1,2-Dichloroethene	3.954	61	403	0.13 ug/L		86
18) tert-Butanol (TBA)	4.252	59	178	0.30 ug/L	#	46
31) 1,1-Dichloropropene	5.748	75	395	0.13 ug/L	#	39
32) 2-Butanone (MEK)	5.736	43	2867	1.39 ug/L		94
36) iso-Butyl Alcohol	6.320	43	1703	7.63 ug/L		80
47) Tetrachloroethene (PCE)	8.662	166	325	0.15 ug/L	#	79
55) Chlorobenzene	9.818	112	560	0.10 ug/L	#	12
56) Ethylbenzene	9.849	91	1104	0.11 ug/L		92
58) m,p-Xylenes (2)	9.989	91	1526	0.22 ug/L		93
60) Styrene	10.414	104	230	0.26 ug/L		53
62) Isopropylbenzene	10.646	105	898	0.11 ug/L		87
66) n-Propylbenzene	10.992	91	1912	0.20 ug/L		89
69) 1,3,5-Trimethylbenzene	11.144	105	966	0.15 ug/L		91
72) 4-Chlorotoluene	11.242	91	870	0.16 ug/L		86
73) tert-Butylbenzene	11.400	91	586	0.17 ug/L	#	70
74) 1,2,4-Trimethylbenzene	11.455	105	949	0.15 ug/L		91
75) sec-Butylbenzene	11.540	105	1567	0.21 ug/L		92
76) 4-Isopropyltoluene	11.649	119	1220	0.20 ug/L		85
77) 1,3-Dichlorobenzene	11.704	146	852	0.23 ug/L		82
78) 1,4-Dichlorobenzene	11.777	146	1093	0.28 ug/L		98
79) n-Butylbenzene	11.966	91	1740	0.30 ug/L		98
80) 1,2-Dichlorobenzene	12.094	146	625	0.19 ug/L		91
82) Hexachlorobutadiene	13.207	223	165	0.31 ug/L	#	73
83) 1,2,4-Trichlorobenzene	13.237	180	959	0.47 ug/L		90
84) Naphthalene	13.505	128	1872	0.35 ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	884	0.43 ug/L		84

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010623.D
Acq On : 6 Jan 2020 9:14 pm
Operator : tb
Sample : 0A06051-IBL2
Misc : 1X 5mL ! DI+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 08 10:51:34 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 15:04:11 2020
Quant Method : C:\msdchem\1\methods\~~VJ200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/8/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	110868	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	264522	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	132141	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	88968	51.03	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	322488	50.50	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366947	49.21	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	99383	48.71	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	260818	132.60	ug/L		98
3) Chloromethane	1.898	50	323609	109.26	ug/L		99
4) Vinyl Chloride	1.995	62	261456	110.05	ug/L		95
5) Bromomethane	2.342	96	102308	81.26	ug/L		99
6) Chloroethane	2.470	64	65757	126.12	ug/L		99
7) Trichlorofluoromethane	2.591	101	91399	110.73	ug/L		98
8) Ethanol	3.260	45	289845m	4310.30	ug/L		
9) 1,1-Dichloroethene	3.145	61	259216	100.04	ug/L		95
10) Carbon Disulfide	3.157	76	479467	105.63	ug/L		97
11) Freon 113	3.200	101	202415	100.14	ug/L		98
12) Iodomethane	3.297	142	74685	183.14	ug/L		89
13) Methylene Chloride	3.777	84	214594	96.75	ug/L		99
14) Acetone	3.857	43	265824m	202.92	ug/L		
15) t-1,2-Dichloroethene	3.948	61	326255	100.59	ug/L		97
16) n-Hexane	4.039	86	56002	106.94	ug/L	#	91
17) Methyl-tert-butyl-ether	4.100	73	838469	104.01	ug/L		91
18) tert-Butanol (TBA)	4.252	59	3395354m	5119.98	ug/L		
19) Diisopropyl ether (DIPE)	4.501	45	157347	20.54	ug/L		98
20) 1,1-Dichloroethane	4.574	63	394635	103.65	ug/L		99
21) Acrylonitrile	4.629	53	154316m	104.40	ug/L		
22) Ethyl-tert-butyl ether...	4.866	59	143062	19.03	ug/L		98
23) c-1,2-Dichloroethene	5.128	61	330862	104.01	ug/L		99
24) 2,2-Dichloropropane	5.238	77	352081	100.08	ug/L		95
25) Bromochloromethane	5.323	49	184637	96.48	ug/L		96
26) Chloroform	5.414	83	418939	100.37	ug/L		97
27) Carbon Tetrachloride	5.548	117	328646	108.52	ug/L		96
28) Tetrahydrofuran	5.578	42	146362	107.45	ug/L		95
29) 1,1,1-Trichloroethane	5.615	97	408532	102.77	ug/L		98
31) 1,1-Dichloropropene	5.742	75	350616	105.63	ug/L		96
32) 2-Butanone (MEK)	5.724	43	426227	207.79	ug/L		98
33) Benzene	5.998	78	1027410	100.71	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	129917	20.41	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.205	62	359673	98.94	ug/L		99
36) iso-Butyl Alcohol	6.272	43	641400m	2831.07	ug/L		
38) Trichloroethene (TCE)	6.619	130	261248	105.86	ug/L		97
39) tert-Amyl ethyl ether ...	6.898	59	101352	21.74	ug/L		92
40) Dibromomethane	7.057	93	147470	101.00	ug/L		95
41) 1,2-Dichloropropane	7.166	63	251031	105.63	ug/L		94
42) Bromodichloromethane	7.245	83	319153	109.54	ug/L		97
44) c-1,3-Dichloropropene	7.945	75	375031	105.07	ug/L		99
46) Toluene	8.225	91	1043895	100.25	ug/L		98
47) Tetrachloroethene (PCE)	8.669	166	257455	101.63	ug/L		94
48) 4-Methyl-2-Pentanone (...	8.663	43	694774	224.83	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 15:04:11 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

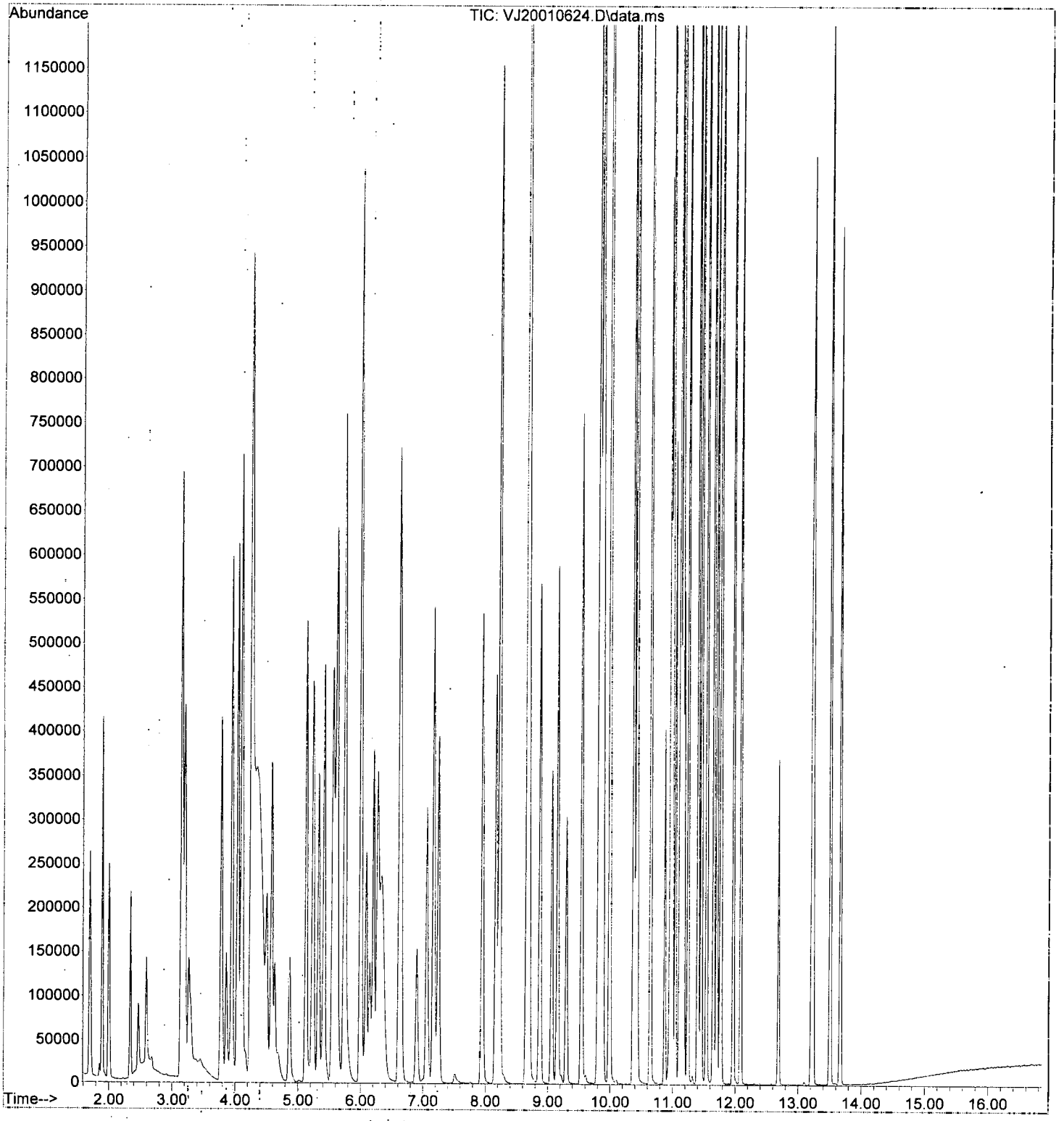
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	364799	104.56 ug/L	96
50) 1,1,2-Trichloroethane	8.869	97	216245	99.66 ug/L	99
51) Dibromochloromethane	9.064	129	225531	113.64 ug/L	99
52) 1,3-Dichloropropane	9.155	76	390171	103.30 ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	233841	107.50 ug/L	100
54) 2-Hexanone	9.539	43	540017	242.31 ug/L	99
55) Chlorobenzene	9.818	112	628098	99.68 ug/L	99
56) Ethylbenzene	9.849	91	1130105	103.18 ug/L	100
57) 1,1,1,2-Tetrachloroethane	9.879	131	222622	104.97 ug/L	99
58) m,p-Xylenes (2)	9.989	91	1695177	208.57 ug/L	99
59) o-Xylene	10.372	91	848401	111.34 ug/L	97
60) Styrene	10.415	104	642559	118.51 ug/L	98
61) Bromoform	10.433	173	170457	120.05 ug/L	97
62) Isopropylbenzene	10.646	105	1059421	109.83 ug/L	98
65) Bromobenzene	10.956	156	255205	99.20 ug/L	86
66) n-Propylbenzene	10.987	91	1201239	97.71 ug/L	97
67) 1,1,2,2-Tetrachloroethane	11.041	83	306207	97.13 ug/L	96
68) 2-Chlorotoluene	11.114	126	234244	99.61 ug/L	97
69) 1,3,5-Trimethylbenzene	11.151	105	863093	97.64 ug/L	98
70) 1,2,3-Trichloropropane	11.145	110	111214	95.58 ug/L	96
71) t-1,4-Dichloro-2-butene	11.181	88	51769	108.47 ug/L	93
72) 4-Chlorotoluene	11.242	91	721994	99.58 ug/L	95
73) tert-Butylbenzene	11.400	91	472004	100.30 ug/L	96
74) 1,2,4-Trimethylbenzene	11.455	105	869693	98.11 ug/L	99
75) sec-Butylbenzene	11.540	105	1045783	99.68 ug/L	98
76) 4-Isopropyltoluene	11.650	119	890642	101.96 ug/L	99
77) 1,3-Dichlorobenzene	11.704	146	464345	97.03 ug/L	98
78) 1,4-Dichlorobenzene	11.771	146	464868	98.36 ug/L	97
79) n-Butylbenzene	11.966	91	768302	102.10 ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	434657	99.21 ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	91004	116.34 ug/L	87
82) Hexachlorobutadiene	13.213	223	70914	101.06 ug/L	96
83) 1,2,4-Trichlorobenzene	13.231	180	294426	110.53 ug/L	95
84) Naphthalene	13.505	128	1049457	113.07 ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	293236	104.45 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 15:04:11 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\~~VJ200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene (I)	6.083	99	110868	50.00	ug/L		0.00	
43) Chlorobenzene-d5 (I)	9.800	117	264522	50.00	ug/L		0.00	
63) 1,4-Dichlorobenzene-d4...	11.759	152	132141	50.00	ug/L		0.00	
System Monitoring Compounds								
30) Dibromofluoromethane (S)	5.596	111	88968	51.03	ug/L		0.00	
37) 1,4-Difluorobenzene (S)	6.649	114	322488	50.60	ug/L		0.00	
45) Toluene-d8 (S)	8.164	98	366947	49.21	ug/L		0.00	
64) 4-Bromofluorobenzene (S)	10.877	174	99383	48.71	ug/L		0.00	
Target Compounds							Qvalue	
2) Dichlorodifluoromethane	1.697	85	260818	132.60	ug/L		98	
3) Chloromethane	1.898	50	323609	109.26	ug/L		99	
4) Vinyl Chloride	1.995	62	261456	110.05	ug/L		95	
5) Bromomethane	2.342	96	102308	81.26	ug/L		99	
6) Chloroethane	2.470	64	65757	126.12	ug/L		99	
7) Trichlorofluoromethane	2.591	101	91399	110.73	ug/L		98	
8) Ethanol	3.260	45	~~213066~~	~~3168.52~~	~~ug/L~~		~~90~~	MI
9) 1,1-Dichloroethene	3.145	61	259216	100.04	ug/L		95	
10) Carbon Disulfide	3.157	76	479467	105.63	ug/L		97	
11) Freon 113	3.200	101	202415	100.14	ug/L		98	
12) Iodomethane	3.297	142	74685	183.14	ug/L		89	
13) Methylene Chloride	3.777	84	214594	96.75	ug/L		99	
14) Acetone	3.857	43	~~188554~~	~~143.93~~	~~ug/L~~		~~97~~	MI
15) t-1,2-Dichloroethene	3.948	61	326255	100.59	ug/L		97	
16) n-Hexane	4.039	86	56002	106.94	ug/L	#	91	
17) Methyl-tert-butyl-ether	4.100	73	838469	104.01	ug/L		91	
18) tert-Butanol (TBA)	4.252	59	~~1882043~~	~~2838.00~~	~~ug/L~~	#	~~87~~	MI
19) Diisopropyl ether (DIPE)	4.501	45	157347	20.54	ug/L		98	
20) 1,1-Dichloroethane	4.574	63	394635	103.65	ug/L		99	
21) Acrylonitrile	4.629	53	~~112841~~	~~76.34~~	~~ug/L~~		~~97~~	MI
22) Ethyl-tert-butyl ether...	4.866	59	143062	19.03	ug/L		98	
23) c-1,2-Dichloroethene	5.128	61	330862	104.01	ug/L		99	
24) 2,2-Dichloropropane	5.238	77	352081	100.08	ug/L		95	
25) Bromochloromethane	5.323	49	184637	96.48	ug/L		96	
26) Chloroform	5.414	83	418939	100.37	ug/L		97	
27) Carbon Tetrachloride	5.548	117	328646	108.52	ug/L		96	
28) Tetrahydrofuran	5.578	42	146362	107.45	ug/L		95	
29) 1,1,1-Trichloroethane	5.615	97	408532	102.77	ug/L		98	
31) 1,1-Dichloropropene	5.742	75	350616	105.63	ug/L		96	
32) 2-Butanone (MEK)	5.724	43	426227	207.79	ug/L		98	
33) Benzene	5.998	78	1027410	100.71	ug/L		99	
34) tert-Amyl methyl ether...	6.144	73	129917	20.41	ug/L		98	
35) 1,2-Dichloroethane (EDC)	6.205	62	359673	98.94	ug/L		99	
36) iso-Butyl Alcohol	6.272	43	~~306318~~	~~1352.06~~	~~ug/L~~		~~97~~	MI
38) Trichloroethene (TCE)	6.619	130	261248	105.86	ug/L		97	
39) tert-Amyl ethyl ether ...	6.898	59	101352	21.74	ug/L		92	
40) Dibromomethane	7.057	93	147470	101.00	ug/L		95	
41) 1,2-Dichloropropane	7.166	63	251031	105.63	ug/L		94	
42) Bromodichloromethane	7.245	83	319153	109.54	ug/L		97	
44) c-1,3-Dichloropropene	7.945	75	375031	105.07	ug/L		99	
46) Toluene	8.225	91	1043895	100.25	ug/L		98	
47) Tetrachloroethene (PCE)	8.669	166	257455	101.63	ug/L		94	
48) 4-Methyl-2-Pentanone (...	8.663	43	694774	224.83	ug/L		98	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

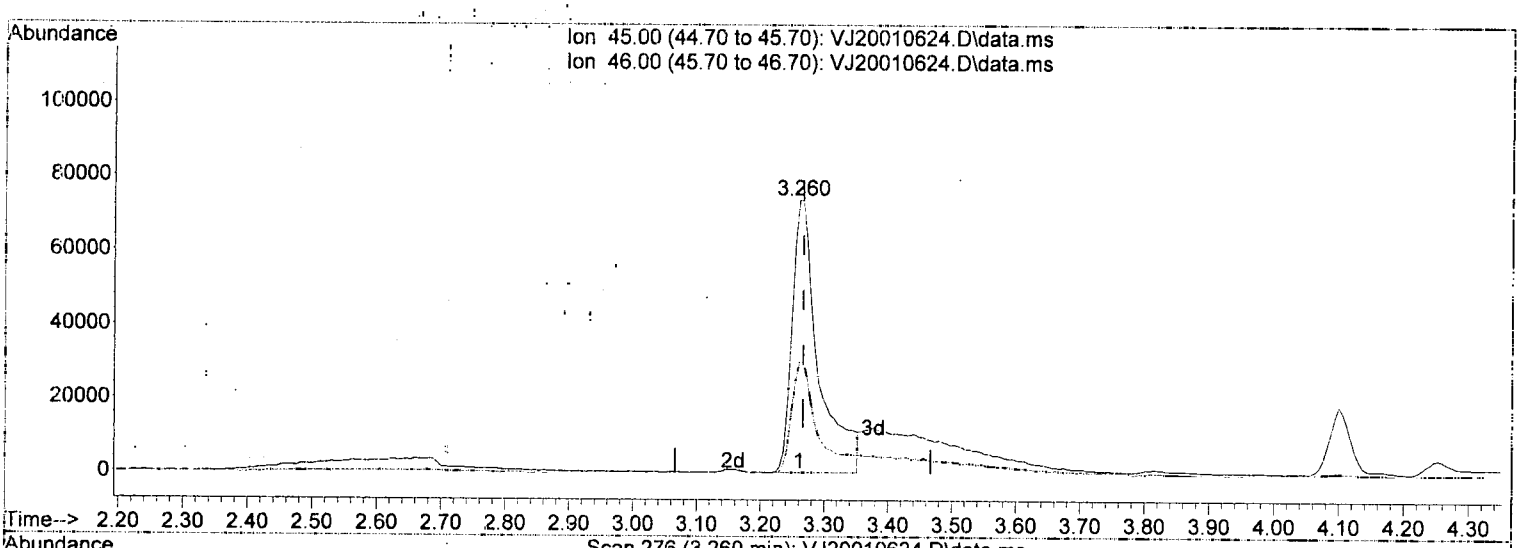
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	364799	104.56	ug/L	96
50) 1,1,2-Trichloroethane	8.869	97	216245	99.66	ug/L	99
51) Dibromochloromethane	9.064	129	225531	113.64	ug/L	99
52) 1,3-Dichloropropane	9.155	76	390171	103.30	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	233841	107.50	ug/L	100
54) 2-Hexanone	9.539	43	540017	242.31	ug/L	99
55) Chlorobenzene	9.818	112	628098	99.68	ug/L	99
56) Ethylbenzene	9.849	91	1130105	103.18	ug/L	100
57) 1,1,1,2-Tetrachloroethane	9.879	131	222622	104.97	ug/L	99
58) m,p-Xylenes (2)	9.989	91	1695177	208.57	ug/L	99
59) o-Xylene	10.372	91	848401	111.34	ug/L	97
60) Styrene	10.415	104	642559	118.51	ug/L	98
61) Bromoform	10.433	173	170457	120.05	ug/L	97
62) Isopropylbenzene	10.646	105	1059421	109.83	ug/L	98
65) Bromobenzene	10.956	156	255205	99.20	ug/L	86
66) n-Propylbenzene	10.987	91	1201239	97.71	ug/L	97
67) 1,1,2,2-Tetrachloroethane	11.041	83	306207	97.13	ug/L	96
68) 2-Chlorotoluene	11.114	126	234244	99.61	ug/L	97
69) 1,3,5-Trimethylbenzene	11.151	105	863093	97.64	ug/L	98
70) 1,2,3-Trichloropropane	11.145	110	111214	95.58	ug/L	96
71) t-1,4-Dichloro-2-butene	11.181	88	51769	108.47	ug/L	93
72) 4-Chlorotoluene	11.242	91	721994	99.58	ug/L	95
73) tert-Butylbenzene	11.400	91	472004	100.30	ug/L	96
74) 1,2,4-Trimethylbenzene	11.455	105	869693	98.11	ug/L	99
75) sec-Butylbenzene	11.540	105	1045783	99.68	ug/L	98
76) 4-Isopropyltoluene	11.650	119	890642	101.96	ug/L	99
77) 1,3-Dichlorobenzene	11.704	146	464345	97.03	ug/L	98
78) 1,4-Dichlorobenzene	11.771	146	464868	98.36	ug/L	97
79) n-Butylbenzene	11.966	91	768302	102.10	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	434657	99.21	ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	91004	116.34	ug/L	87
82) Hexachlorobutadiene	13.213	223	70914	101.06	ug/L	96
83) 1,2,4-Trichlorobenzene	13.231	180	294426	110.53	ug/L	95
84) Naphthalene	13.505	128	1049457	113.07	ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	293236	104.45	ug/L	99

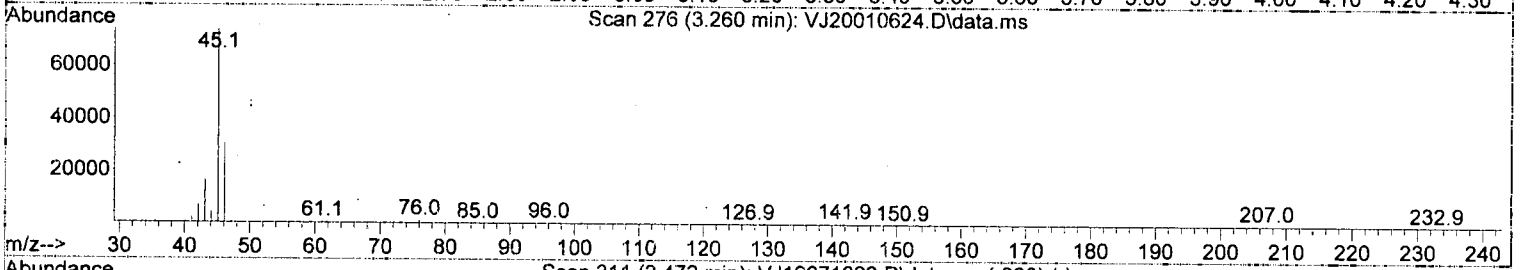
(#) = qualifier out of range (m) = manual integration (+) = signals summed

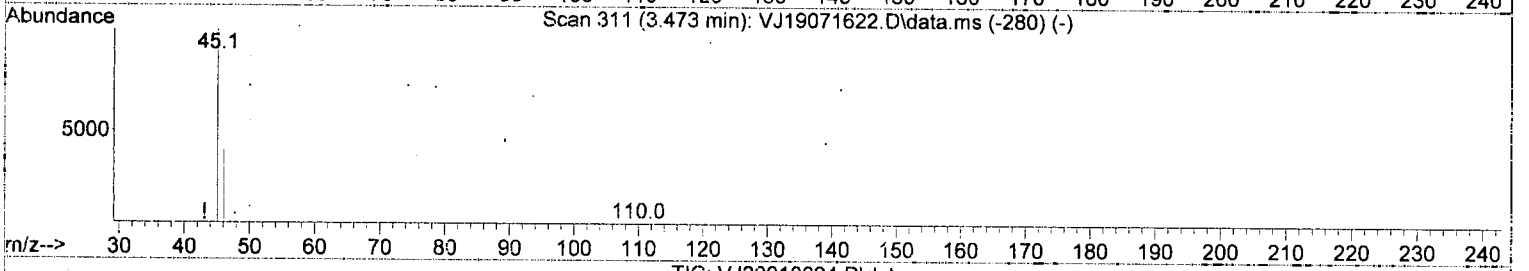
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(8) Ethanol

3.260min (-0.006) 3168.52 ug/L

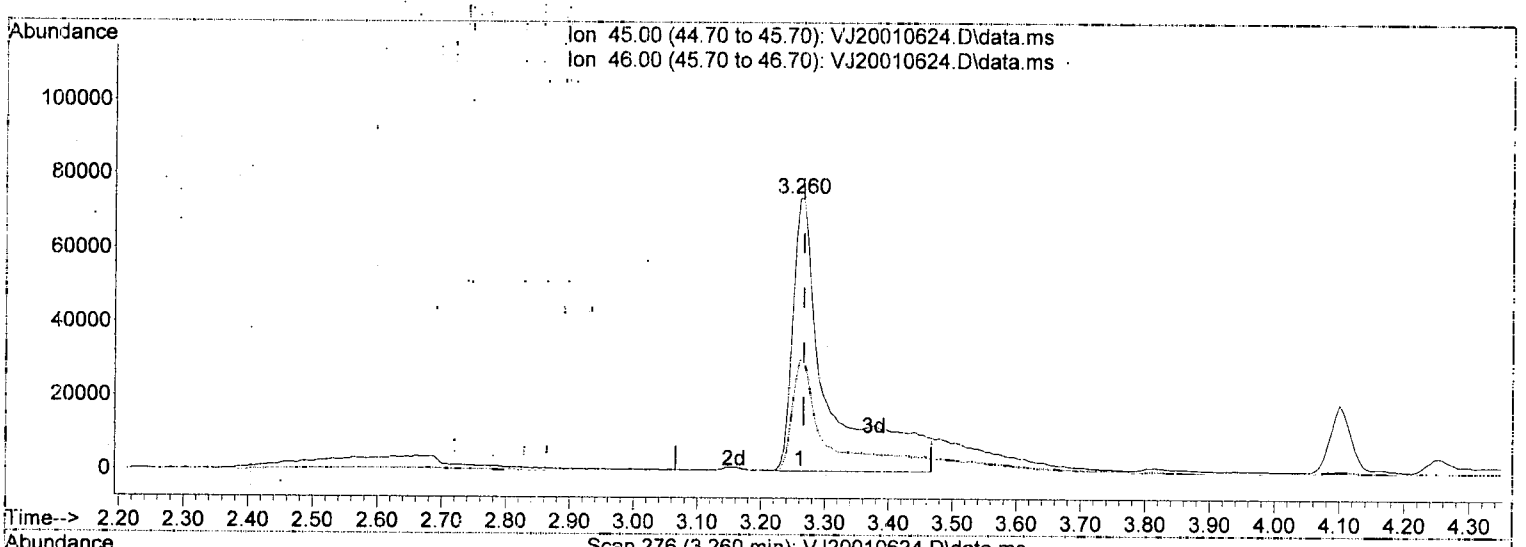
response 213066

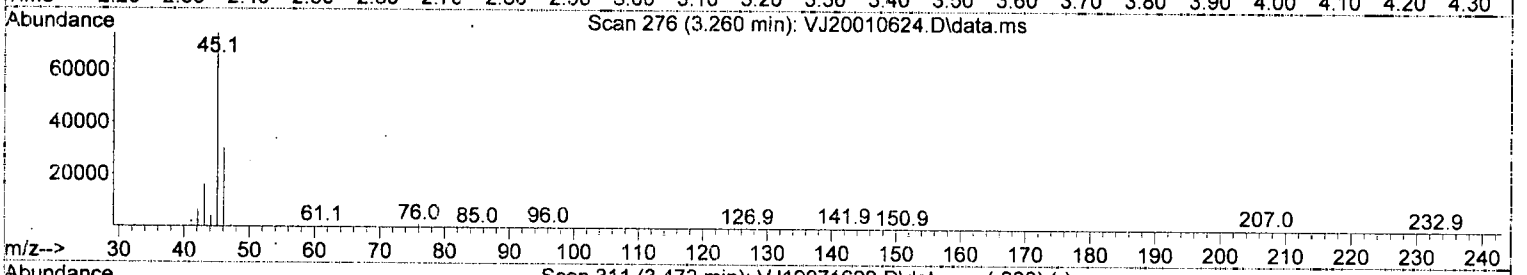
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	40.99
0.00	0.00	0.00
0.00	0.00	0.00

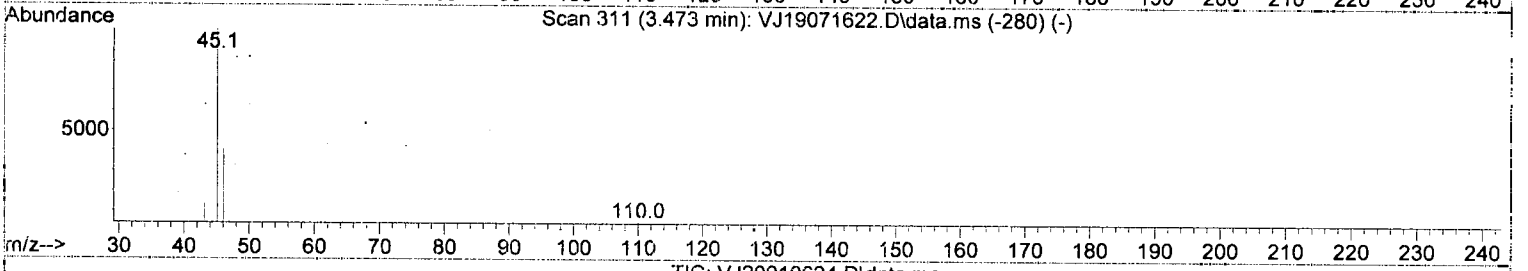
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(8) Ethanol

3.260min (-0.006) 4310.30 ug/L m

response 289845

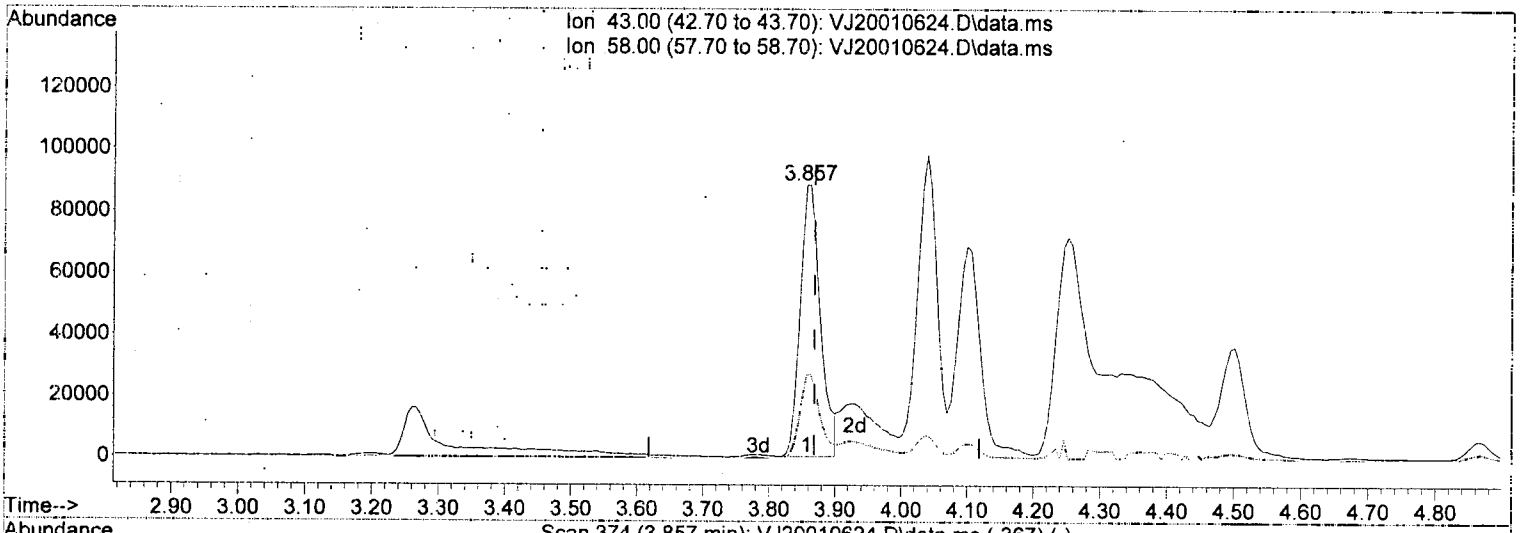
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	40.99
0.00	0.00	0.00
0.00	0.00	0.00

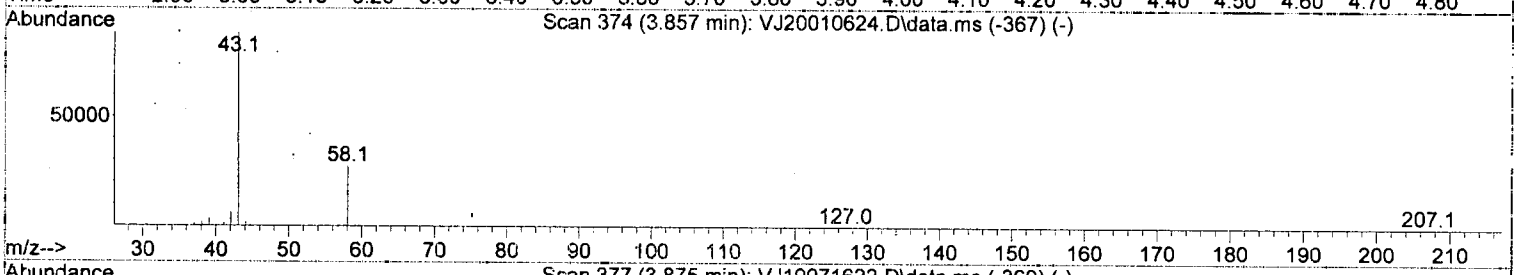
1/7/20

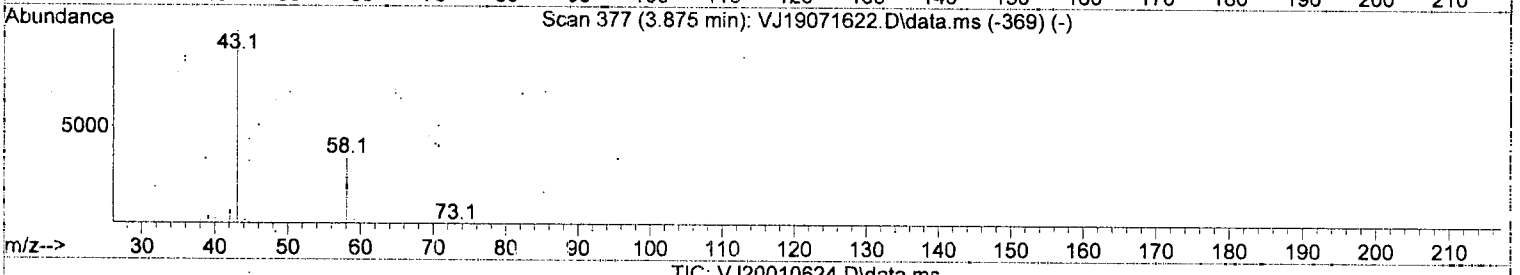
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(14) Acetone

3.857min (-0.011) 143.93 ug/L

MI

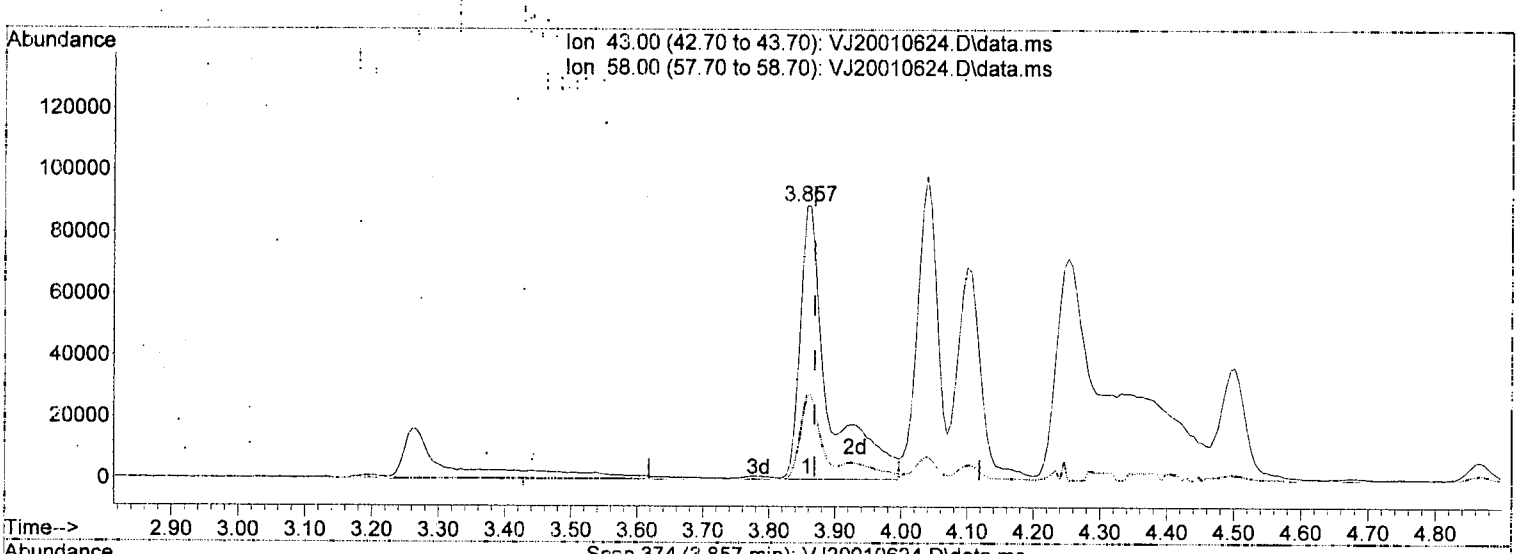
response 188554

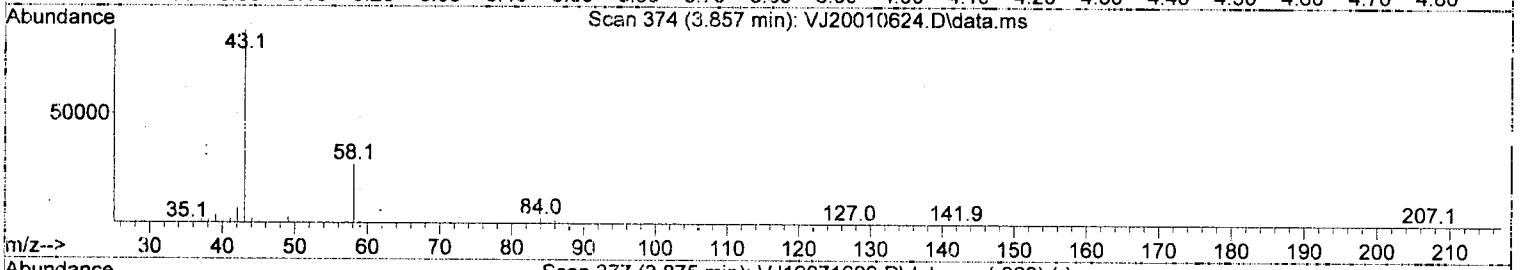
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.73
0.00	0.00	0.00
0.00	0.00	0.00

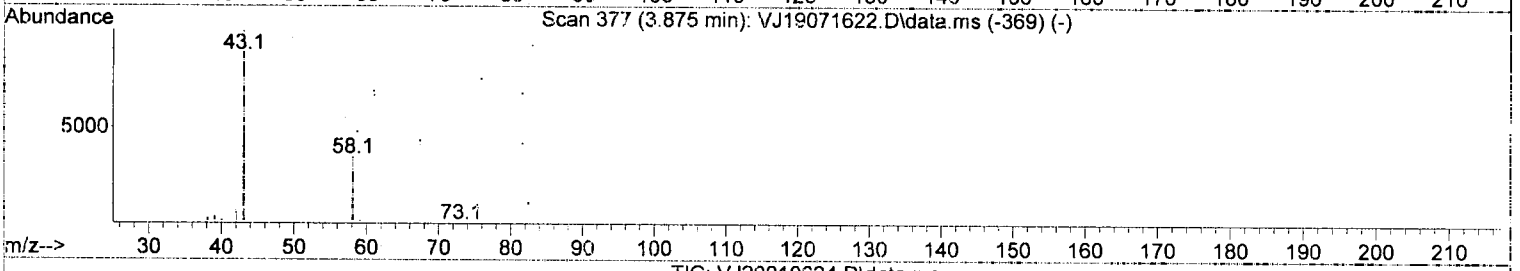
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(14) Acetone

3.857min (-0.011) 202.92 ug/L m

response 265824

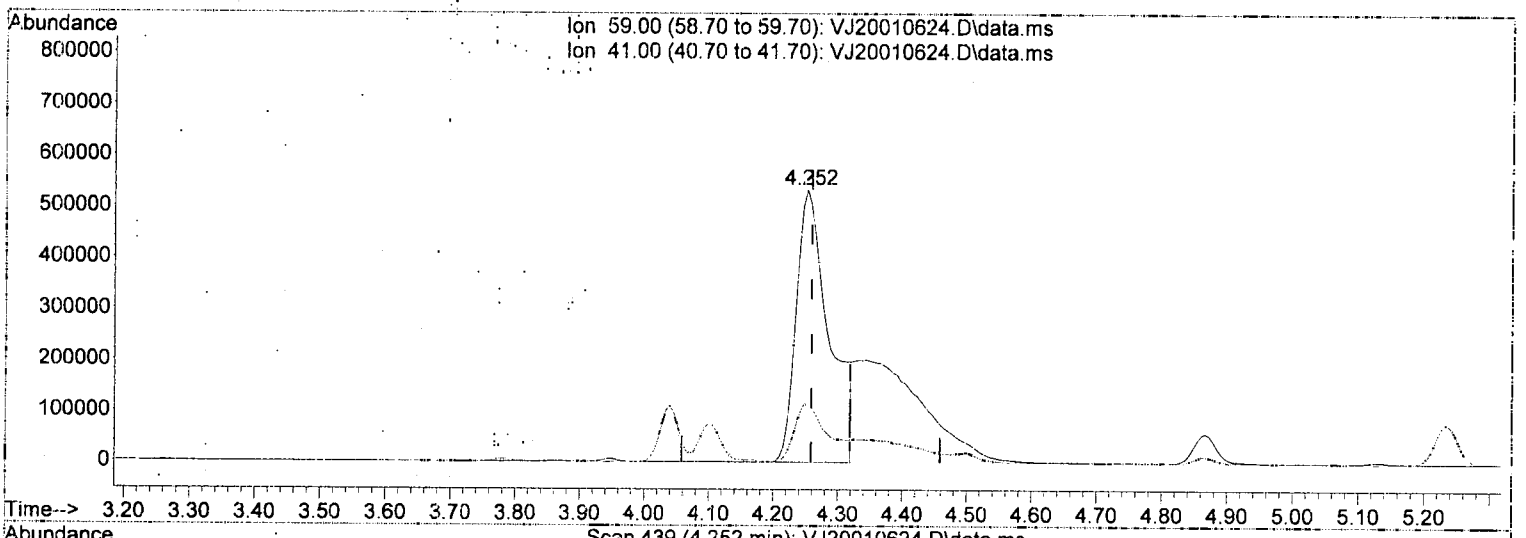
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.60
0.00	0.00	0.00
0.00	0.00	0.00

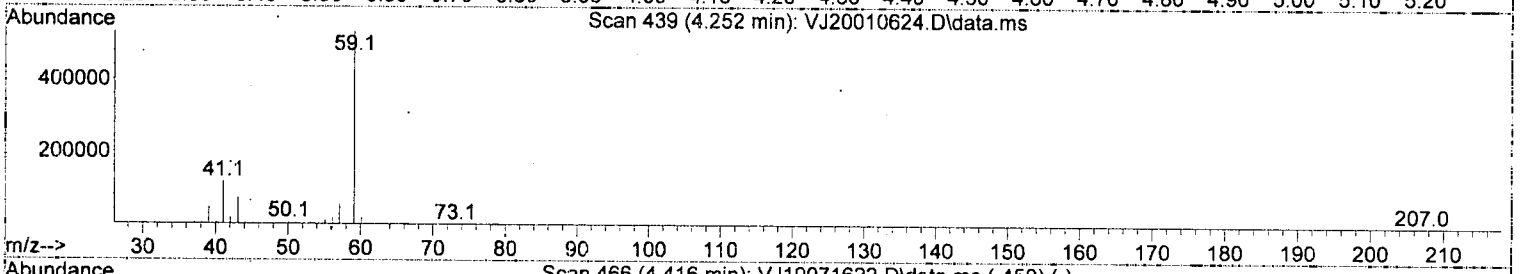
1/7/20

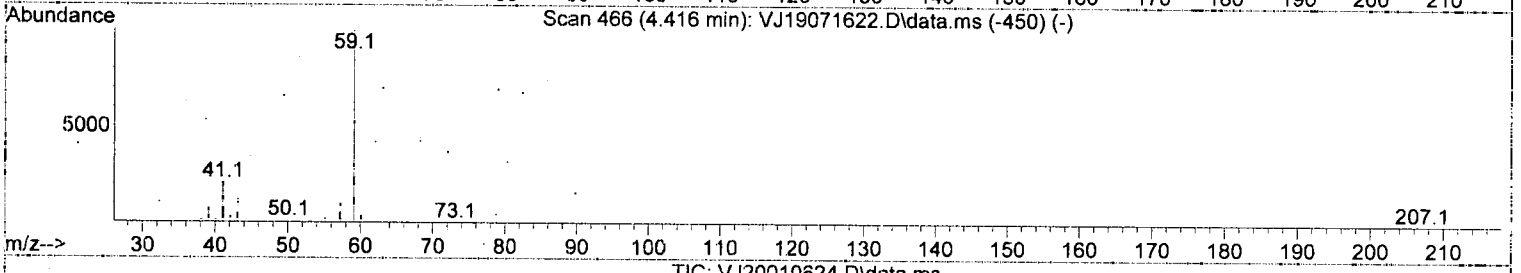
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 2838.00 ug/L

response 1882043

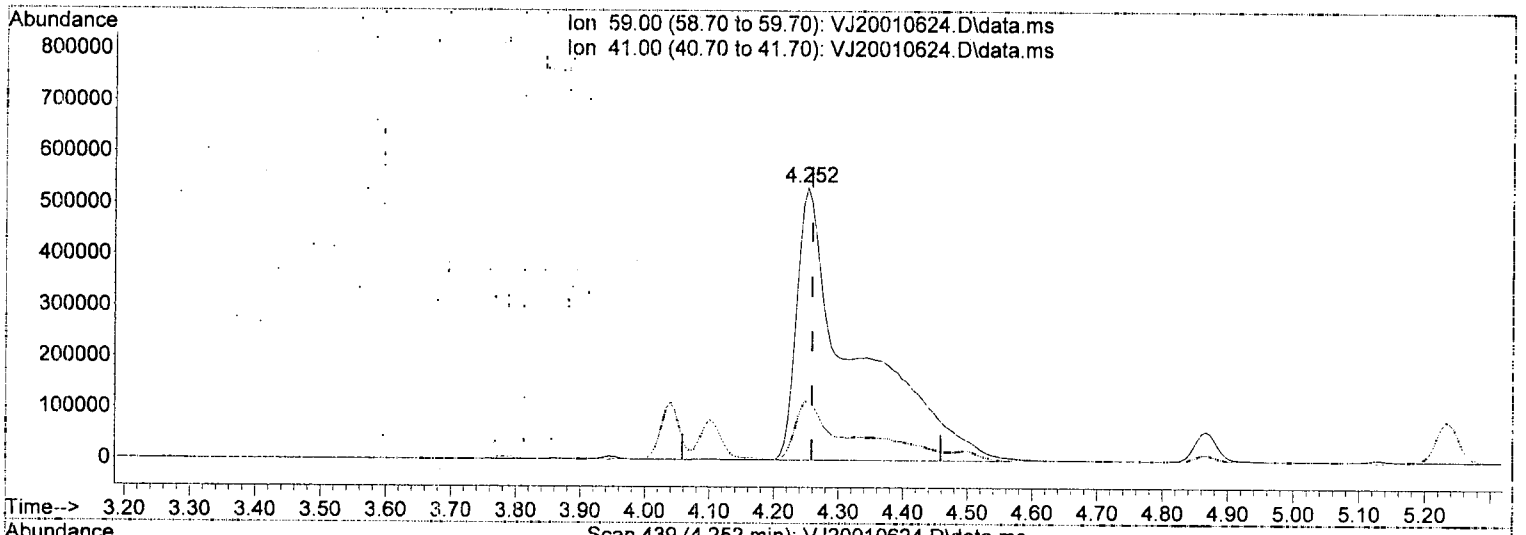
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	22.05#
0.00	0.00	0.00
0.00	0.00	0.00

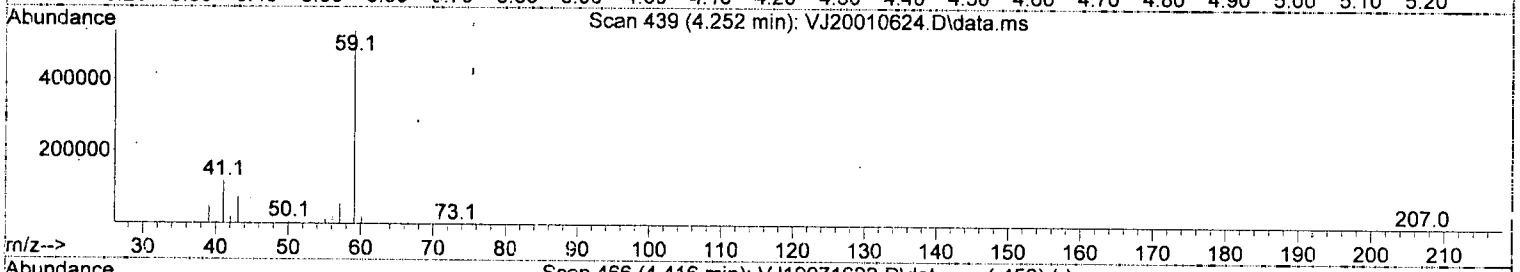
MI

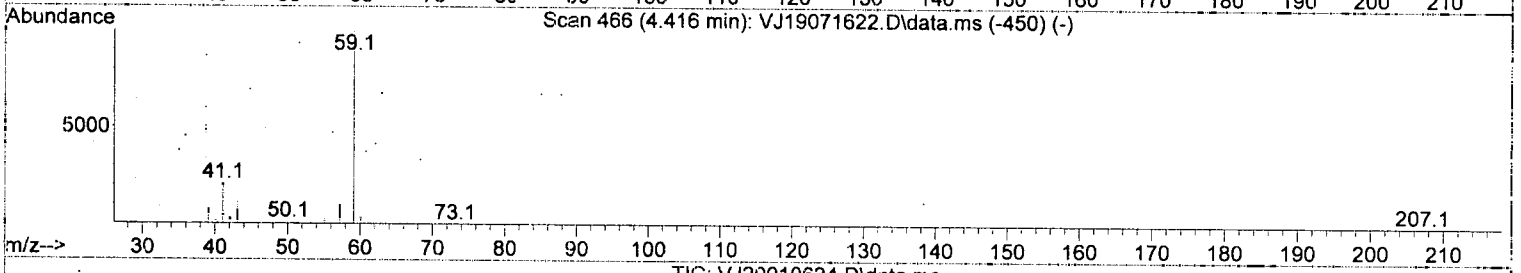
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 5119.98 ug/L m

response 3395354

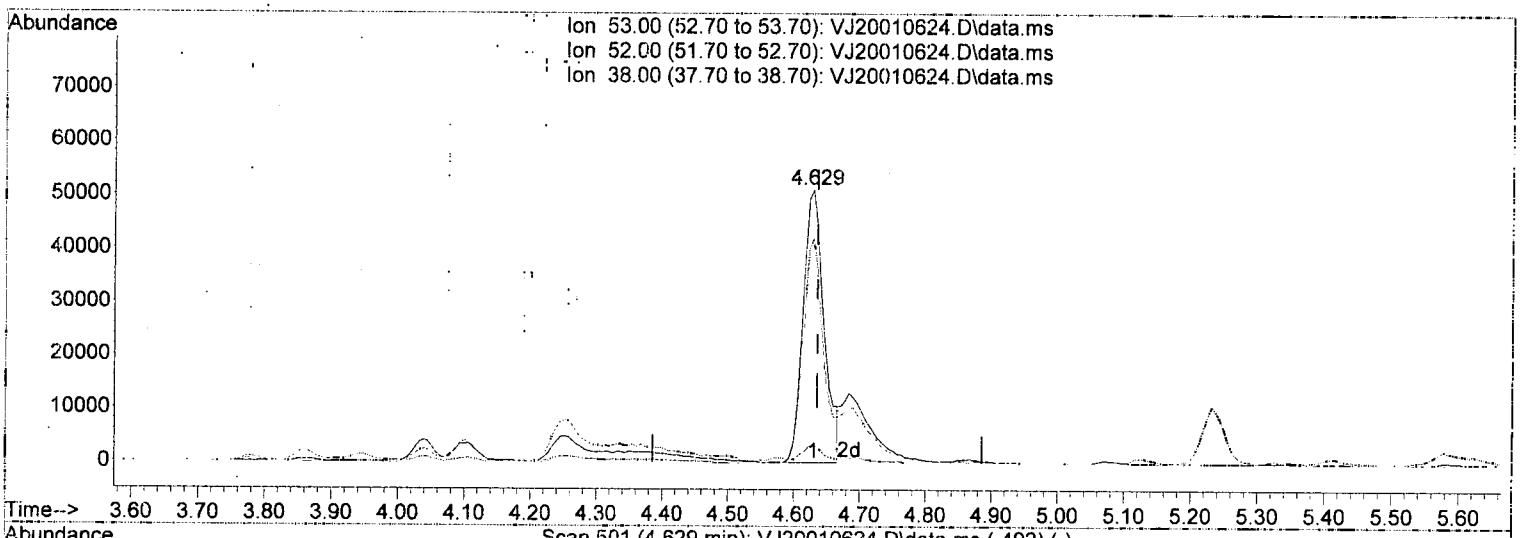
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	22.05#
0.00	0.00	0.00
0.00	0.00	0.00

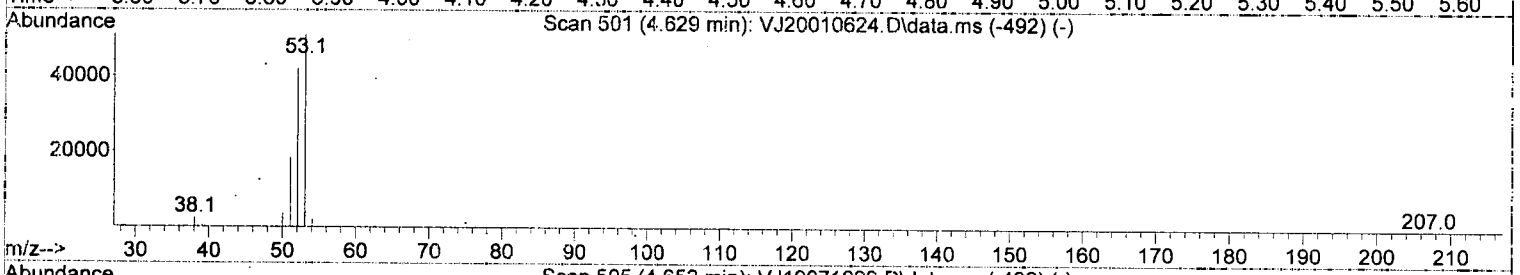
1/7/20

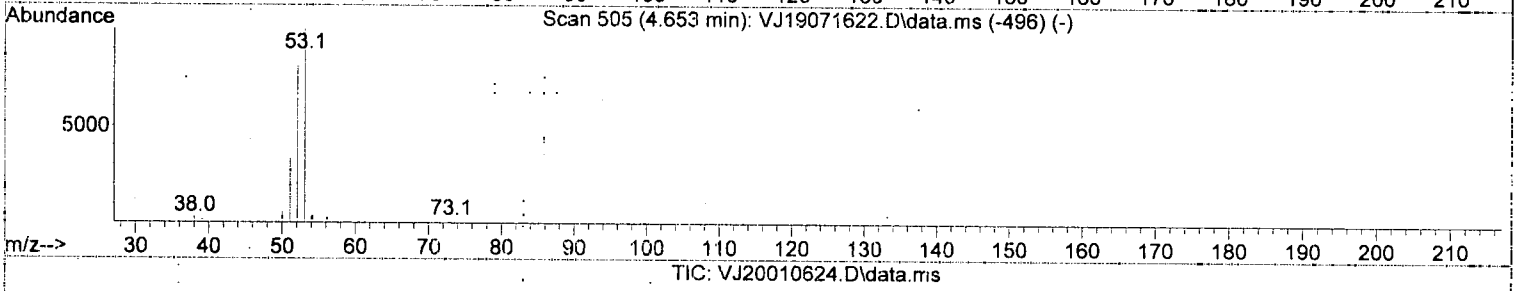
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 76.34 ug/L

response 112841

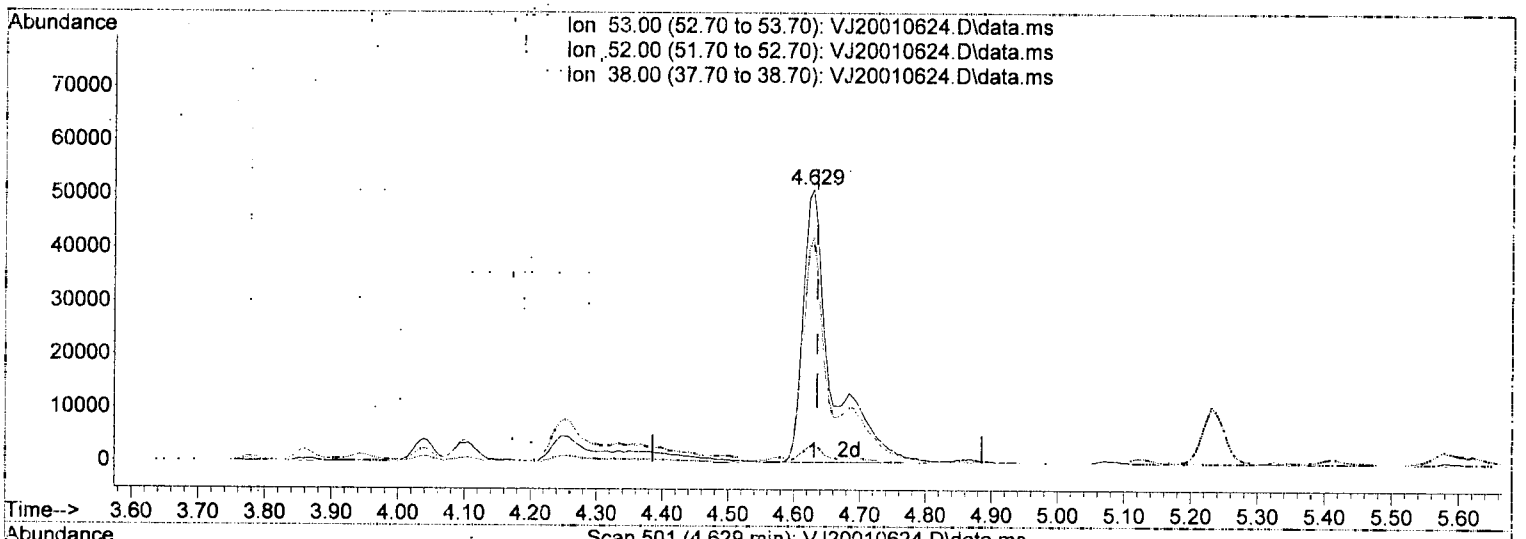
MI

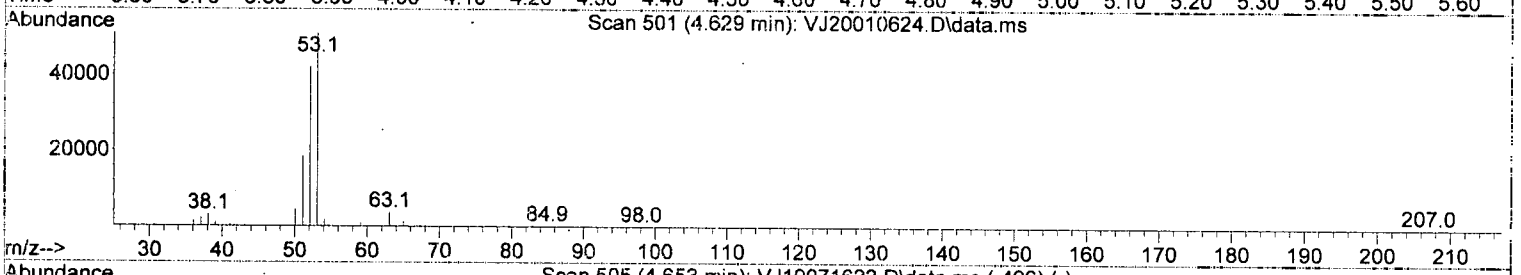
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	82.36
38.00	5.50	4.89
0.00	0.00	0.00

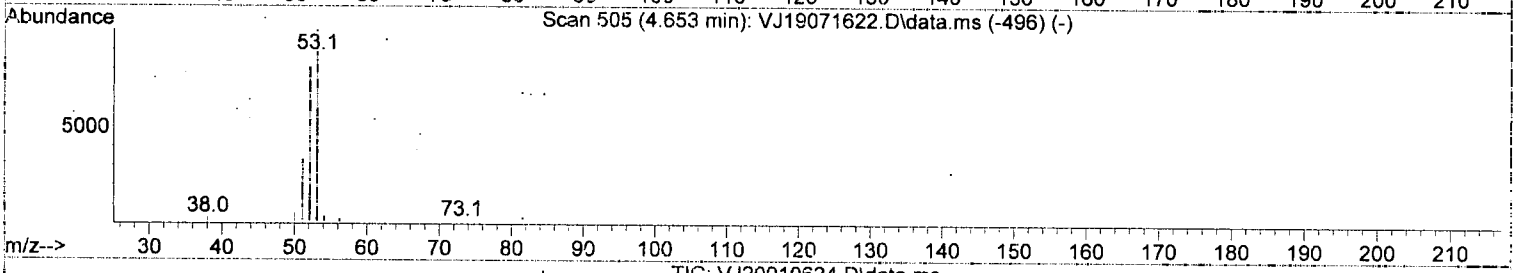
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 104.40 ug/L m

response 154316

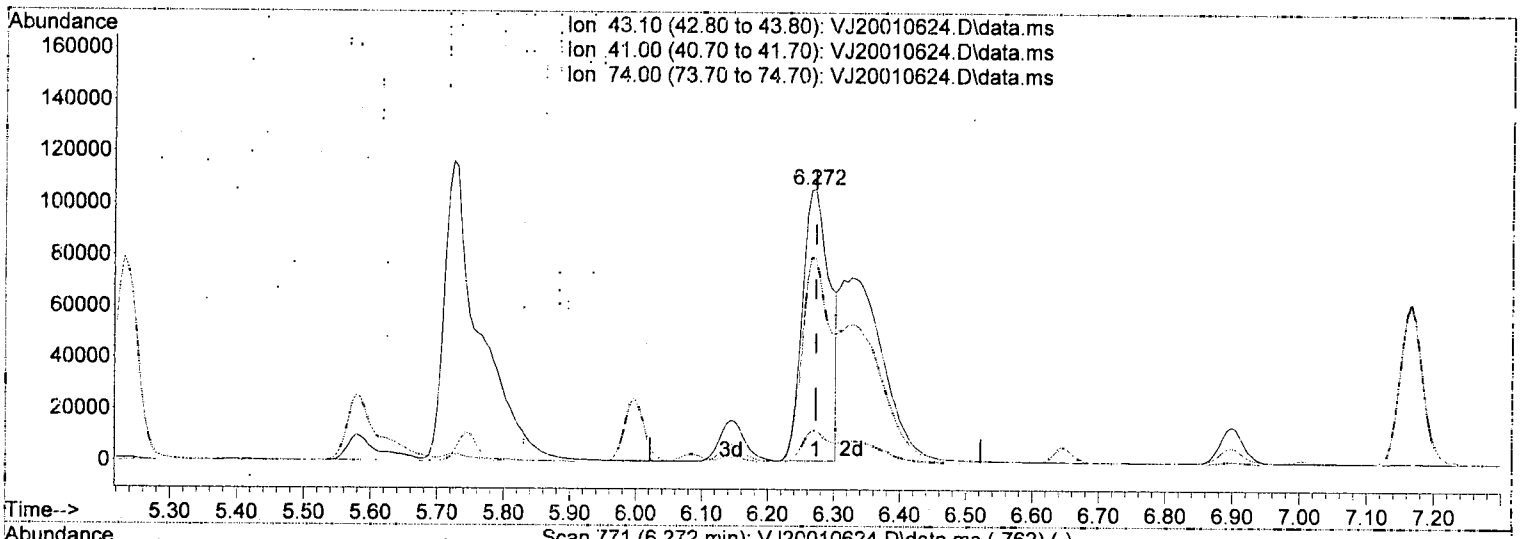
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	82.36
38.00	5.50	6.37
0.00	0.00	0.00

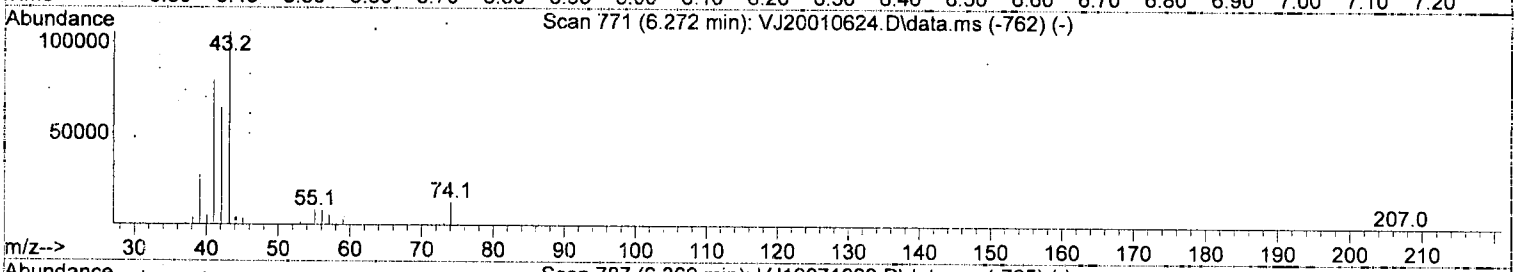
1/7/20

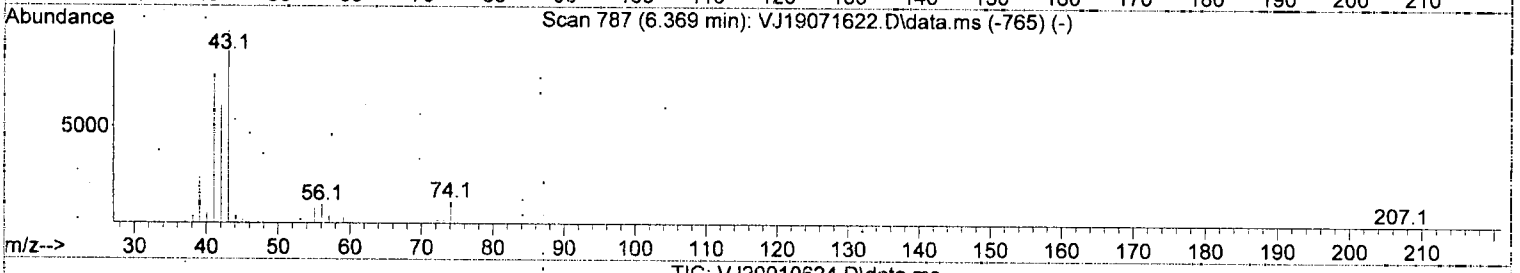
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(36) iso-Butyl Alcohol

6.272min (0.000) 1352.06 ug/L

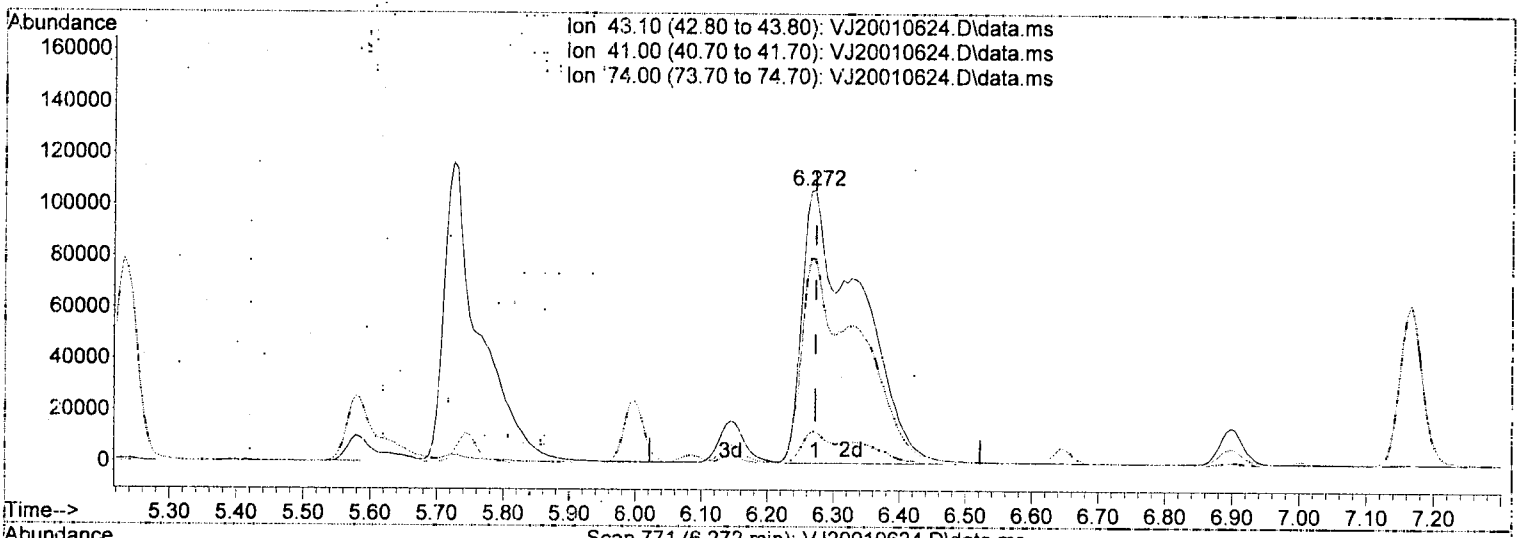
response 306318

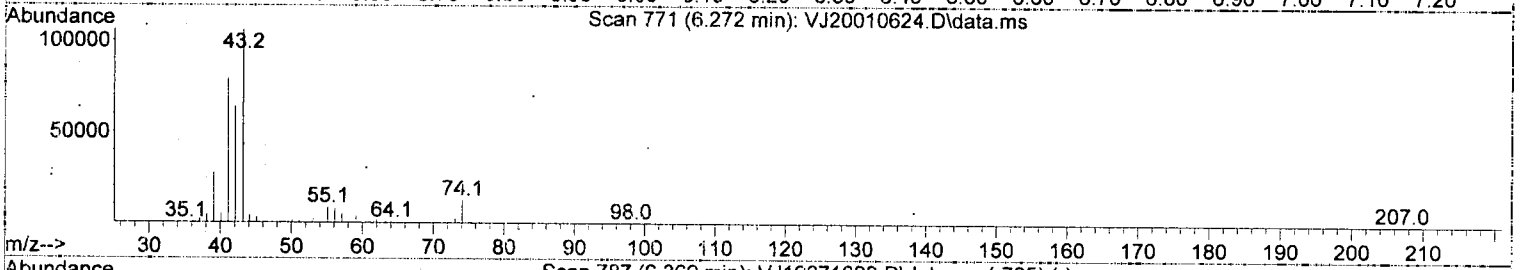
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	75.02
74.00	11.60	11.95
0.00	0.00	0.00

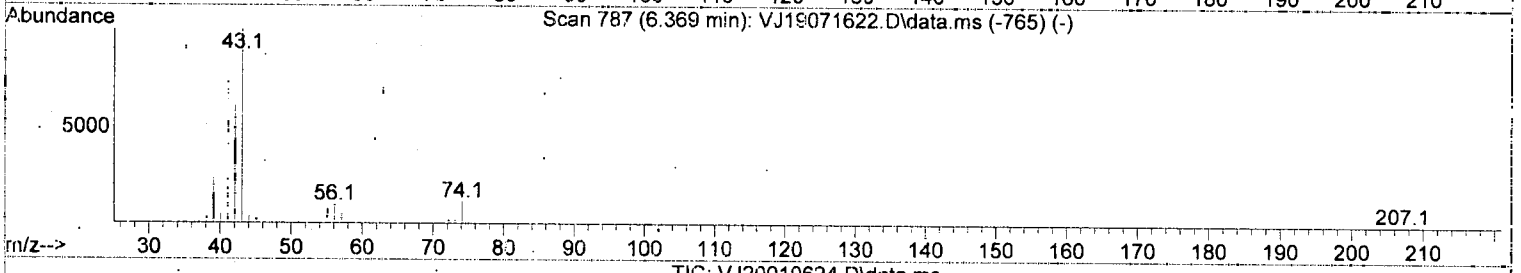
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(36) iso-Butyl Alcohol

6.272min (0.000) 2831.07 ug/L m

response 641400

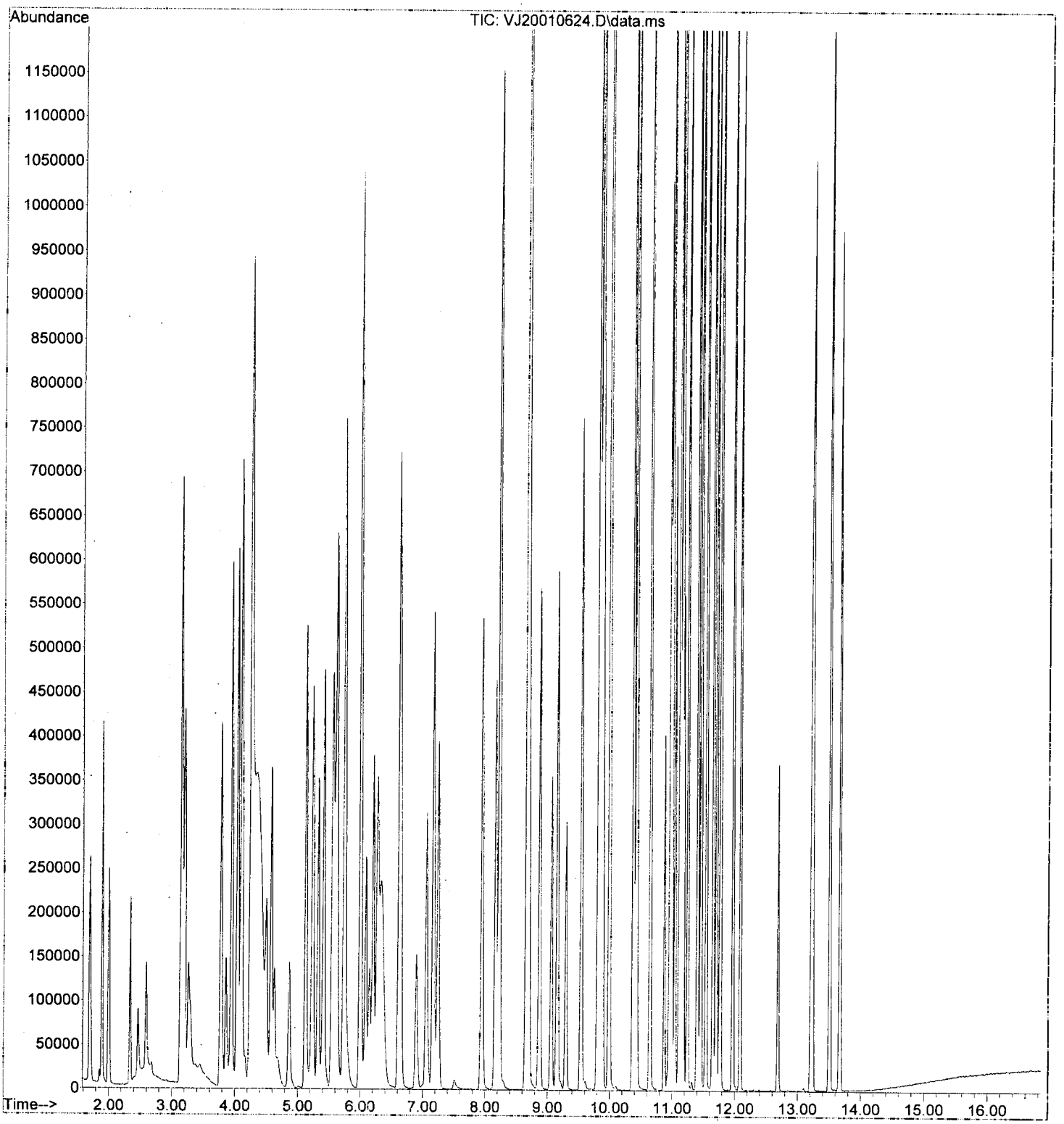
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	74.96
74.00	11.60	11.89
0.00	0.00	0.00

1/7/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010625.D
Acq On : 6 Jan 2020 10:08 pm
Operator : tb
Sample : 0A06051-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 15 Sample Multiplier: 1

NR

Quant Time: Jan 08 10:51:37 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.083	99	108180	50.00 ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	268908	50.00 ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	117506	50.00 ug/L		0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.596	111	89567	51.25 ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	318641	50.49 ug/L		0.00
45) Toluene-d8 (S)	8.164	98	371918	49.89 ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	92515	51.00 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.703	85	657	0.31 ug/L	#	51
3) Chloromethane	1.898	50	6266	2.02 ug/L		95
4) Vinyl Chloride	2.001	62	199	0.09 ug/L	#	46
5) Bromomethane	2.342	96	7500	3.76 ug/L		95
6) Chloroethane	2.457	64	137	0.24 ug/L	#	1
8) Ethanol	3.236	45	128	Below Cal	#	29
9) 1,1-Dichloroethene	3.133	61	433	0.16 ug/L	#	32
10) Carbon Disulfide	3.157	76	3387	0.72 ug/L		80
11) Freon 113	3.187	101	621	0.32 ug/L		88
12) Iodomethane	3.297	142	3063	7.93 ug/L		82
13) Methylene Chloride	3.777	84	3256	0.52 ug/L		94
14) Acetone	3.869	43	2199	1.61 ug/L		89
15) t-1,2-Dichloroethene	3.948	61	883	0.27 ug/L		95
18) tert-Butanol (TBA)	4.282	59	717	1.17 ug/L	#	46
31) 1,1-Dichloropropene	5.749	75	748	0.24 ug/L		90
32) 2-Butanone (MEK)	5.742	43	3079	1.43 ug/L		86
33) Benzene	5.998	78	1123	0.11 ug/L		56
36) iso-Butyl Alcohol	6.320	43	1991	8.59 ug/L		78
38) Trichloroethene (TCE)	6.606	130	256	0.11 ug/L	#	53
46) Toluene	8.225	91	1448	0.14 ug/L		92
47) Tetrachloroethene (PCE)	8.663	166	993	0.41 ug/L		86
55) Chlorobenzene	9.818	112	1134	0.18 ug/L		81
56) Ethylbenzene	9.855	91	2045	0.19 ug/L		86
58) m,p-Xylenes (2)	9.989	91	3352	0.45 ug/L		96
59) o-Xylene	10.372	91	960	0.14 ug/L		91
60) Styrene	10.415	104	513	0.31 ug/L		80
62) Isopropylbenzene	10.646	105	1880	0.21 ug/L		93
65) Bromobenzene	10.962	156	394	0.18 ug/L		97
66) n-Propylbenzene	10.993	91	3852	0.38 ug/L		95
68) 2-Chlorotoluene	11.108	126	311	0.16 ug/L		88
69) 1,3,5-Trimethylbenzene	11.151	105	1928	0.28 ug/L		96
72) 4-Chlorotoluene	11.242	91	2093	0.35 ug/L		94
73) tert-Butylbenzene	11.400	91	1137	0.30 ug/L		82
74) 1,2,4-Trimethylbenzene	11.455	105	1994	0.29 ug/L		92
75) sec-Butylbenzene	11.540	105	3207	0.39 ug/L		99
76) 4-Isopropyltoluene	11.650	119	2637	0.39 ug/L		94
77) 1,3-Dichlorobenzene	11.704	146	1656	0.42 ug/L		92
78) 1,4-Dichlorobenzene	11.771	146	2158	0.50 ug/L		78
79) n-Butylbenzene	11.966	91	3640	0.58 ug/L		97
80) 1,2-Dichlorobenzene	12.088	146	1033	0.29 ug/L		95
82) Hexachlorobutadiene	13.213	223	618	1.06 ug/L		92
83) 1,2,4-Trichlorobenzene	13.237	180	1906	0.85 ug/L		79
84) Naphthalene	13.505	128	3048	0.47 ug/L		86

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010625.D
Acq On : 6 Jan 2020 10:08 pm
Operator : tb
Sample : 0A06051-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 08 10:51:37 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

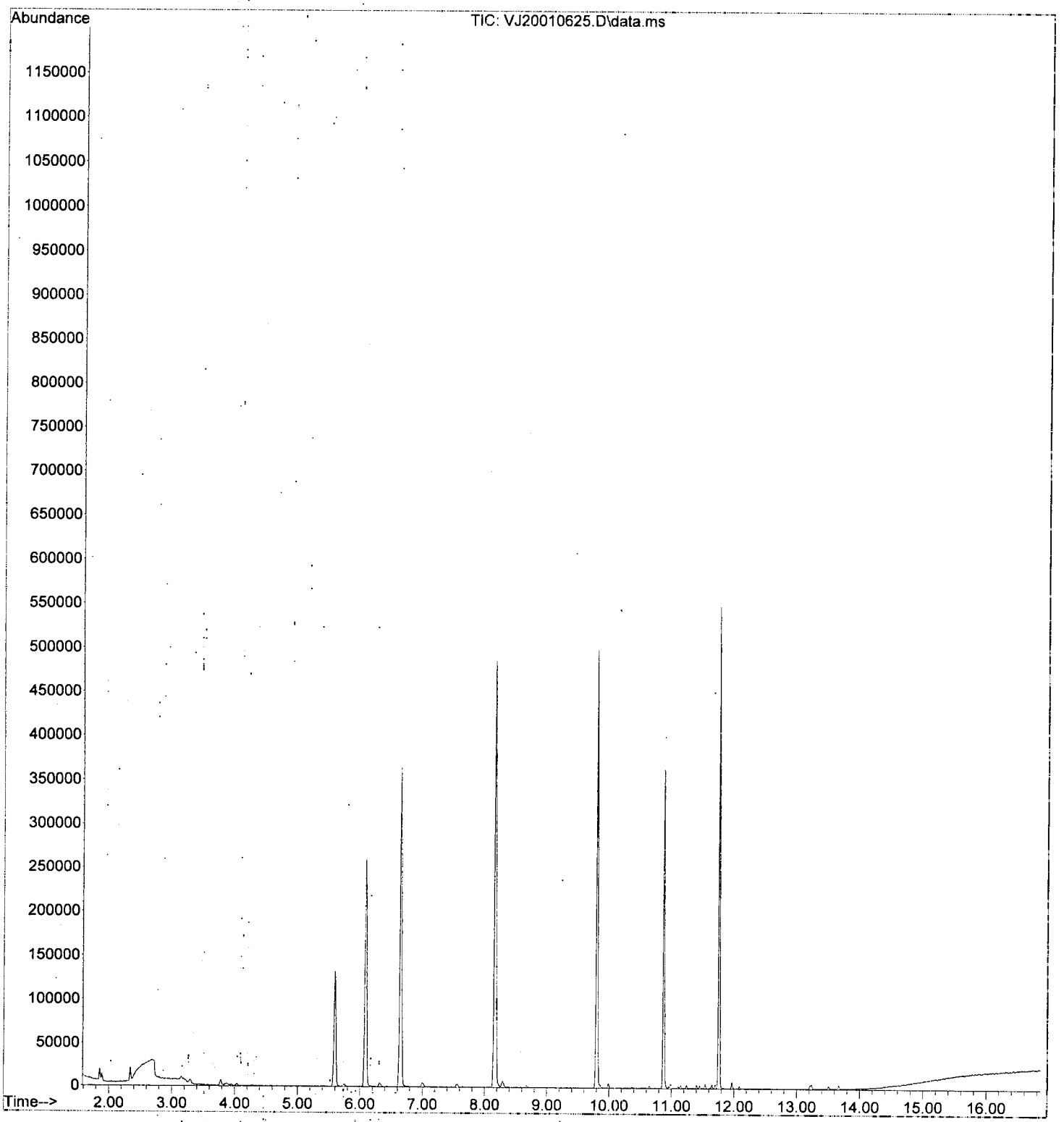
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
85) 1,2,3-Trichlorobenzene	13.669	180	1527	0.67	ug/L	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010625.D
Acq On : 6 Jan 2020 10:08 pm
Operator : tb
Sample : 0A06051-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 08 10:51:37 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

1/7/20

Quant Time: Jan 07 15:06:26 2020
Quant Method : C:\msdchem\1\methods\V~~J200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.083	99	113880	50.00	ug/L	0.00
43) Chlorobenzene-d5 (I)	9.800	117	270707	50.00	ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	138986	50.00	ug/L	0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.590	111	92653	51.74	ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.643	114	336999	51.48	ug/L	0.00
45) Toluene-d8 (S)	8.164	98	377155	49.43	ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.877	174	101679	47.38	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	d	
3) Chloromethane	0.000		0	N.D.	d	
4) Vinyl Chloride	0.000		0	N.D.	d	
5) Bromomethane	0.000		0	N.D.	d	
6) Chloroethane	0.000		0	N.D.	d	
7) Trichlorofluoromethane	0.000		0	N.D.	d	
8) Ethanol	0.000		0	N.D.	d	
9) 1,1-Dichloroethene	3.133	61	532160	199.96	ug/L	97
10) Carbon Disulfide	3.145	76	997437	213.93	ug/L	98
11) Freon 113	3.187	101	413088	198.97	ug/L	98
12) Iodomethane	3.279	142	71908	171.67	ug/L	93
13) Methylene Chloride	3.771	84	426237	187.09	ug/L	100
14) Acetone	3.857	43	551814m	410.08	ug/L	
15) t-1,2-Dichloroethene	3.936	61	670587	201.29	ug/L	99
16) n-Hexane	4.033	86	115656	215.01	ug/L	96
17) Methyl-tert-butyl-ether	4.094	73	1739636	210.08	ug/L	95
18) tert-Butanol (TBA)	0.000		0	N.D.	d	
19) Diisopropyl ether (DIPE)	0.000		0	N.D.	d	
20) 1,1-Dichloroethane	4.574	63	778036	198.95	ug/L	99
21) Acrylonitrile	4.623	53	311398m	205.09	ug/L	
22) Ethyl-tert-butyl ether...	0.000		0	N.D.	d	
23) c-1,2-Dichloroethene	5.122	61	665136	203.56	ug/L	99
24) 2,2-Dichloropropane	5.231	77	717593	198.58	ug/L	97
25) Bromochloromethane	5.323	49	362865	184.60	ug/L	98
26) Chloroform	5.408	83	835972	194.99	ug/L	96
27) Carbon Tetrachloride	5.548	117	697816	224.32	ug/L	96
28) Tetrahydrofuran	5.578	42	299591	214.13	ug/L	95
29) 1,1,1-Trichloroethane	5.615	97	839286	205.54	ug/L	98
31) 1,1-Dichloropropene	5.742	75	719241	210.95	ug/L	97
32) 2-Butanone (MEK)	5.724	43	860392	408.36	ug/L	99
33) Benzene	5.992	78	2104798	200.87	ug/L	99
34) tert-Amyl methyl ether...	0.000		0	N.D.	d	
35) 1,2-Dichloroethane (EDC)	6.199	62	729497	195.37	ug/L	99
36) iso-Butyl Alcohol	6.272	43	1304391	5605.17	ug/L	98
38) Trichloroethene (TCE)	6.612	130	540121	213.08	ug/L	97
39) tert-Amyl ethyl ether ...	0.000		0	N.D.	d	
40) Dibromomethane	7.056	93	295836	197.25	ug/L	96
41) 1,2-Dichloropropane	7.166	63	513536	210.37	ug/L	93
42) Bromodichloromethane	7.239	83	673068	224.90	ug/L	97
44) c-1,3-Dichloropropene	7.945	75	788701	215.93	ug/L	97
46) Toluene	8.218	91	2113193	198.81	ug/L	98
47) Tetrachloroethene (PCE)	8.669	166	525373	202.56	ug/L	94
48) 4-Methyl-2-Pentanone (...	8.663	43	1392617	440.35	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 15:06:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

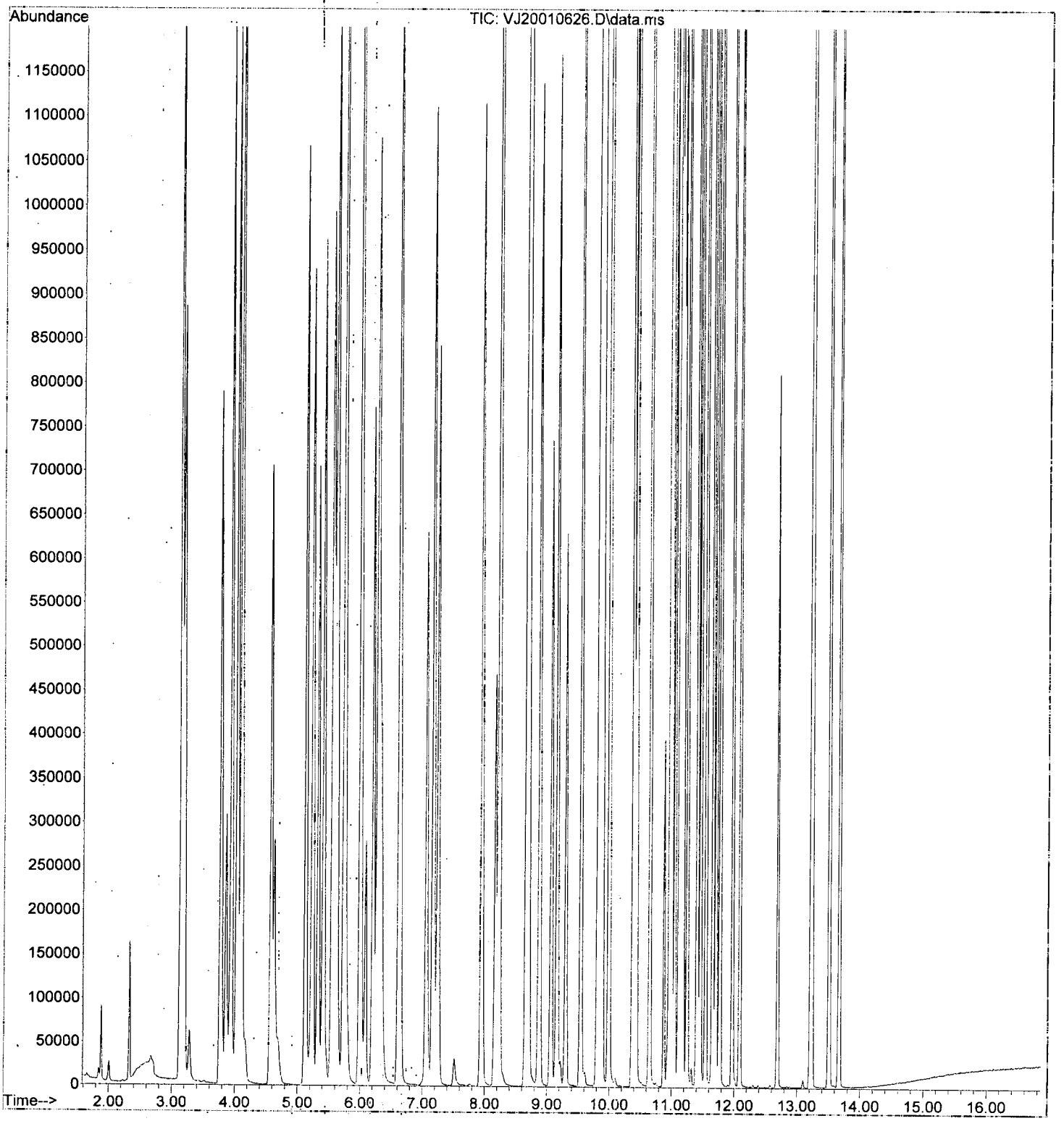
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	742175	207.87	ug/L	98
50) 1,1,2-Trichloroethane	8.869	97	439402	197.87	ug/L	100
51) Dibromochloromethane	9.058	129	475554	234.15	ug/L	99
52) 1,3-Dichloropropane	9.155	76	792112	204.93	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	481376	216.23	ug/L	99
54) 2-Hexanone	9.533	43	1114091	488.49	ug/L	99
55) Chlorobenzene	9.818	112	1265574	196.26	ug/L	98
56) Ethylbenzene	9.849	91	2266469	202.20	ug/L	100
57) 1,1,1,2-Tetrachloroethane	9.879	131	452718	208.60	ug/L	99
58) m,p-Xylenes (2)	9.989	91	3397624	408.48	ug/L	99
59) o-Xylene	10.372	91	1721459	220.76	ug/L	97
60) Styrene	10.415	104	1328257	239.38	ug/L	98
61) Bromoform	10.433	173	358978	247.05	ug/L	98
62) Isopropylbenzene	10.646	105	2132542	216.03	ug/L	99
65) Bromobenzene	10.956	156	521478	192.72	ug/L	88
66) n-Propylbenzene	10.993	91	2406935	186.13	ug/L	99
67) 1,1,2,2-Tetrachloroethane	11.041	83	627455	189.22	ug/L	97
68) 2-Chlorotoluene	11.114	126	477290	192.97	ug/L	98
69) 1,3,5-Trimethylbenzene	11.151	105	1711211	184.05	ug/L	97
70) 1,2,3-Trichloropropane	11.145	110	227473	185.87	ug/L	94
71) t-1,4-Dichloro-2-butene	11.181	88	108766	216.67	ug/L	90
72) 4-Chlorotoluene	11.242	91	1463967	191.97	ug/L	95
73) tert-Butylbenzene	11.400	91	960546	194.05	ug/L	94
74) 1,2,4-Trimethylbenzene	11.455	105	1736316	186.23	ug/L	98
75) sec-Butylbenzene	11.540	105	2093887	189.76	ug/L	98
76) 4-Isopropyltoluene	11.650	119	1802226	196.15	ug/L	98
77) 1,3-Dichlorobenzene	11.704	146	940100	186.76	ug/L	98
78) 1,4-Dichlorobenzene	11.771	146	951168	191.34	ug/L	97
79) n-Butylbenzene	11.966	91	1537990	194.32	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	895922	194.42	ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	200017	243.11	ug/L	90
82) Hexachlorobutadiene	13.213	223	144234	195.42	ug/L	95
83) 1,2,4-Trichlorobenzene	13.231	180	622345	222.13	ug/L	95
84) Naphthalene	13.505	128	2224076	227.82	ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	618452	209.45	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 15:06:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	113880	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	270707	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	138986	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	92653	51.74	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	336999	51.48	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	377155	49.43	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	101679	47.38	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	1173	0.58	ug/L		73
3) Chloromethane	1.879	50	64059	21.06	ug/L		99
4) Vinyl Chloride	2.007	62	18387	7.53	ug/L		92
5) Bromomethane	2.330	96	70871	54.80	ug/L		99
6) Chloroethane	2.451	64	989	1.85	ug/L	#	8
7) Trichlorofluoromethane	2.585	101	651	0.77	ug/L		84
8) Ethanol	3.273	45	2779	40.23	ug/L		88
9) 1,1-Dichloroethene	3.133	61	532160	199.96	ug/L		97
10) Carbon Disulfide	3.145	76	997437	213.93	ug/L		98
11) Freon 113	3.187	101	413088	198.97	ug/L		98
12) Iodomethane	3.279	142	71908	171.67	ug/L		93
13) Methylene Chloride	3.771	84	426237	187.09	ug/L		100
14) Acetone	3.857	43	~~435386~~	~~323.56~~	~~ug/L~~		~~98~~ MI
15) t-1,2-Dichloroethene	3.936	61	670587	201.29	ug/L		99
16) n-Hexane	4.033	86	115656	215.01	ug/L		96
17) Methyl-tert-butyl-ether	4.094	73	1739636	210.08	ug/L		95
18) tert-Butanol (TBA)	4.264	59	1655	2.43	ug/L	#	1
19) Diisopropyl ether (DIPE)	4.495	45	673	0.09	ug/L		59
20) 1,1-Dichloroethane	4.574	63	778036	198.95	ug/L		99
21) Acrylonitrile	4.623	53	~~253785~~	~~167.15~~	~~ug/L~~		~~98~~ MI
22) Ethyl-tert-butyl ether...	4.854	59	413	0.05	ug/L	#	38
23) c-1,2-Dichloroethene	5.122	61	665136	203.56	ug/L		99
24) 2,2-Dichloropropane	5.231	77	717593	198.58	ug/L		97
25) Bromochloromethane	5.323	49	362865	184.60	ug/L		98
26) Chloroform	5.408	83	835972	194.99	ug/L		96
27) Carbon Tetrachloride	5.548	117	697816	224.32	ug/L		96
28) Tetrahydrofuran	5.578	42	299591	214.13	ug/L		95
29) 1,1,1-Trichloroethane	5.615	97	839286	205.54	ug/L		98
31) 1,1-Dichloropropene	5.742	75	719241	210.95	ug/L		97
32) 2-Butanone (MEK)	5.724	43	860392	408.36	ug/L		99
33) Benzene	5.992	78	2104798	200.87	ug/L		99
34) tert-Amyl methyl ether...	6.150	73	650	0.10	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.199	62	729497	195.37	ug/L		99
36) iso-Butyl Alcohol	6.272	43	1304391	5605.17	ug/L		98
38) Trichloroethene (TCE)	6.612	130	540121	213.08	ug/L		97
39) tert-Amyl ethyl ether ...	6.892	59	131	0.03	ug/L	#	21
40) Dibromomethane	7.056	93	295836	197.25	ug/L		96
41) 1,2-Dichloropropane	7.166	63	513536	210.37	ug/L		93
42) Bromodichloromethane	7.239	83	673068	224.90	ug/L		97
44) c-1,3-Dichloropropene	7.945	75	788701	215.93	ug/L		97
46) Toluene	8.218	91	2113193	198.31	ug/L		98
47) Tetrachloroethene (PCE)	8.669	166	525373	202.66	ug/L		94
48) 4-Methyl-2-Pentanone (...	8.663	43	1392617	440.35	ug/L		96

not spiked

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

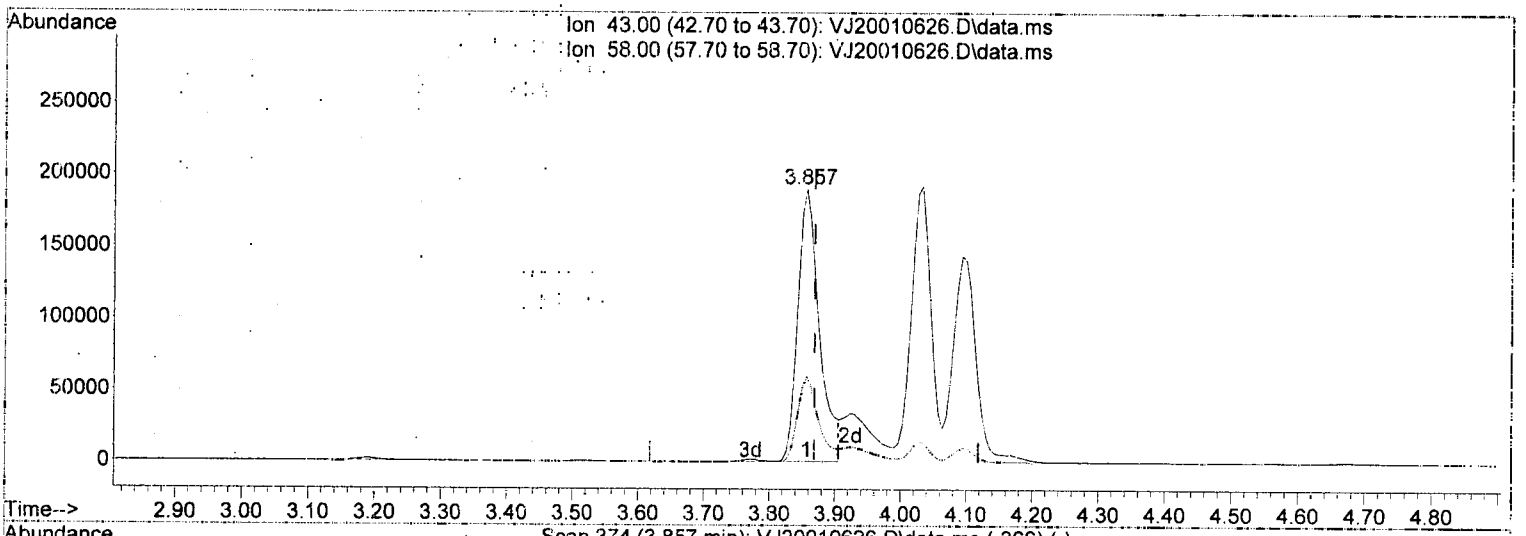
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	742175	207.87	ug/L	98
50) 1,1,2-Trichloroethane	8.869	97	439402	197.87	ug/L	100
51) Dibromochloromethane	9.058	129	475554	234.15	ug/L	99
52) 1,3-Dichloropropane	9.155	76	792112	204.93	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	481376	216.23	ug/L	99
54) 2-Hexanone	9.533	43	1114091	488.49	ug/L	99
55) Chlorobenzene	9.818	112	1265574	196.26	ug/L	98
56) Ethylbenzene	9.849	91	2266469	202.20	ug/L	100
57) 1,1,1,2-Tetrachloroethane	9.879	131	452718	208.60	ug/L	99
58) m,p-Xylenes (2)	9.989	91	3397624	408.48	ug/L	99
59) o-Xylene	10.372	91	1721459	220.76	ug/L	97
60) Styrene	10.415	104	1328257	239.38	ug/L	98
61) Bromoform	10.433	173	358978	247.05	ug/L	98
62) Isopropylbenzene	10.646	105	2132542	216.03	ug/L	99
65) Bromobenzene	10.956	156	521478	192.72	ug/L	88
66) n-Propylbenzene	10.993	91	2406935	186.13	ug/L	99
67) 1,1,2,2-Tetrachloroethane	11.041	83	627455	189.22	ug/L	97
68) 2-Chlorotoluene	11.114	126	477290	192.97	ug/L	98
69) 1,3,5-Trimethylbenzene	11.151	105	1711211	184.05	ug/L	97
70) 1,2,3-Trichloropropane	11.145	110	227473	185.87	ug/L	94
71) t-1,4-Dichloro-2-butene	11.181	88	108766	216.67	ug/L	90
72) 4-Chlorotoluene	11.242	91	1463967	191.97	ug/L	95
73) tert-Butylbenzene	11.400	91	960546	194.05	ug/L	94
74) 1,2,4-Trimethylbenzene	11.455	105	1736316	186.23	ug/L	98
75) sec-Butylbenzene	11.540	105	2093887	189.76	ug/L	98
76) 4-Isopropyltoluene	11.650	119	1802226	196.15	ug/L	98
77) 1,3-Dichlorobenzene	11.704	146	940100	186.76	ug/L	98
78) 1,4-Dichlorobenzene	11.771	146	951168	191.34	ug/L	97
79) n-Butylbenzene	11.966	91	1537990	194.32	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	895922	194.42	ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	200017	248.11	ug/L	90
82) Hexachlorobutadiene	13.213	223	144234	196.42	ug/L	95
83) 1,2,4-Trichlorobenzene	13.231	180	622345	222.13	ug/L	95
84) Naphthalene	13.505	128	2224076	227.82	ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	618452	209.45	ug/L	98

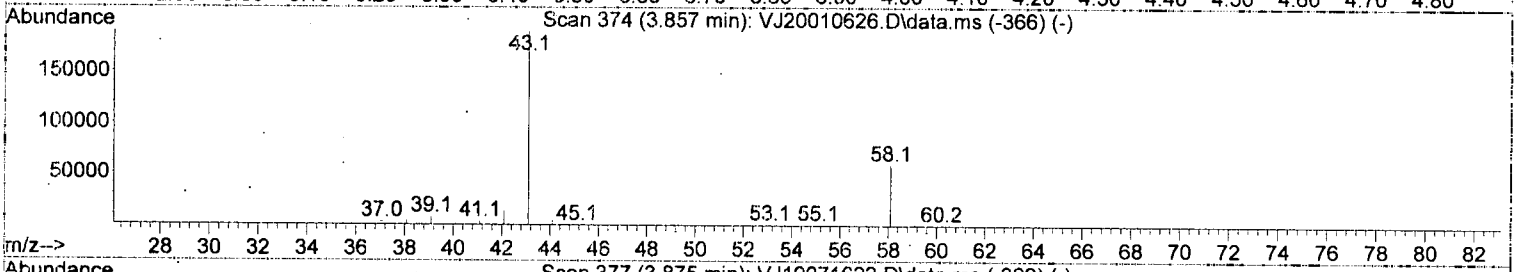
(#) = qualifier out of range (m) = manual integration (+) = signals summed

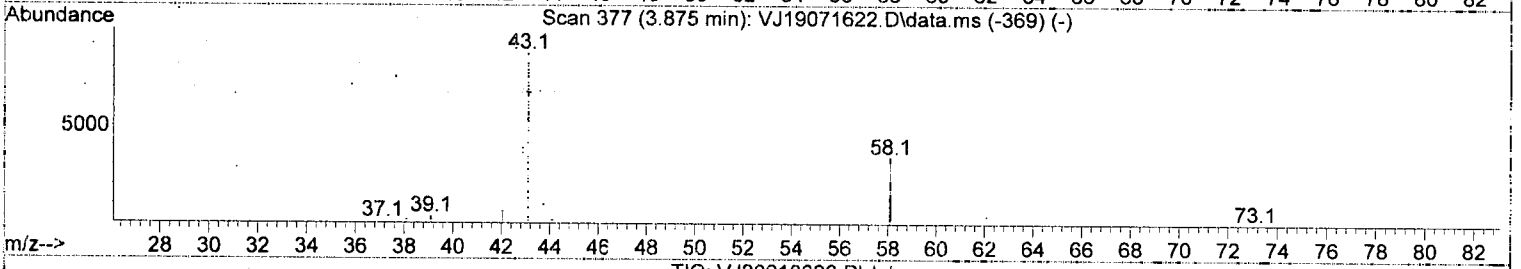
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010626.D\data.ms

(14) Acetone

3.857min (-0.011) 323.56 ug/L

response 435386

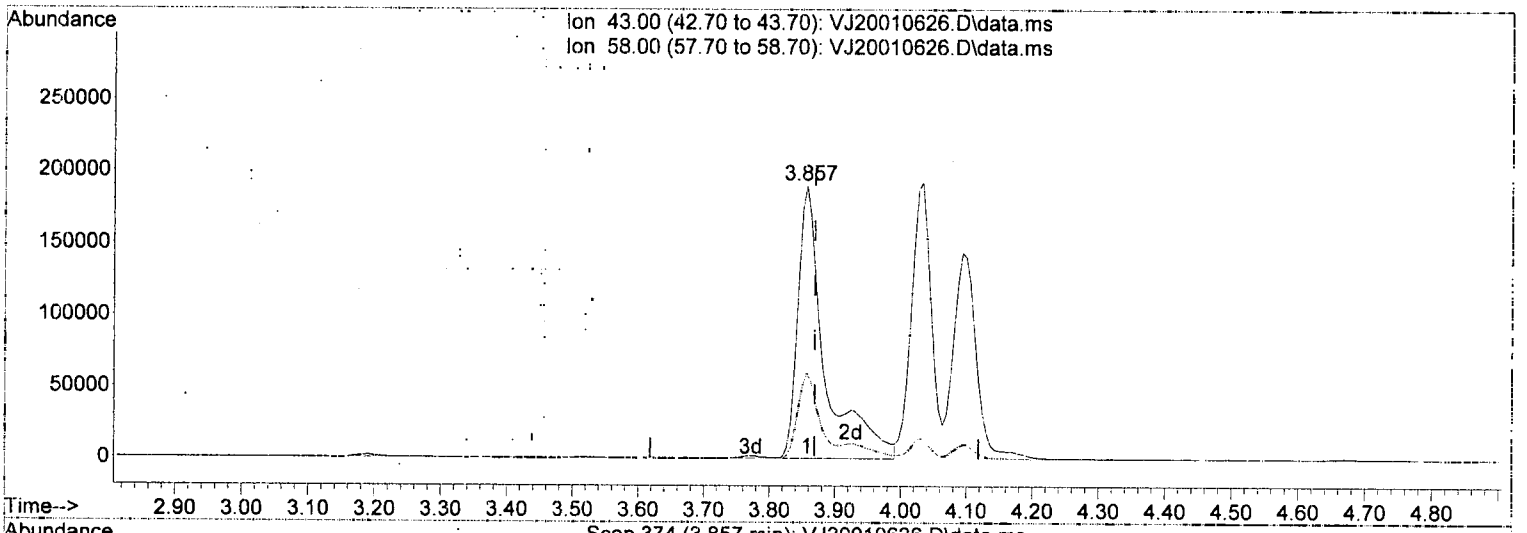
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.17
0.00	0.00	0.00
0.00	0.00	0.00

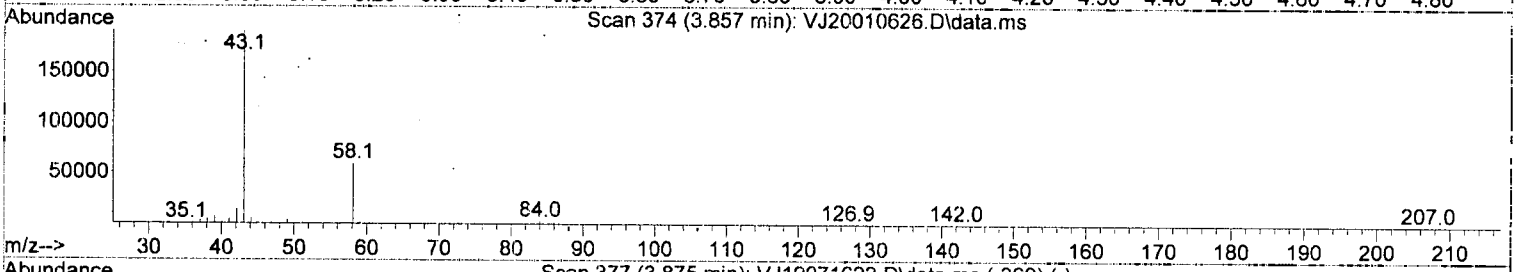
MI

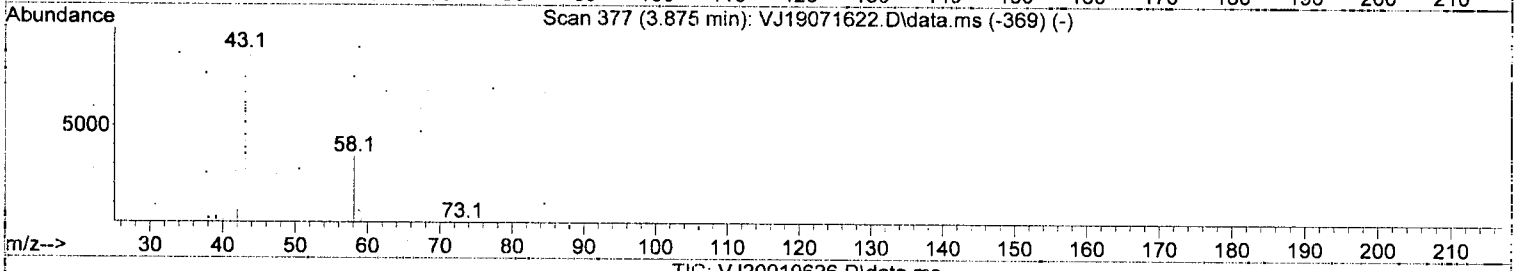
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010626.D\data.ms

(14) Acetone

3.857min (-0.011) 410.08 ug/L (m)

response 551814

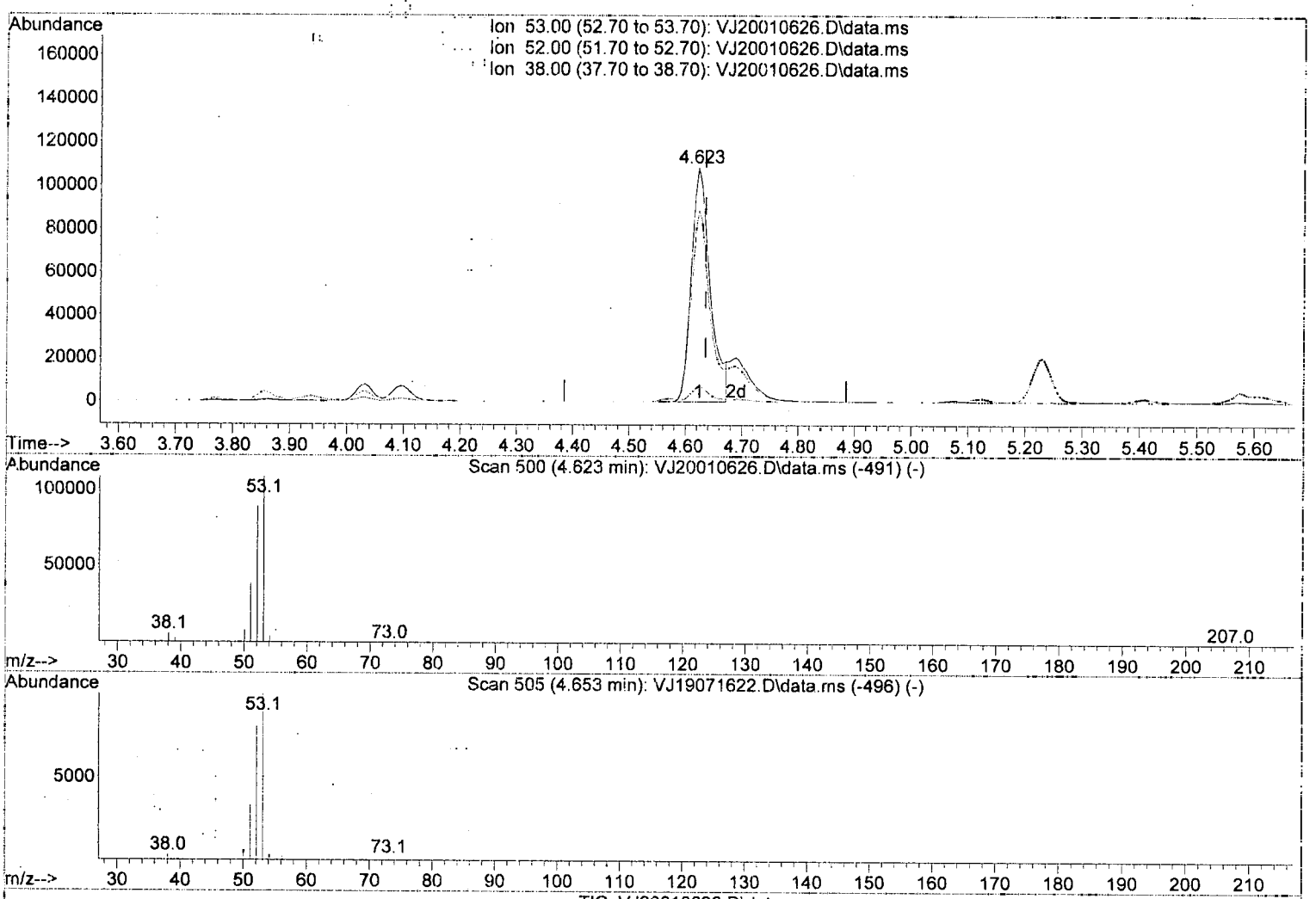
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.12
0.00	0.00	0.00
0.00	0.00	0.00

1/7/20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



TIC: VJ20010626.D\data.ms

(21) Acrylonitrile

4.623min (-0.012) 167.15 ug/L

response 253785

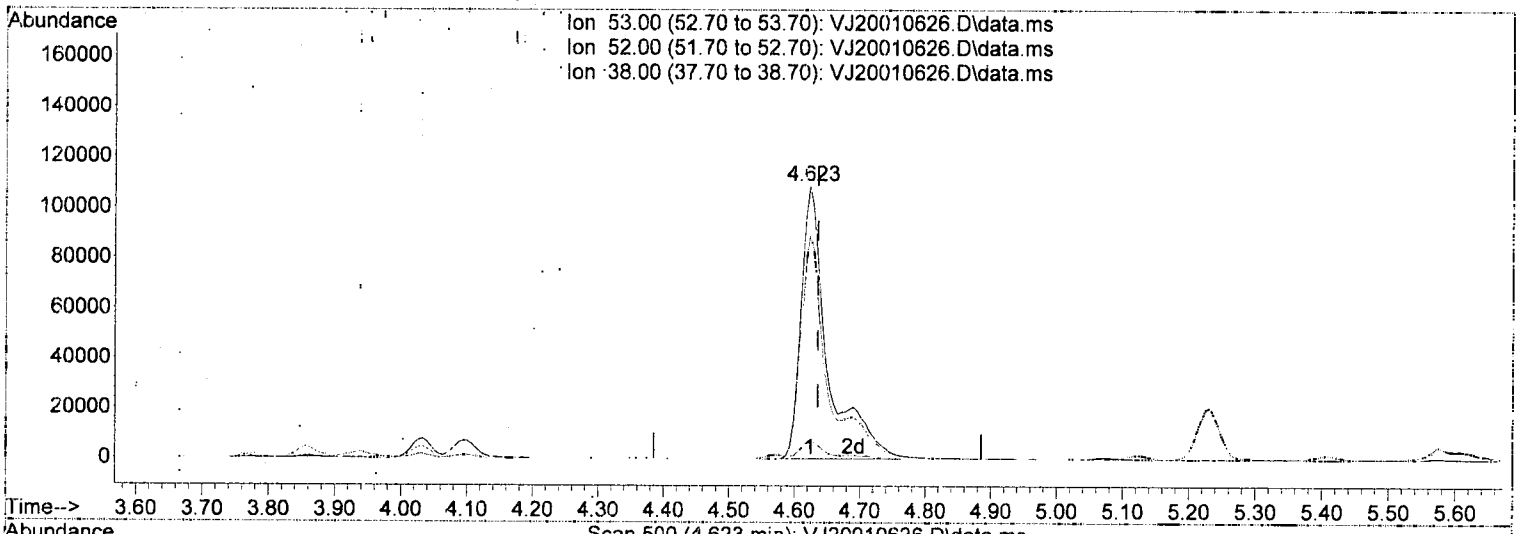
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	81.86
38.00	5.50	5.39
0.00	0.00	0.00

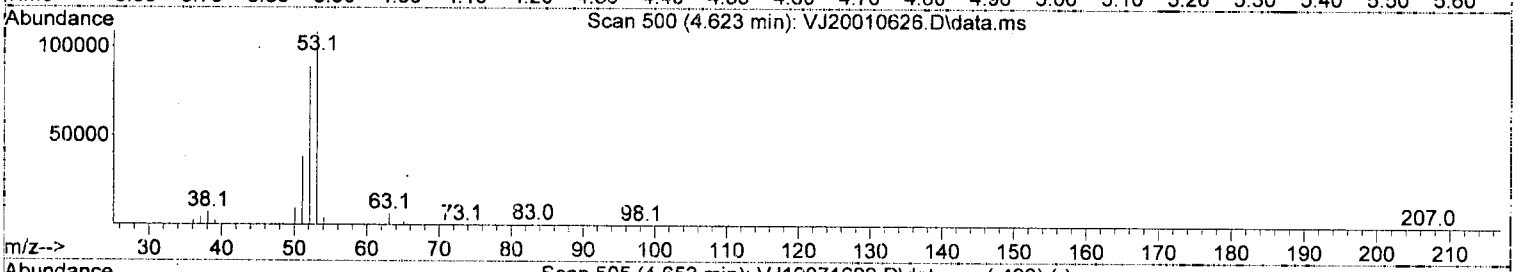
MI

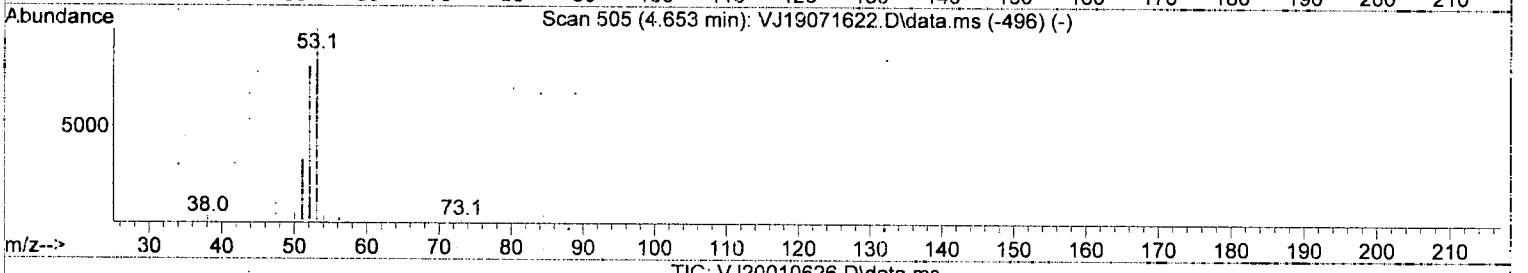
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010626.D\data.ms

(21) Acrylonitrile

4.623min (-0.012) 205.09 ug/L m

response 311398

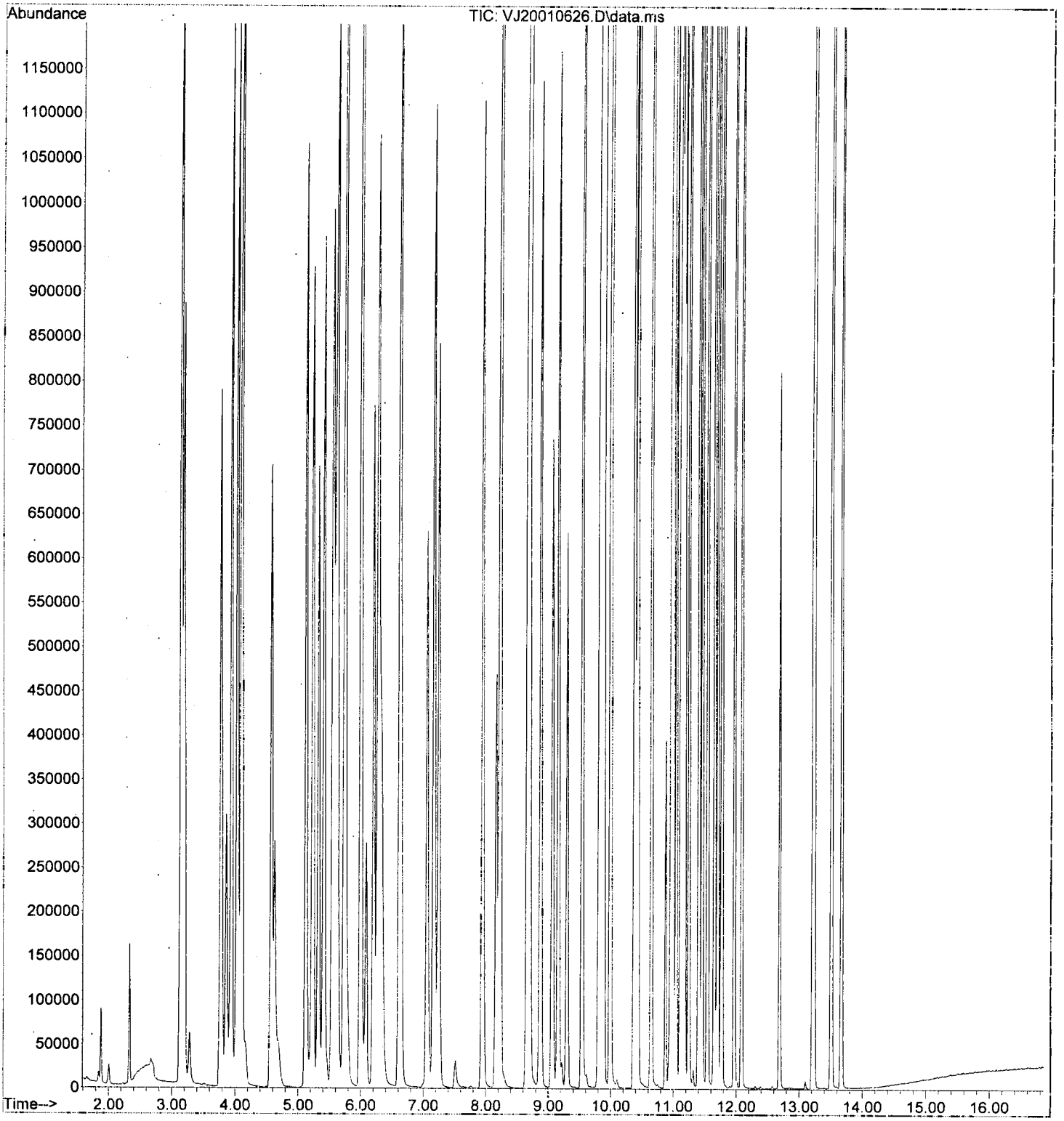
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	81.86
38.00	5.50	6.60
0.00	0.00	0.00

11/7/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010627.D
Acq On : 6 Jan 2020 11:01 pm
Operator : tb
Sample : 0A06051-IBL4
Misc : 1X | 5mL | DI+MeOH
ALS Vial : 17 | Sample Multiplier: 1

Quant Time: Jan 08 10:51:40 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	113663	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	282838	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	125972	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	93322	50.82	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	338233	51.01	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	389727	49.71	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	99058	50.94	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.898	50	7870	2.41	ug/L		99
5) Bromomethane	2.342	96	8320	4.14	ug/L		98
6) Chloroethane	2.451	64	57	0.10	ug/L	#	17
8) Ethanol	3.236	45	209	Below Cal		#	29
9) 1,1-Dichloroethene	3.145	61	957	0.35	ug/L		88
10) Carbon Disulfide	3.151	76	7075	1.43	ug/L		94
11) Freon 113	3.199	101	1429	0.70	ug/L		98
12) Iodomethane	3.291	142	7499	17.06	ug/L		87
13) Methylene Chloride	3.777	84	3507	0.56	ug/L		92
14) Acetone	3.881	43	2803	1.95	ug/L		86
15) t-1,2-Dichloroethene	3.948	61	1726	0.51	ug/L		98
16) n-Hexane	4.039	86	122	0.24	ug/L	#	47
18) tert-Butanol (TBA)	4.282	59	484	0.75	ug/L	#	46
23) c-1,2-Dichloroethene	5.122	61	566	0.18	ug/L		89
27) Carbon Tetrachloride	5.554	117	311	0.10	ug/L		87
29) 1,1,1-Trichloroethane	5.627	97	378	0.10	ug/L	#	25
31) 1,1-Dichloropropene	5.755	75	1690	0.52	ug/L		89
32) 2-Butanone (MEK)	5.742	43	3488	1.55	ug/L		93
33) Benzene	6.004	78	2038	0.20	ug/L		90
35) 1,2-Dichloroethane (EDC)	6.205	62	330	0.09	ug/L	#	49
36) iso-Butyl Alcohol	6.314	43	2303	9.46	ug/L		93
38) Trichloroethene (TCE)	6.618	130	1127	0.46	ug/L		86
44) c-1,3-Dichloropropene	7.945	75	335	0.09	ug/L	#	55
46) Toluene	8.218	91	2892	0.26	ug/L		99
47) Tetrachloroethene (PCE)	8.669	166	2085	0.81	ug/L		88
49) t-1,3-Dichloropropene	8.699	75	486	0.14	ug/L	#	45
54) 2-Hexanone	9.545	43	205	0.95	ug/L	#	32
55) Chlorobenzene	9.812	112	2389	0.36	ug/L		68
56) Ethylbenzene	9.855	91	4050	0.36	ug/L		94
58) m,p-Xylenes (2)	9.989	91	6497	0.83	ug/L		95
59) o-Xylene	10.366	91	1854	0.25	ug/L		88
60) Styrene	10.415	104	1284	0.43	ug/L		90
62) Isopropylbenzene	10.646	105	3552	0.37	ug/L		91
65) Bromobenzene	10.962	156	933	0.39	ug/L		80
66) n-Propylbenzene	10.993	91	7876	0.72	ug/L		98
68) 2-Chlorotoluene	11.108	126	1002	0.49	ug/L		99
69) 1,3,5-Trimethylbenzene	11.151	105	4163	0.56	ug/L		96
72) 4-Chlorotoluene	11.242	91	4216	0.67	ug/L		96
73) tert-Butylbenzene	11.400	91	2132	0.52	ug/L		96
74) 1,2,4-Trimethylbenzene	11.455	105	3923	0.53	ug/L		97
75) sec-Butylbenzene	11.540	105	6645	0.75	ug/L		99
76) 4-Isopropyltoluene	11.650	119	5593	0.77	ug/L		93
77) 1,3-Dichlorobenzene	11.704	146	3708	0.87	ug/L		91

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010627.D
Acq On : 6 Jan 2020 11:01 pm
Operator : tb
Sample : 0A06051-IBL4
Misc : 1X 5mL DI+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 08 10:51:40 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

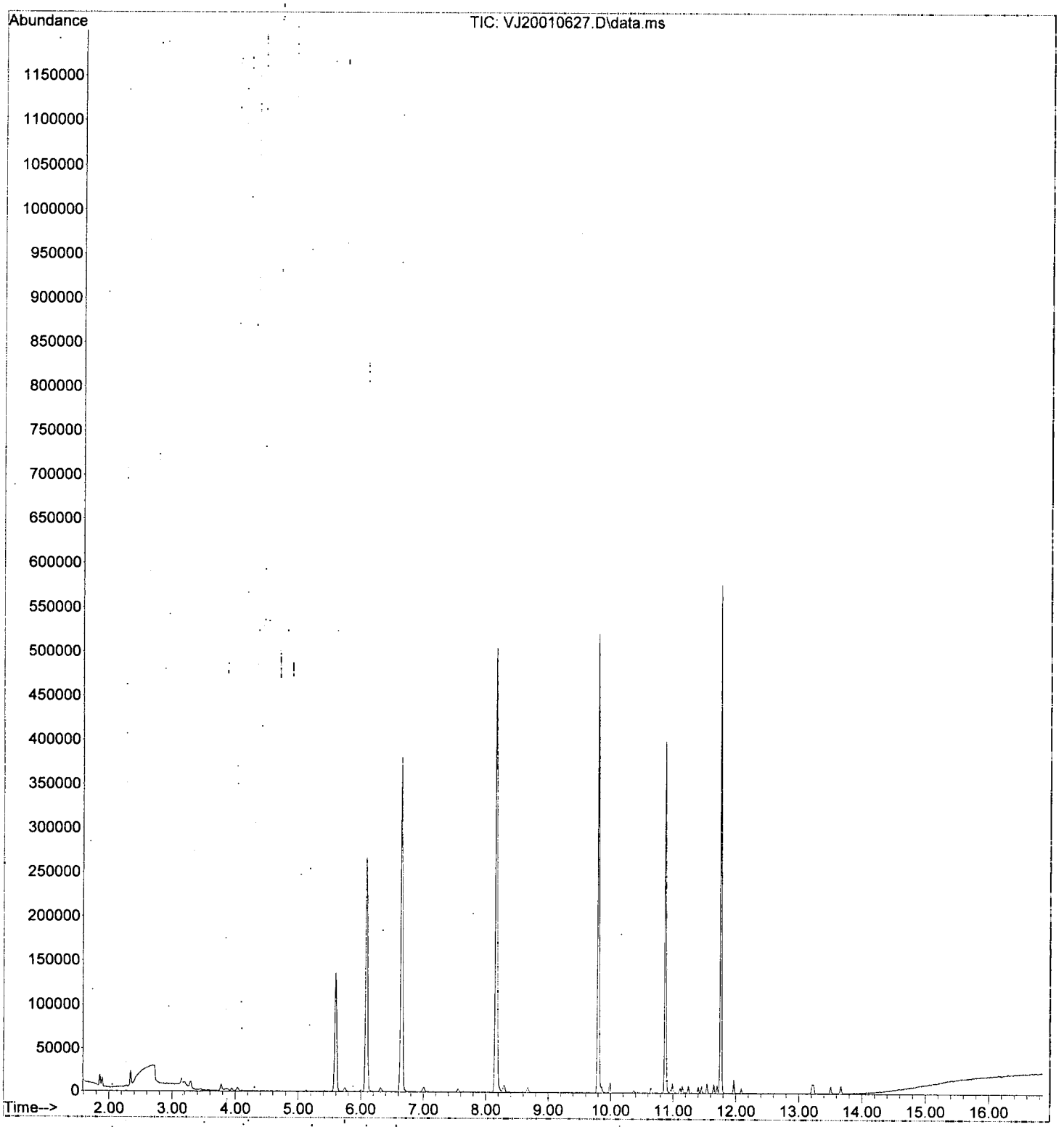
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
78) 1,4-Dichlorobenzene	11.771	146	3976	0.87 ug/L	89
79) n-Butylbenzene	11.966	91	7693	1.14 ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	2176	0.56 ug/L	97
82) Hexachlorobutadiene	13.213	223	1275	2.03 ug/L	92
83) 1,2,4-Trichlorobenzene	13.237	180	3806	1.59 ug/L	96
84) Naphthalene	13.505	128	6535	0.83 ug/L	98
85) 1,2,3-Trichlorobenzene	13.663	180	3249	1.34 ug/L	94

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010627.D
Acq On : 6 Jan 2020 11:01 pm
Operator : tb
Sample : 0A06051-IBL4
Misc : 1X 5mL DI+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 08 10:51:40 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010628.D
Acq On : 6 Jan 2020 11:28 pm
Operator : tb
Sample : 0A06051-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 08 10:51:43 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

NR

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	107910	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	265943	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	117788	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	90186	51.74	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	320476	50.91	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	371517	50.39	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	94425	51.93	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	5351	1.73	ug/L		94
5) Bromomethane	2.342	96	6306	2.69	ug/L		98
6) Chloroethane	2.476	64	56	0.10	ug/L	#	1
8) Ethanol	3.279	45	3447	1.51	ug/L		86
9) 1,1-Dichloroethene	3.139	61	319	0.12	ug/L	#	73
10) Carbon Disulfide	3.151	76	2860	0.61	ug/L		83
11) Freon 113	3.200	101	425	0.22	ug/L		85
12) Iodomethane	3.291	142	5244	13.02	ug/L		92
13) Methylene Chloride	3.778	84	3150	0.48	ug/L		98
14) Acetone	3.869	43	2519	1.85	ug/L		98
15) t-1,2-Dichloroethene	3.942	61	576	0.18	ug/L		86
18) tert-Butanol (TBA)	4.264	59	194	0.32	ug/L	#	46
31) 1,1-Dichloropropene	5.749	75	513	0.17	ug/L	#	39
32) 2-Butanone (MEK)	5.736	43	2872	1.34	ug/L		86
36) iso-Butyl Alcohol	6.320	43	1895	8.20	ug/L		88
38) Trichloroethene (TCE)	6.612	130	323	0.14	ug/L	#	79
46) Toluene	8.225	91	964	0.09	ug/L		87
47) Tetrachloroethene (PCE)	8.669	166	793	0.33	ug/L		94
55) Chlorobenzene	9.812	112	708	0.11	ug/L	#	9
56) Ethylbenzene	9.849	91	1371	0.13	ug/L		87
58) m,p-Xylenes (2)	9.989	91	2226	0.30	ug/L		94
59) o-Xylene	10.366	91	663	0.10	ug/L		95
60) Styrene	10.421	104	429	0.29	ug/L		72
62) Isopropylbenzene	10.646	105	1188	0.13	ug/L		87
65) Bromobenzene	10.956	156	188	0.08	ug/L	#	51
66) n-Propylbenzene	10.987	91	3000	0.29	ug/L		89
68) 2-Chlorotoluene	11.108	126	261	0.14	ug/L		90
69) 1,3,5-Trimethylbenzene	11.151	105	1372	0.20	ug/L		93
72) 4-Chlorotoluene	11.242	91	1342	0.23	ug/L		95
73) tert-Butylbenzene	11.400	91	488	0.13	ug/L		93
74) 1,2,4-Trimethylbenzene	11.455	105	1312	0.19	ug/L		96
75) sec-Butylbenzene	11.540	105	2120	0.26	ug/L		94
76) 4-Isopropyltoluene	11.650	119	1804	0.27	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	1211	0.30	ug/L		96
78) 1,4-Dichlorobenzene	11.771	146	1484	0.35	ug/L		81
79) n-Butylbenzene	11.966	91	2778	0.44	ug/L		94
80) 1,2-Dichlorobenzene	12.082	146	562	0.16	ug/L		93
82) Hexachlorobutadiene	13.207	223	359	0.61	ug/L		86
83) 1,2,4-Trichlorobenzene	13.238	180	1182	0.53	ug/L		75
84) Naphthalene	13.505	128	1660	0.30	ug/L		74
85) 1,2,3-Trichlorobenzene	13.663	180	945	0.42	ug/L		79

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010628.D
Acq On : 6 Jan 2020 11:28 pm
Operator : tb
Sample : 0A06051-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 08 10:51:43 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

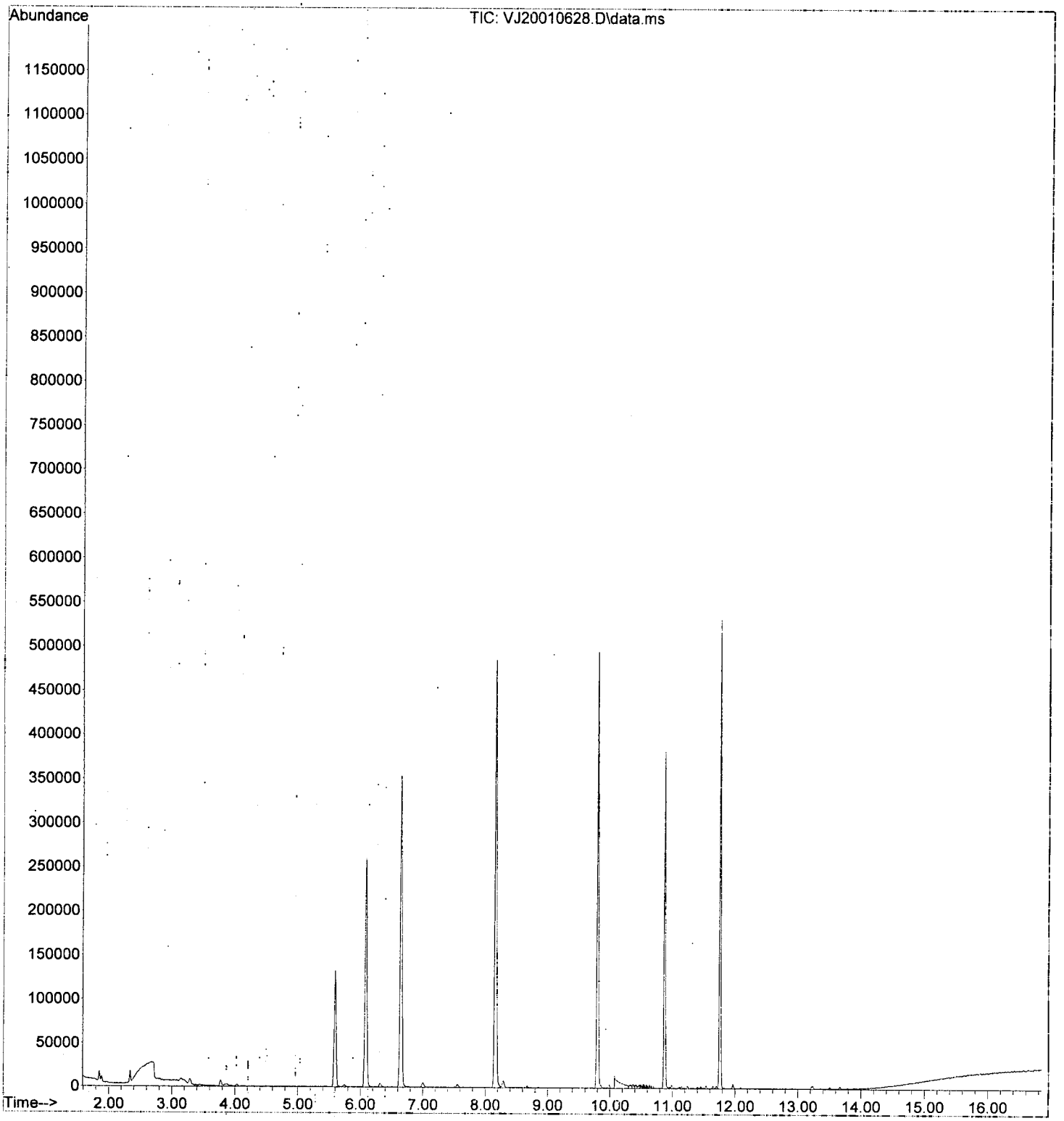
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010628.D
Acq On : 6 Jan 2020 11:28 pm
Operator : tb
Sample : 0A06051-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 08 10:51:43 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

1/8/20

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.083	99	112083	50.00 ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	271117	50.00 ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	129999	50.00 ug/L		0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.590	111	88313	48.77 ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	330172	50.50 ug/L		0.00
45) Toluene-d8 (S)	8.164	98	375713	49.99 ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	98256	48.96 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.685	85	36704	16.82 ug/L		96
3) Chloromethane	1.886	50	64219	19.97 ug/L		99
4) Vinyl Chloride	1.989	62	47883	19.74 ug/L		95
5) Bromomethane	2.336	96	22927	17.30 ug/L		96
6) Chloroethane	2.457	64	10699	18.37 ug/L		91
7) Trichlorofluoromethane	2.585	101	16369	19.03 ug/L		98
8) Ethanol	3.279	45	95750	1376.37 ug/L		90
9) 1,1-Dichloroethene	3.133	61	57923	21.27 ug/L		97
10) Carbon Disulfide	3.145	76	102394	20.93 ug/L		98
11) Freon 113	3.187	101	40701	20.12 ug/L		99
12) Iodomethane	3.285	142	16363	33.02 ug/L		90
13) Methylene Chloride	3.771	84	46878	20.37 ug/L		99
14) Acetone	3.863	43	~~41754~~	~~29.46 ug/L~~		~~100~~ MI 39.80
15) t-1,2-Dichloroethene	3.936	61	69064	20.71 ug/L		96
16) n-Hexane	4.027	86	10441	20.45 ug/L	#	89
17) Methyl-tert-butyl-ether	4.100	73	159079	19.37 ug/L		59
18) tert-Butanol (TBA)	4.258	59	882233	1391.07 ug/L	#	90
19) Diisopropyl ether (DIPE)	4.501	45	38819	5.31 ug/L		97
20) 1,1-Dichloroethane	4.574	63	82482	21.45 ug/L		98
21) Acrylonitrile	4.629	53	~~21285~~	~~14.74 ug/L~~		~~96~~ MI 19.80
22) Ethyl-tert-butyl ether...	4.866	59	35840	5.15 ug/L		97
23) c-1,2-Dichloroethene	5.122	61	65632	21.15 ug/L		98
24) 2,2-Dichloropropane	5.231	77	64719	18.27 ug/L		98
25) Bromochloromethane	5.323	49	37281	19.42 ug/L		96
26) Chloroform	5.408	83	84256	19.94 ug/L		99
27) Carbon Tetrachloride	5.548	117	62604	20.62 ug/L		96
28) Tetrahydrofuran	5.578	42	26458	19.26 ug/L		96
29) 1,1,1-Trichloroethane	5.615	97	79971	20.55 ug/L		98
31) 1,1-Dichloropropene	5.742	75	66173	20.62 ug/L		98
32) 2-Butanone (MEK)	5.724	43	79533	35.76 ug/L		97
33) Benzene	5.998	78	207197	20.18 ug/L		98
34) tert-Amyl methyl ether...	6.144	73	32676	4.90 ug/L		97
35) 1,2-Dichloroethane (EDC)	6.199	62	72495	19.92 ug/L		99
36) iso-Butyl Alcohol	6.290	43	117397	489.04 ug/L		96
38) Trichloroethene (TCE)	6.619	130	50788	21.03 ug/L		97
39) tert-Amyl ethyl ether ...	6.898	59	24003	5.20 ug/L		90
40) Dibromomethane	7.057	93	28627	19.84 ug/L		95
41) 1,2-Dichloropropane	7.166	63	48900	20.25 ug/L		95
42) Bromodichloromethane	7.239	83	56790	19.87 ug/L		96
44) c-1,3-Dichloropropene	7.945	75	64562	19.07 ug/L		98
46) Toluene	8.219	91	209321	19.71 ug/L		99
47) Tetrachloroethene (PCE)	8.669	166	51675	20.98 ug/L		92
48) 4-Methyl-2-Pentanone (...	8.663	43	115344	36.36 ug/L		98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

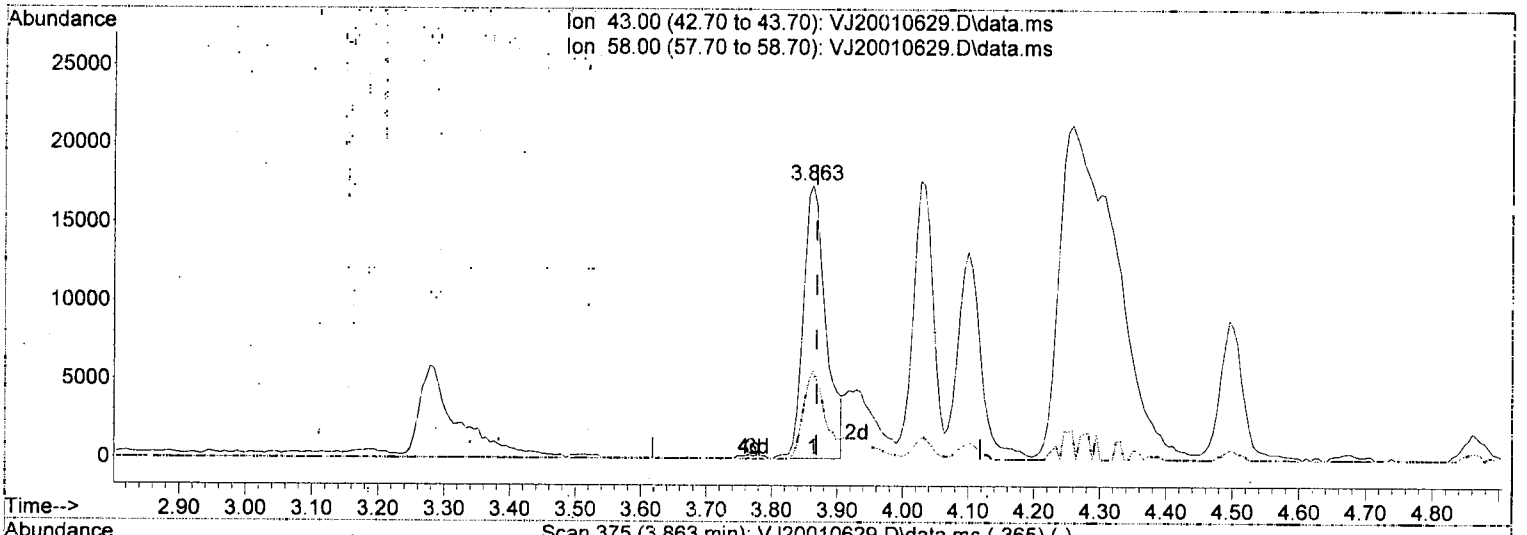
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	69350	21.47 ug/L	98
50) 1,1,2-Trichloroethane	8.869	97	43388	19.82 ug/L	96
51) Dibromochloromethane	9.058	129	39351	19.42 ug/L	99
52) 1,3-Dichloropropane	9.155	76	75375	20.14 ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	43688	20.03 ug/L	99
54) 2-Hexanone	9.539	43	84677	34.81 ug/L	97
55) Chlorobenzene	9.819	112	125966	19.58 ug/L	98
56) Ethylbenzene	9.849	91	221140	20.61 ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.879	131	43038	19.99 ug/L	98
58) m,p-Xylenes (2)	9.989	91	328224	43.55 ug/L	98
59) o-Xylene	10.372	91	151808	21.69 ug/L	96
60) Styrene	10.415	104	109181	18.54 ug/L	97
61) Bromoform	10.433	173	28061	19.93 ug/L	96
62) Isopropylbenzene	10.646	105	192192	20.85 ug/L	98
65) Bromobenzene	10.956	156	48699	19.87 ug/L	85
66) n-Propylbenzene	10.987	91	225603	19.89 ug/L	95
67) 1,1,2,2-Tetrachloroethane	11.041	83	58290	20.27 ug/L	97
68) 2-Chlorotoluene	11.114	126	43565	20.46 ug/L	96
69) 1,3,5-Trimethylbenzene	11.151	105	166543	21.83 ug/L	95
70) 1,2,3-Trichloropropane	11.145	110	21572	19.87 ug/L	88
71) t-1,4-Dichloro-2-butene	11.181	88	7891	16.88 ug/L #	87
72) 4-Chlorotoluene	11.242	91	135265	20.73 ug/L	95
73) tert-Butylbenzene	11.400	91	88546	20.90 ug/L	92
74) 1,2,4-Trimethylbenzene	11.455	105	163812	21.58 ug/L	97
75) sec-Butylbenzene	11.540	105	196092	21.44 ug/L	97
76) 4-Isopropyltoluene	11.650	119	164712	22.01 ug/L	98
77) 1,3-Dichlorobenzene	11.704	146	90244	20.59 ug/L	97
78) 1,4-Dichlorobenzene	11.771	146	90991	19.19 ug/L	95
79) n-Butylbenzene	11.966	91	142489	20.38 ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	82301	20.59 ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	14361	18.08 ug/L	78
82) Hexachlorobutadiene	13.213	223	13464	20.80 ug/L	93
83) 1,2,4-Trichlorobenzene	13.237	180	49728	20.12 ug/L	97
84) Naphthalene	13.505	128	173056	18.45 ug/L	99
85) 1,2,3-Trichlorobenzene	13.669	180	52751	21.04 ug/L	98

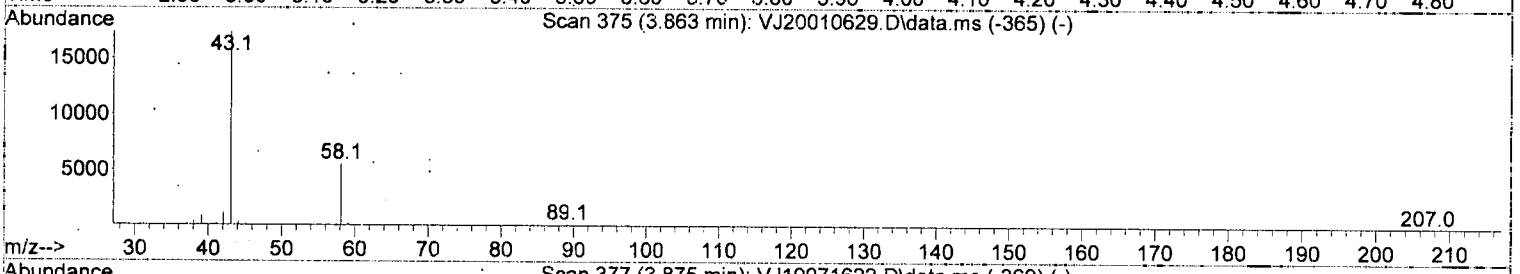
(#) = qualifier out of range (m) = manual integration (+) = signals summed

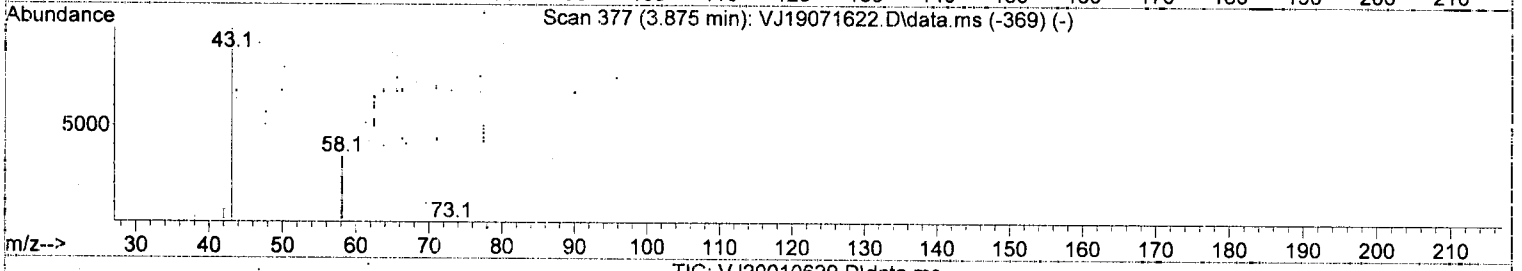
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20010629.D\data.ms

(14) Acetone

3.863min (-0.005) 29.46 ug/L

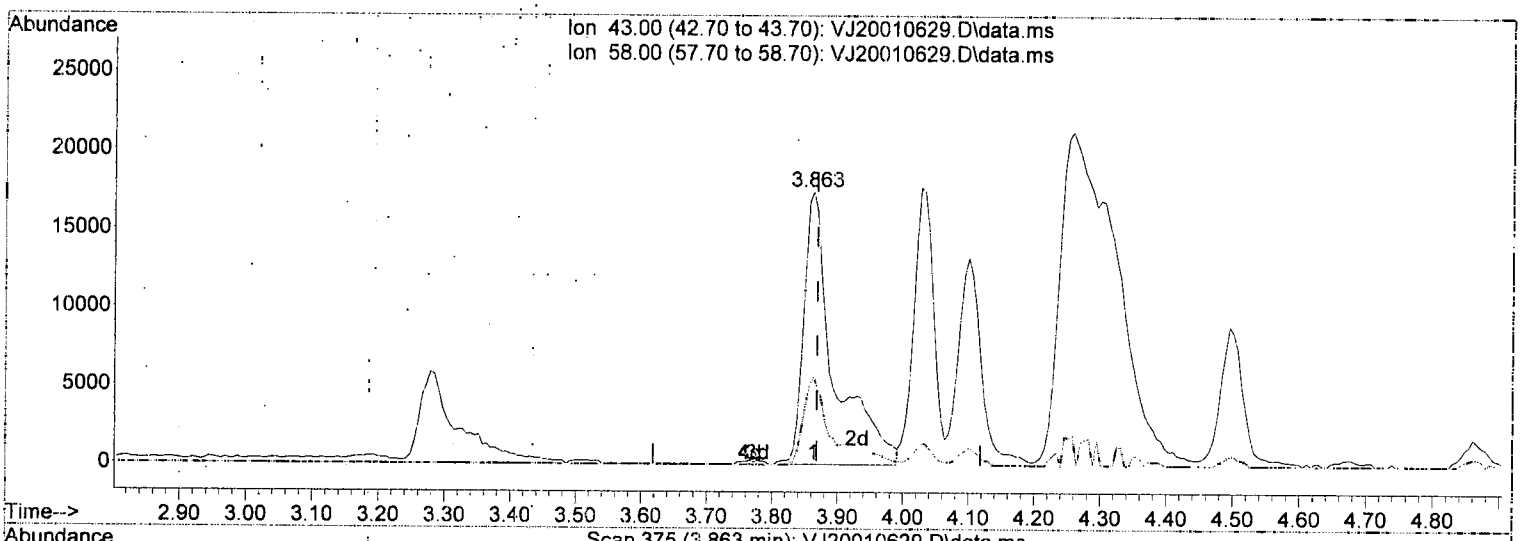
response 41754

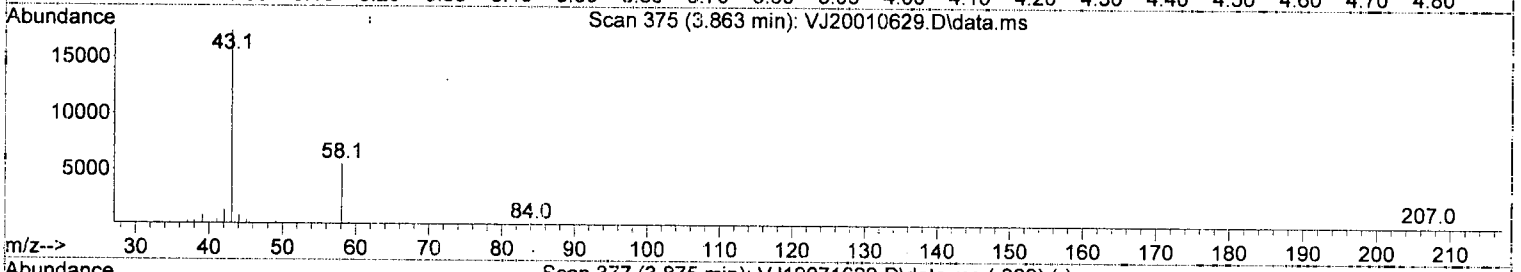
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.12
0.00	0.00	0.00
0.00	0.00	0.00

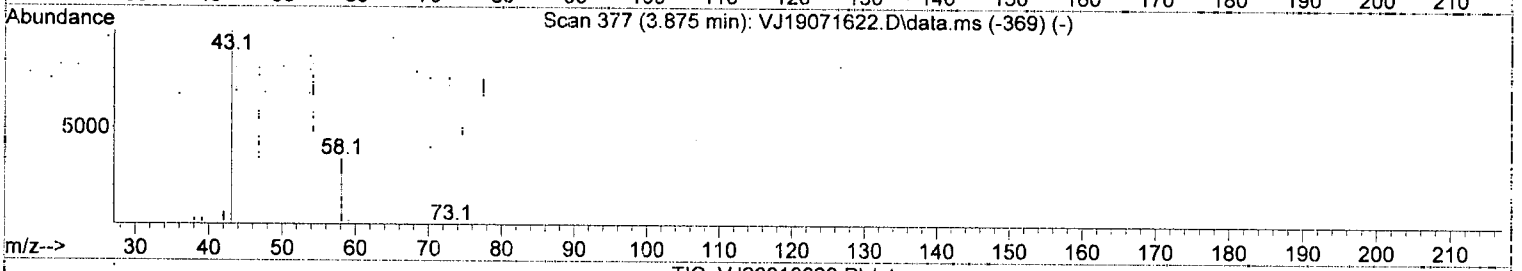
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20010629.D\data.ms

(14) Acetone

3.863min (-0.005) 39.80 ug/L (m)

response 56409

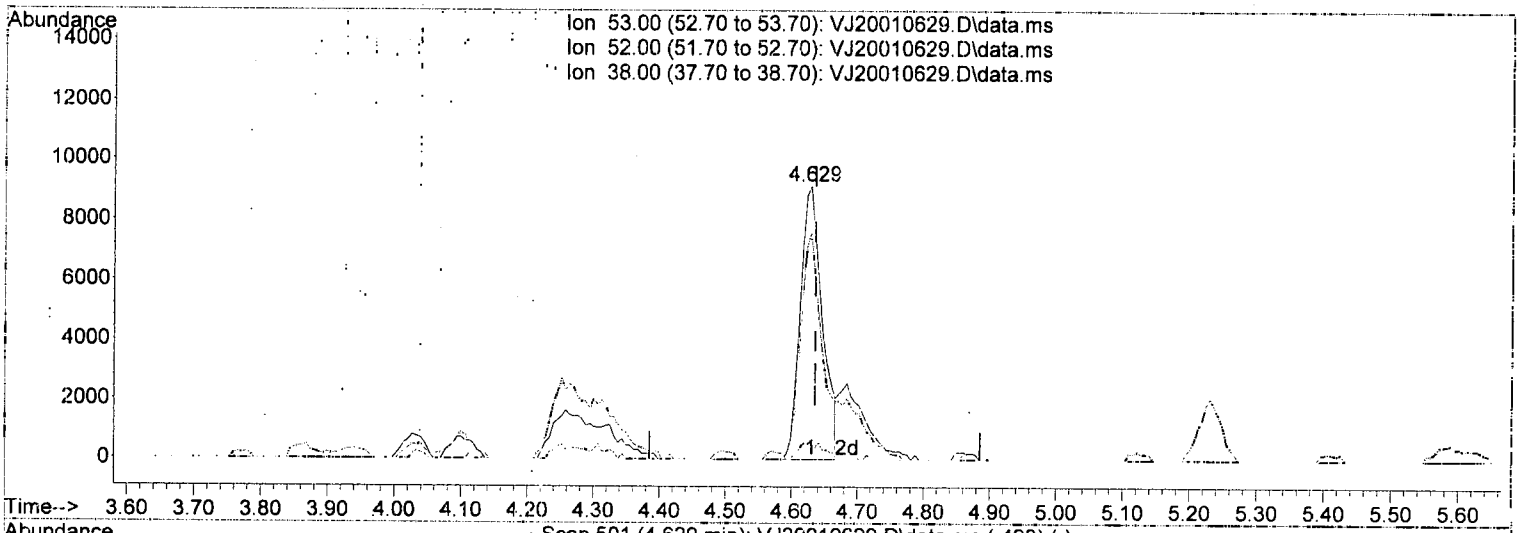
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.12
0.00	0.00	0.00
0.00	0.00	0.00

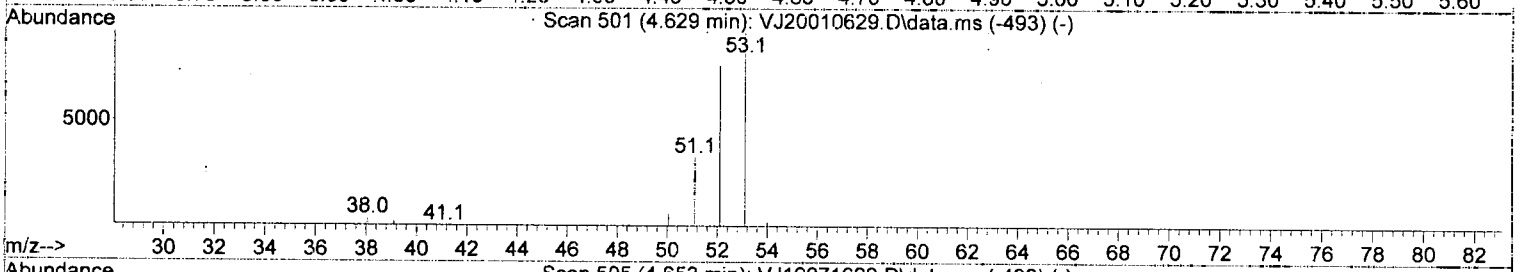
1/8/20

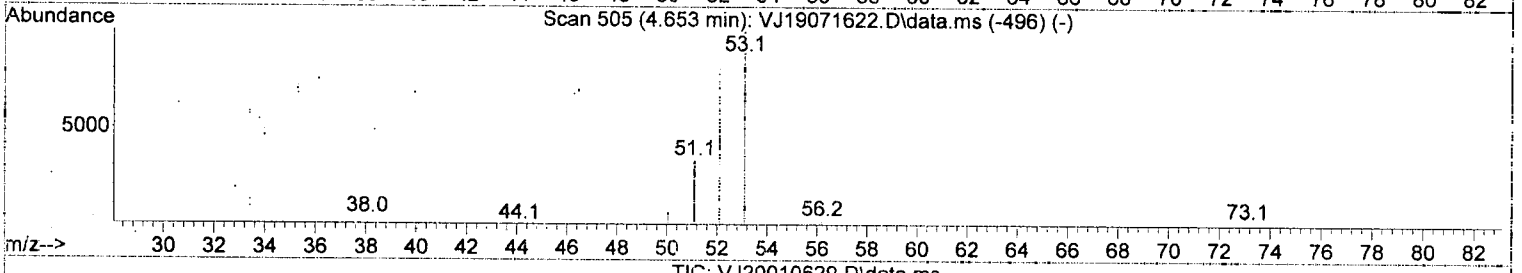
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL ; 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20010629.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 14.74 ug/L

response 21285

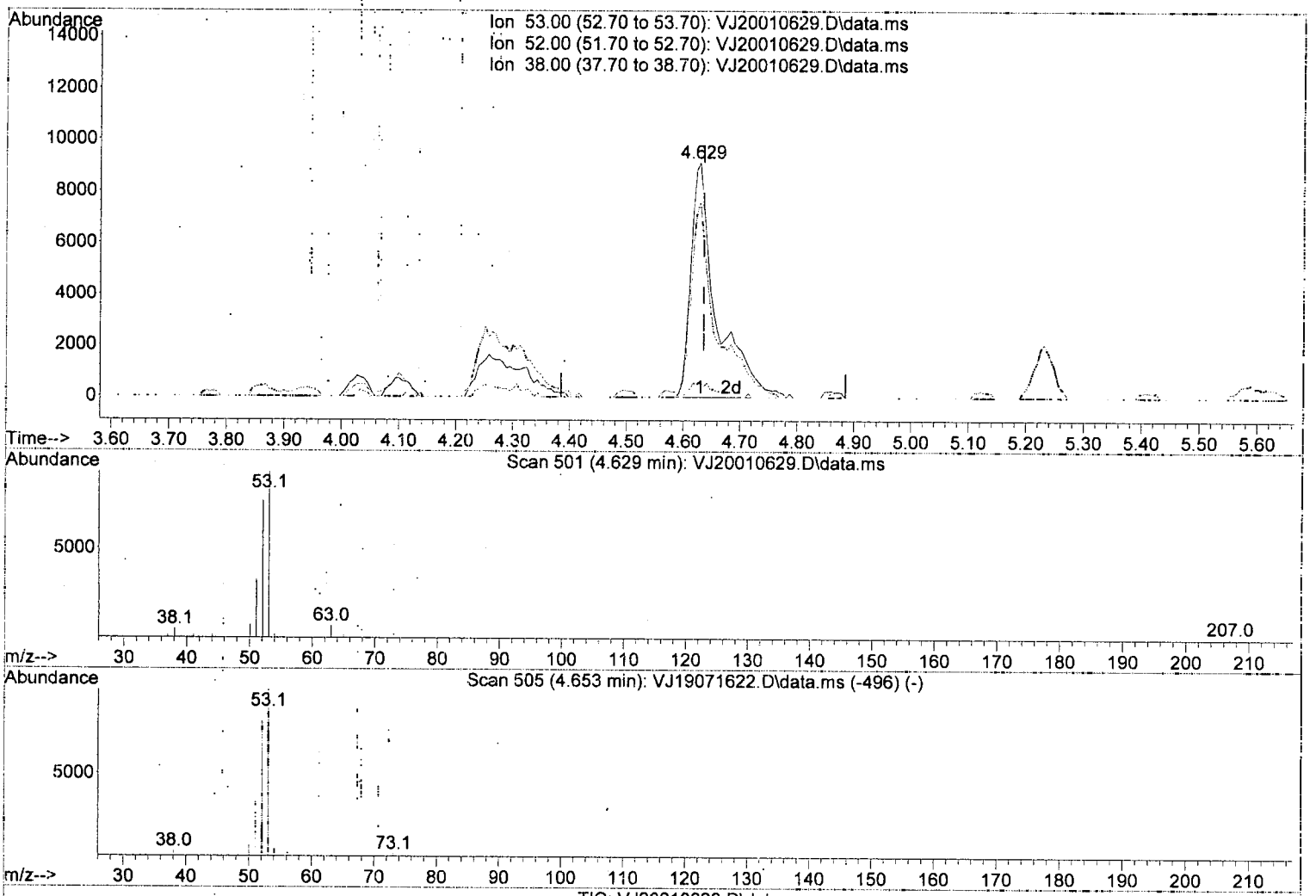
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	83.16
38.00	5.50	4.85
0.00	0.00	0.00

MI

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20010629.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 19.80 ug/L (m)

response 28595

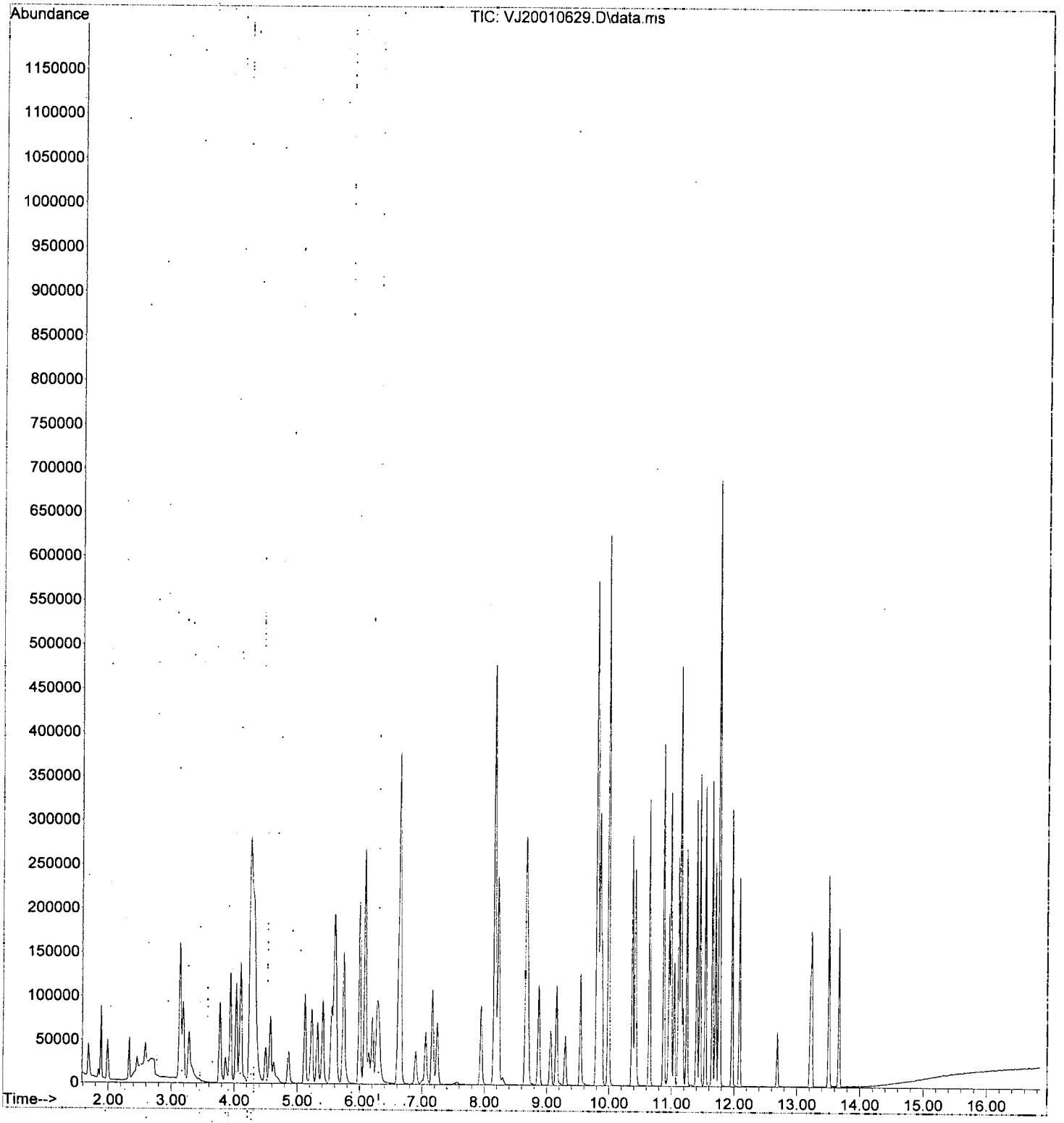
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	83.16
38.00	5.50	7.10
0.00	0.00	0.00

1/8/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010630.D
Acq On : 7 Jan 2020 12:22 am
Operator : tb
Sample : 0A06051-IBL6
Misc : 1X : 5mL : DI+MeOH
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 08 10:51:49 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

NR

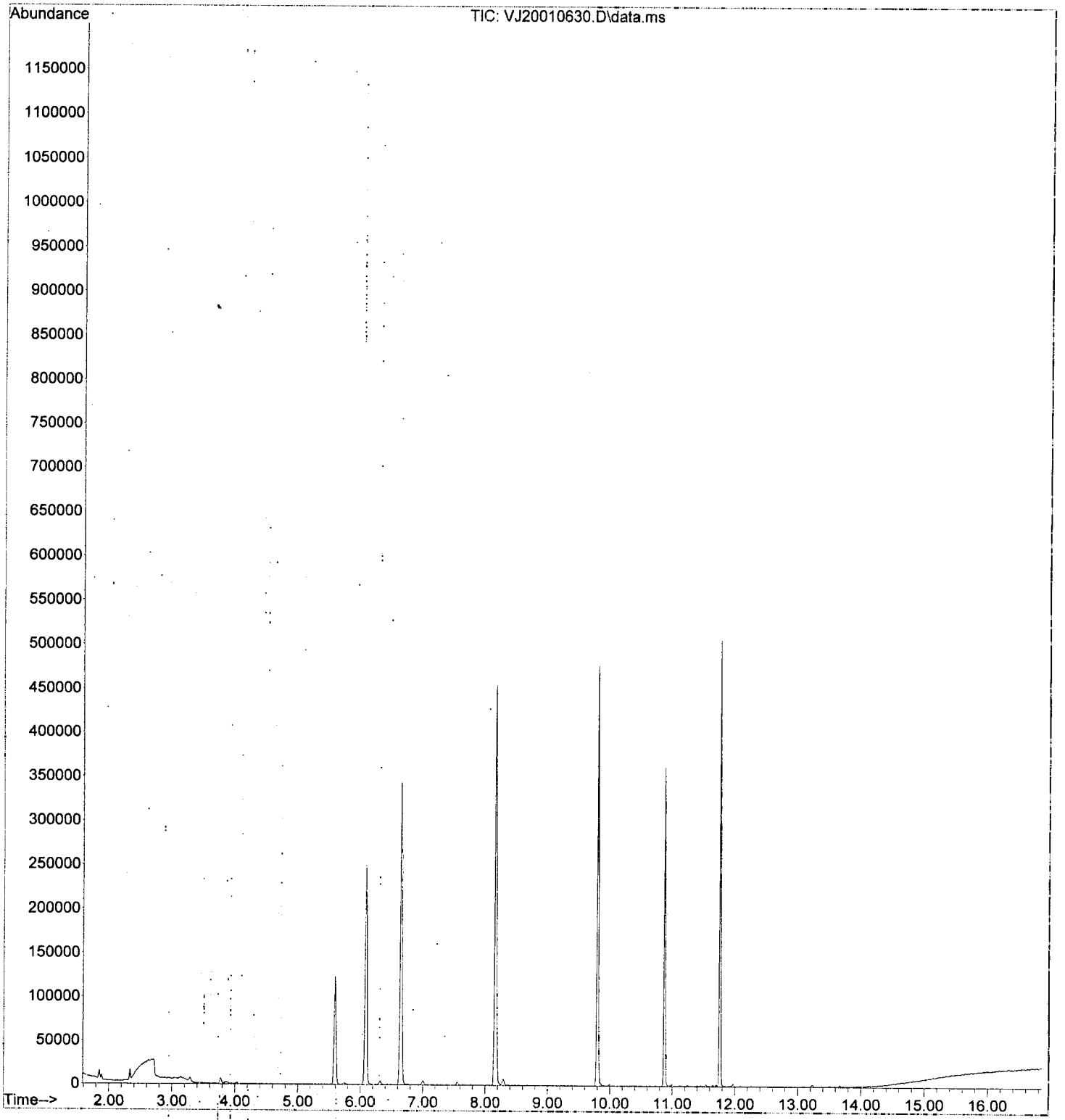
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	103090	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	255119	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	113496	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	83713	50.27	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	305996	50.88	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	352020	49.77	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	89877	51.30	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.885	50	4299	1.45	ug/L		99
5) Bromomethane	2.336	96	5414	2.11	ug/L		98
6) Chloroethane	2.457	64	55	0.10	ug/L	#	1
8) Ethanol	3.291	45	3628	6.70	ug/L		79
10) Carbon Disulfide	3.151	76	1856	0.41	ug/L		53
11) Freon 113	3.187	101	187	0.10	ug/L	#	16
12) Iodomethane	3.291	142	3525	9.45	ug/L		88
13) Methylene Chloride	3.777	84	3123	0.53	ug/L		85
14) Acetone	3.863	43	2354	1.81	ug/L		93
18) tert-Butanol (TBA)	4.270	59	402	0.69	ug/L	#	46
31) 1,1-Dichloropropene	5.742	75	306	0.10	ug/L	#	39
32) 2-Butanone (MEK)	5.742	43	2811	1.37	ug/L		93
36) iso-Butyl Alcohol	6.320	43	1801	8.16	ug/L		85
38) Trichloroethene (TCE)	6.618	130	202	0.09	ug/L	#	12
47) Tetrachloroethene (PCE)	8.675	166	363	0.16	ug/L	#	64
56) Ethylbenzene	9.849	91	991	0.10	ug/L		91
58) m,p-Xylenes (2)	9.989	91	1390	0.20	ug/L		95
60) Styrene	10.415	104	222	0.26	ug/L	#	40
66) n-Propylbenzene	10.986	91	1795	0.18	ug/L		94
68) 2-Chlorotoluene	11.120	126	198	0.11	ug/L	#	29
69) 1,3,5-Trimethylbenzene	11.145	105	785	0.12	ug/L		88
72) 4-Chlorotoluene	11.242	91	928	0.16	ug/L		80
73) tert-Butylbenzene	11.400	91	367	0.10	ug/L	#	85
74) 1,2,4-Trimethylbenzene	11.455	105	867	0.13	ug/L		85
75) sec-Butylbenzene	11.540	105	1356	0.17	ug/L		94
76) 4-Isopropyltoluene	11.650	119	1082	0.17	ug/L		93
77) 1,3-Dichlorobenzene	11.704	146	791	0.21	ug/L		88
78) 1,4-Dichlorobenzene	11.771	146	1025	0.25	ug/L	#	72
79) n-Butylbenzene	11.972	91	1865	0.31	ug/L		99
80) 1,2-Dichlorobenzene	12.088	146	351	0.10	ug/L		72
82) Hexachlorobutadiene	13.207	223	199	0.35	ug/L	#	81
83) 1,2,4-Trichlorobenzene	13.237	180	771	0.36	ug/L		86
84) Naphthalene	13.505	128	1274	0.26	ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	617	0.28	ug/L		93

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010630.D
Acq On : 7 Jan 2020 12:22 am
Operator : tb
Sample : 0A06051-IBL6
Misc : 1X 5mL DI+MeOH
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 08 10:51:49 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



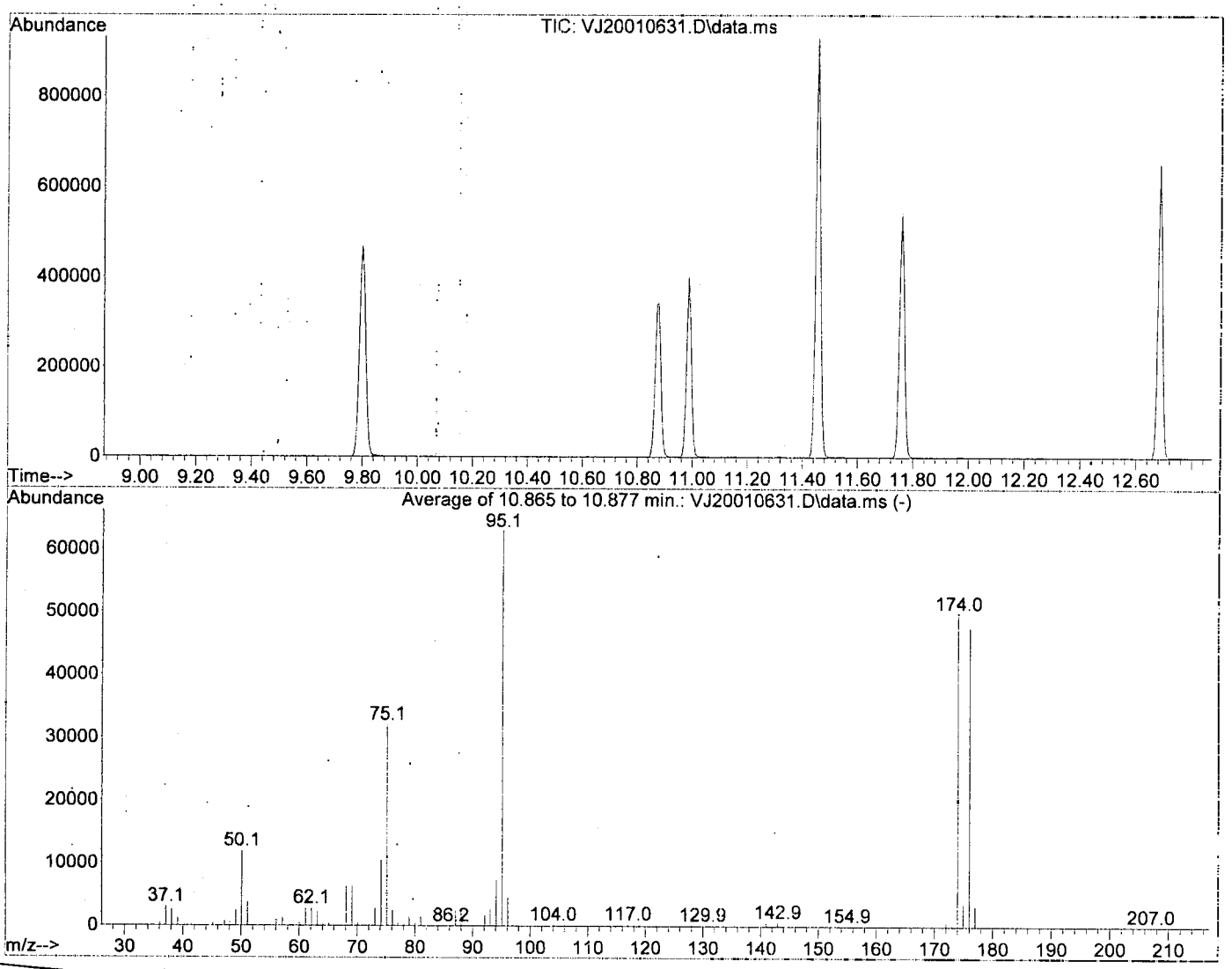
BFB

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Integration File: APEXG.P

Method : C:\msdchem\1\methods\VJ200106G.M
Title : NWTPH-Gx by GC/MS
Last Update : Tue Jan 07 15:45:42 2020

1/8/20



AutoFind: Scans 1526, 1527, 1528; Background Corrected with Scan 1520

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	126.4	63141	PASS
96	95	5	9	7.1	4473	PASS
173	174	0.00	2	0.3	127	PASS
174	95	50	200	79.1	49957	PASS
175	174	5	9	7.2	3614	PASS
176	174	95	105	95.6	47779	PASS
177	176	5	10	6.8	3236	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 08 10:53:19 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

1/8/20

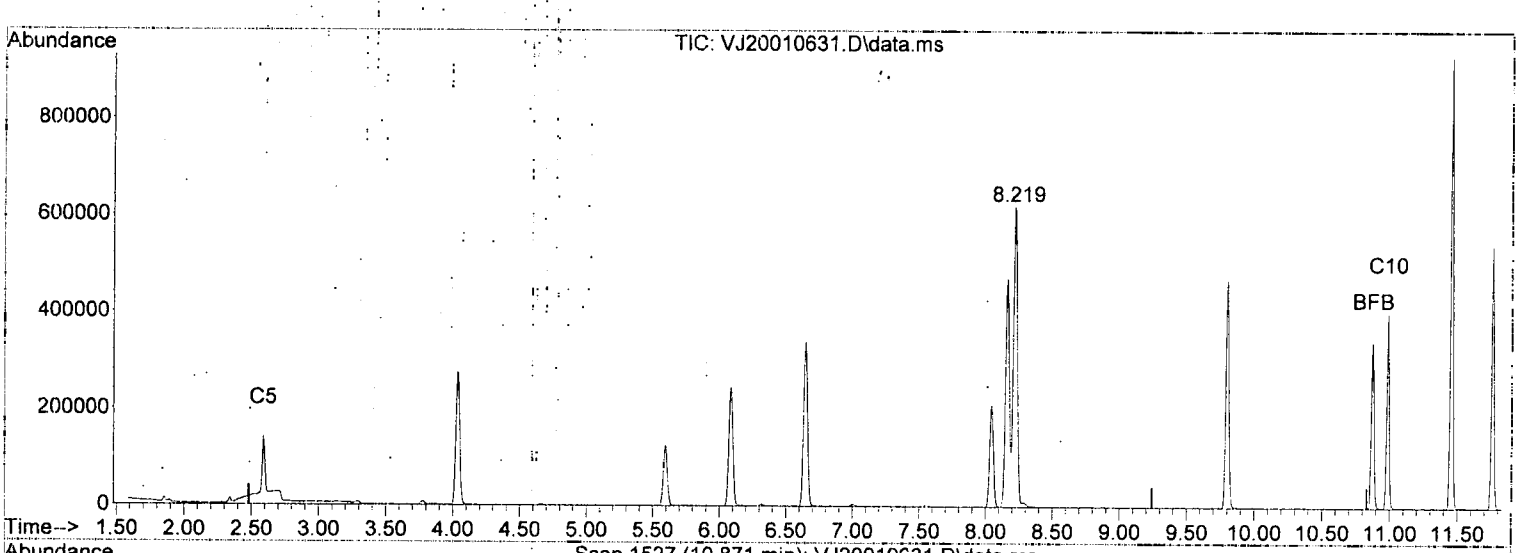
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	182417	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	300538	51.10	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	87539	50.67	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	366983	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	251866	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	183698	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	5014026m	744.98	ug/L	
5) TPHg (C5-C9)	9.239	TIC	3040095m	311.82	ug/L	
6) TPHg (C6-C10)	9.239	TIC	2624461m	334.73	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5408108m	493.52	ug/L	

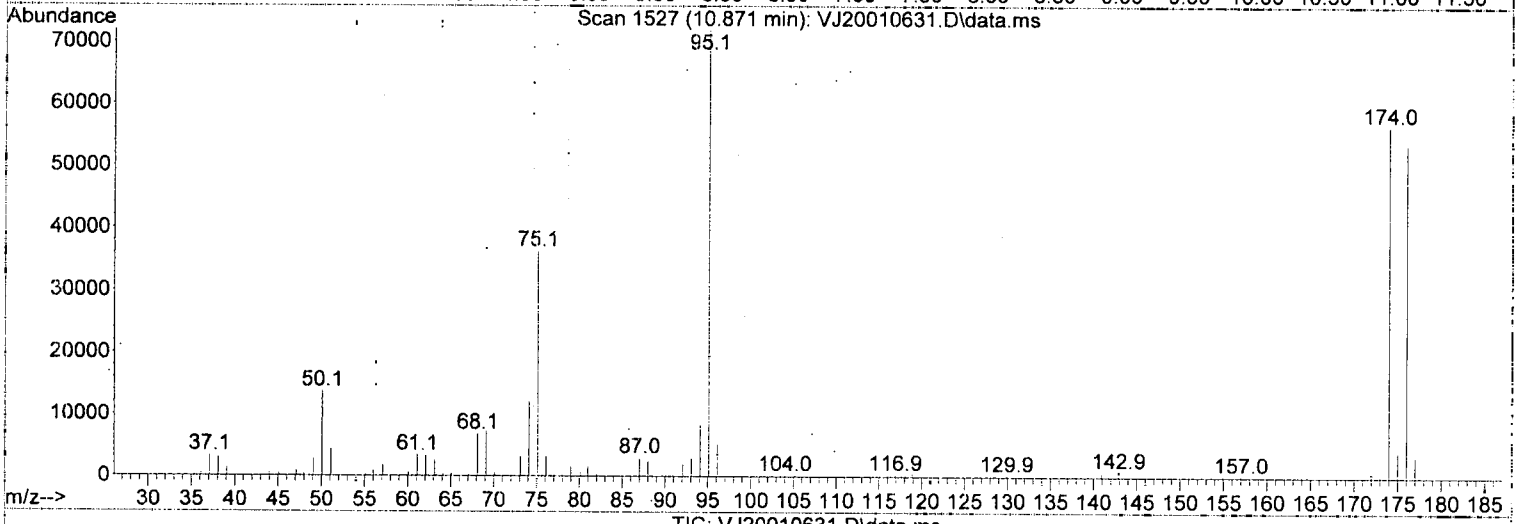
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 08 10:53:19 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20010631.D\data.ms

(5) TPHg (C5-C9) (H)

9.239min (0.000) 311.82 ug/L m

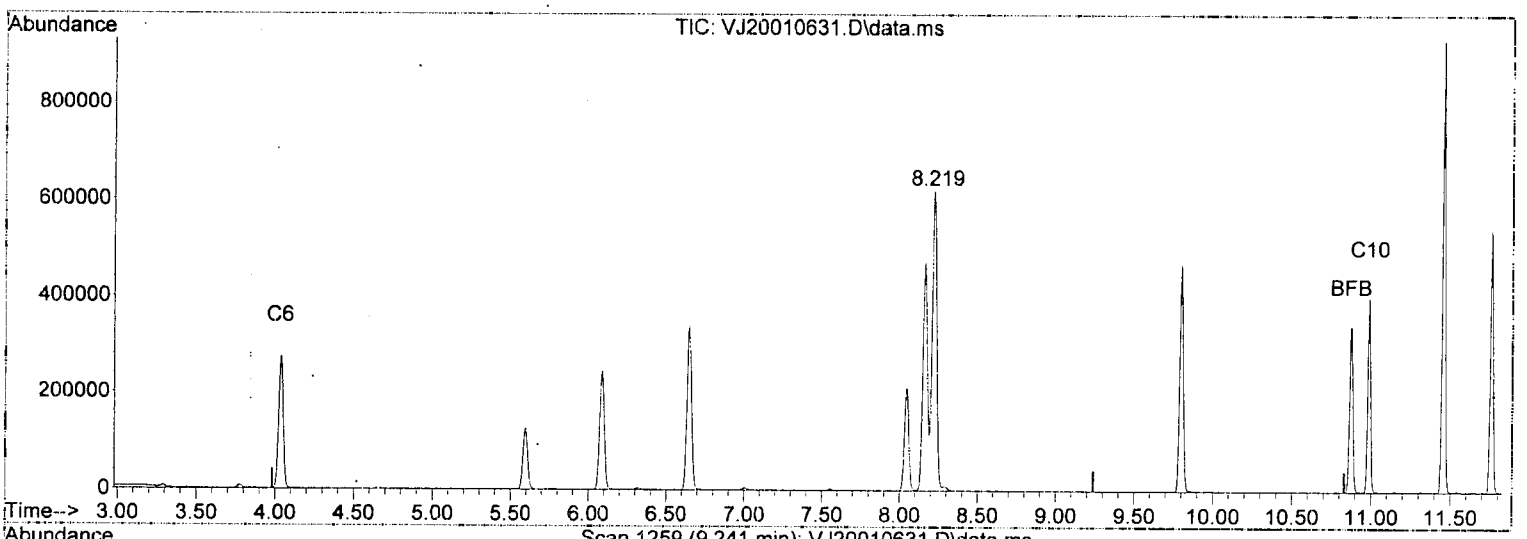
response 3040095

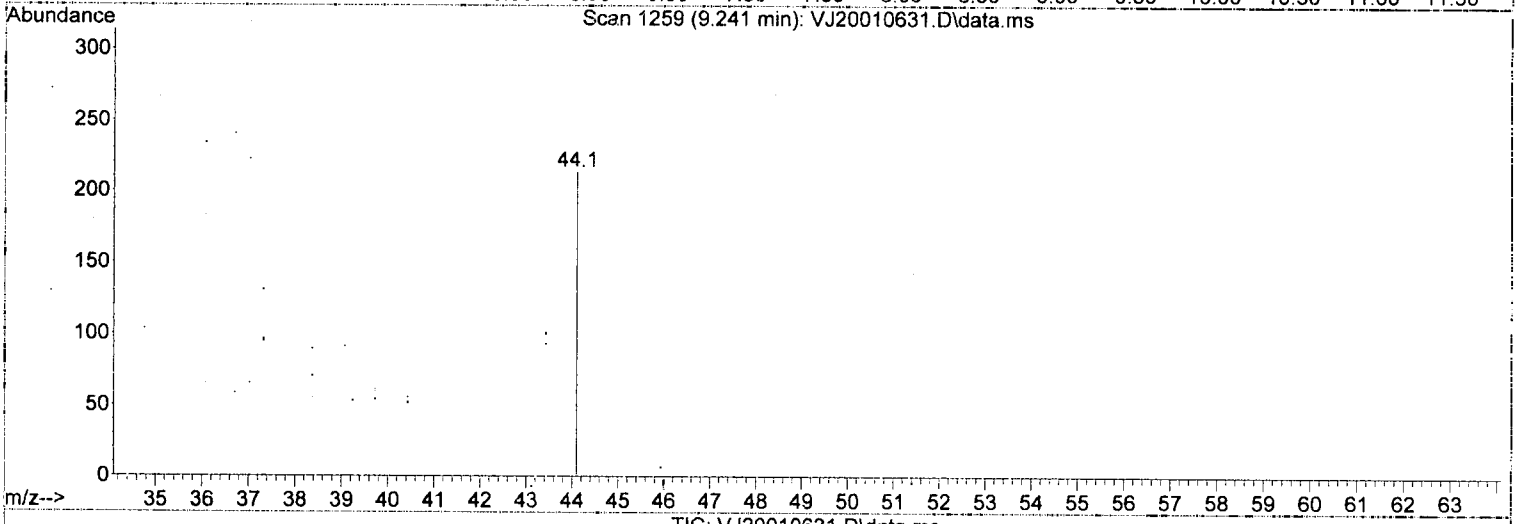
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.20#
0.00	0.00	0.78#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 08 10:53:19 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20010631.D\data.ms

(6) TPHg (C6-C10) (H)

9.239min (0.000) 334.73 ug/L m

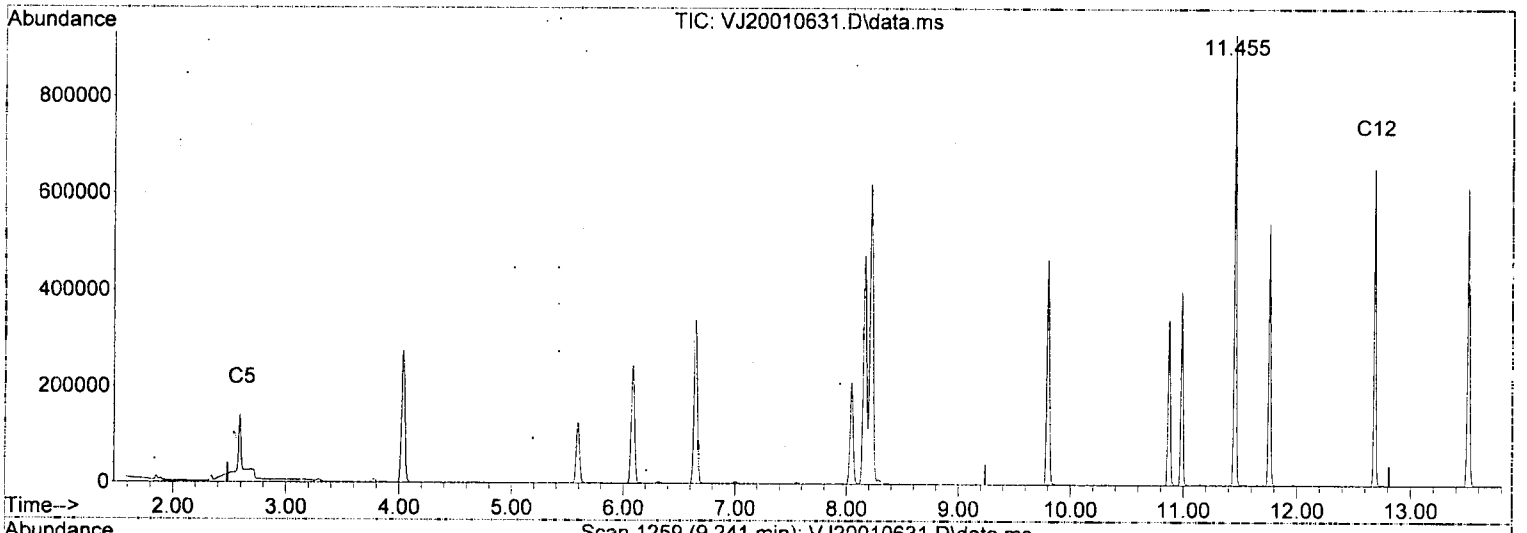
response 2624461

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.39#
0.00	0.00	0.90#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 08 10:53:19 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



TIC: VJ20010631.D\data.ms

(7) CA-LUFT (C5-C12) (H)

9.239min (0.000) 493.52 ug/L m

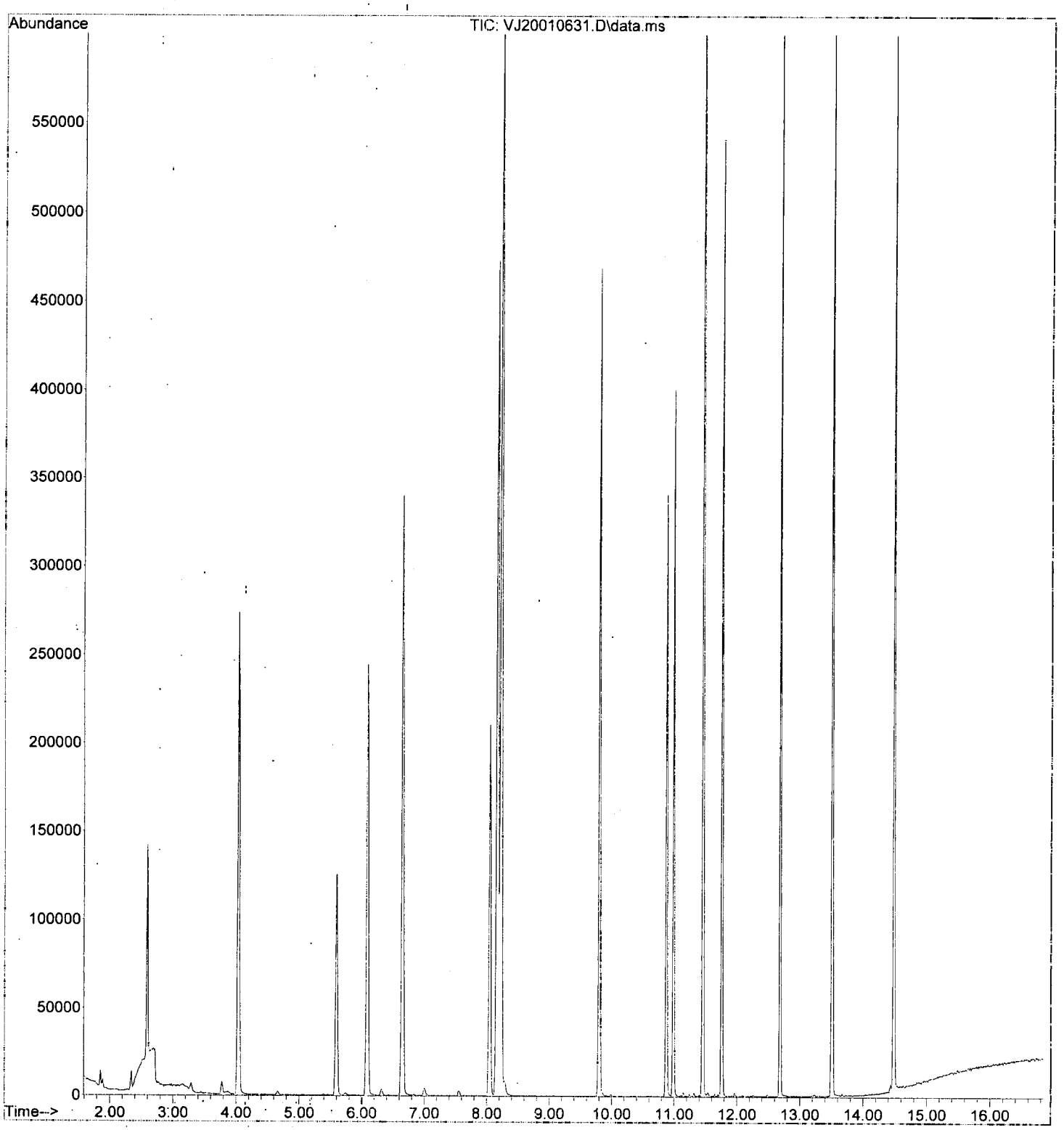
response 5408108

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.68#
0.00	0.00	0.44#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 08 10:53:19 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010632.D
Acq On : 7 Jan 2020 1:16 am
Operator : tb
Sample : 0A06051-IBL7
Misc : 1X 5mL DI+MeOH
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 08 10:53:45 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

NR

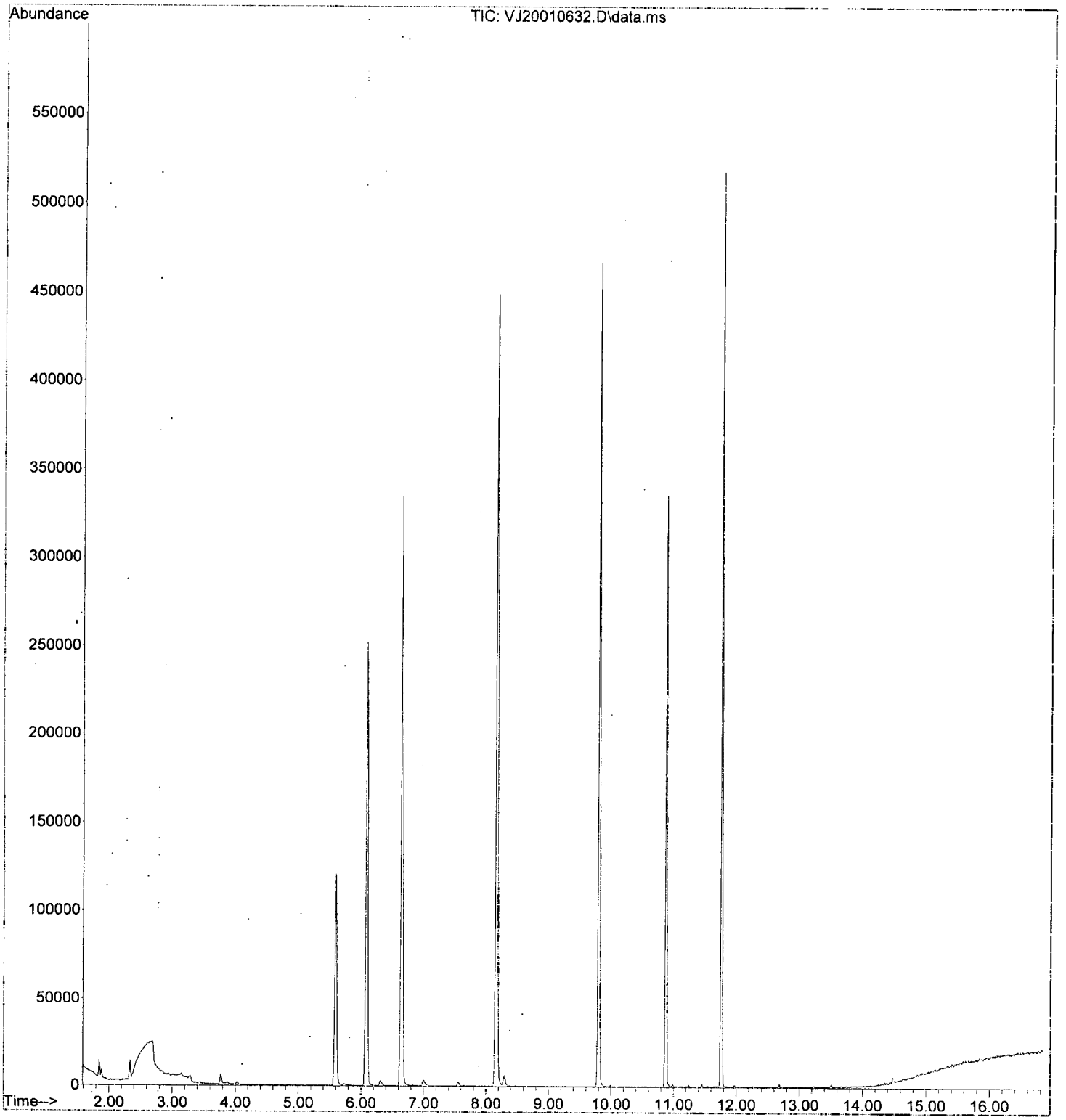
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	186332	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	304914	50.75	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	88137	49.94	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	349823	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	250507	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	174210	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	98720m	32.26	ug/L	
5) TPHg (C5-C9)	9.239	TIC	358890m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	339181m	23.97	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	389474m	3.36	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010632.D
Acq On : 7 Jan 2020 1:16 am
Operator : tb
Sample : 0A06051-IBL7
Misc : 1X 5mL DI+MeOH
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 08 10:53:45 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

1/8/20

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	6.083	168	181663	50.00 ug/L	-0.01
System Monitoring Compounds					
2) 1,4-Difluorobenzene (Sur)	6.649	114	301733	51.52 ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	87195	50.68 ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	348201	0.00 ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	253758	0.00 ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	170730	0.00 ug/L	0.00
Target Compounds					Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	99460m	32.73 ug/L	
5) TPHg (C5-C9)	9.239	TIC	360890m	Below Cal	
6) TPHg (C6-C10)	9.239	TIC	345915m	26.04 ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	396221m	4.98 ug/L	

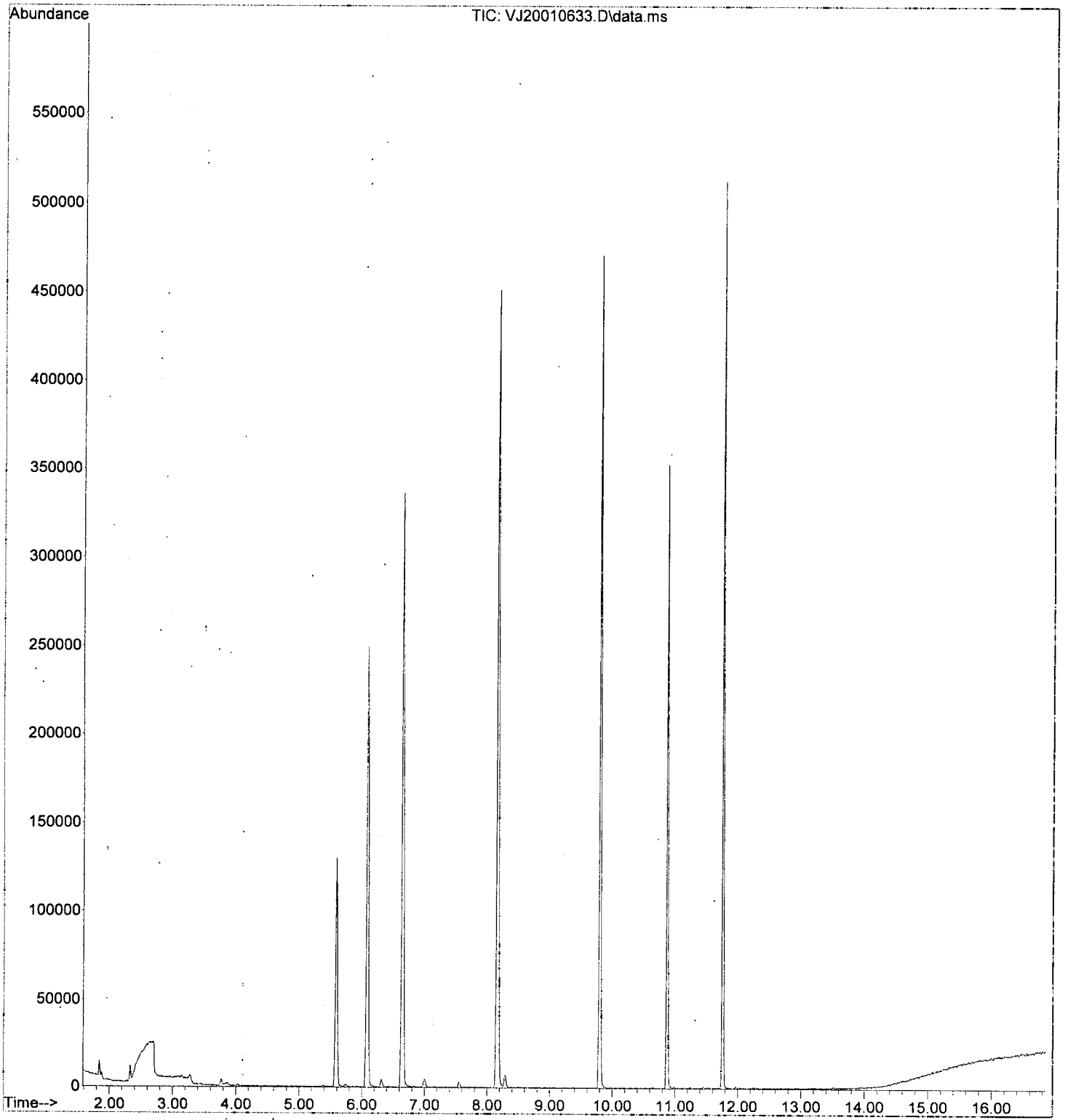
LMDL ↓

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010634.D
Acq On : 7 Jan 2020 2:09 am
Operator : tb
Sample : 0A06051-CALC
Misc : 1X 5mL 50ppb GX DI+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 07 15:41:27 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

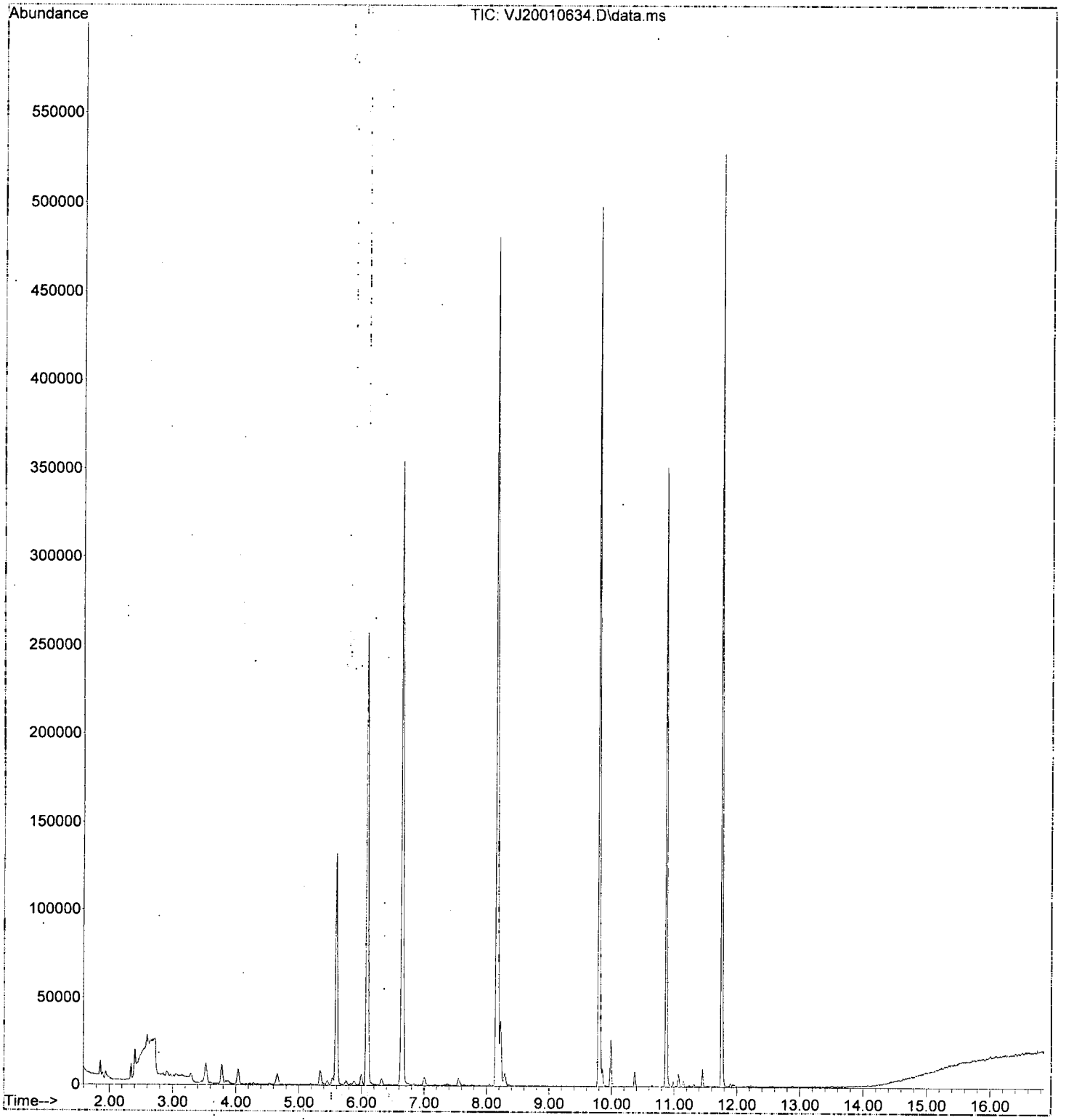
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	189886	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	311513	50.75	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	89937	50.67	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	362450	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	259164	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	177564	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	281399m	43.27	ug/L	
5) TPHg (C5-C9)	9.239	TIC	874353m	96.16	ug/L	
6) TPHg (C6-C10)	9.239	TIC	580106m	74.80	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	936641m	87.74	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010634.D
Acq On : 7 Jan 2020 2:09 am
Operator : tb
Sample : 0A06051-CALC
Misc : 1X 5mL 50ppb GX DI+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 07 15:41:27 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010635.D
Acq On : 7 Jan 2020 2:36 am
Operator : tb
Sample : 0A06051-CALD
Misc : 1X 5mL 100ppb GX DI+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 07 15:41:30 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/7/20

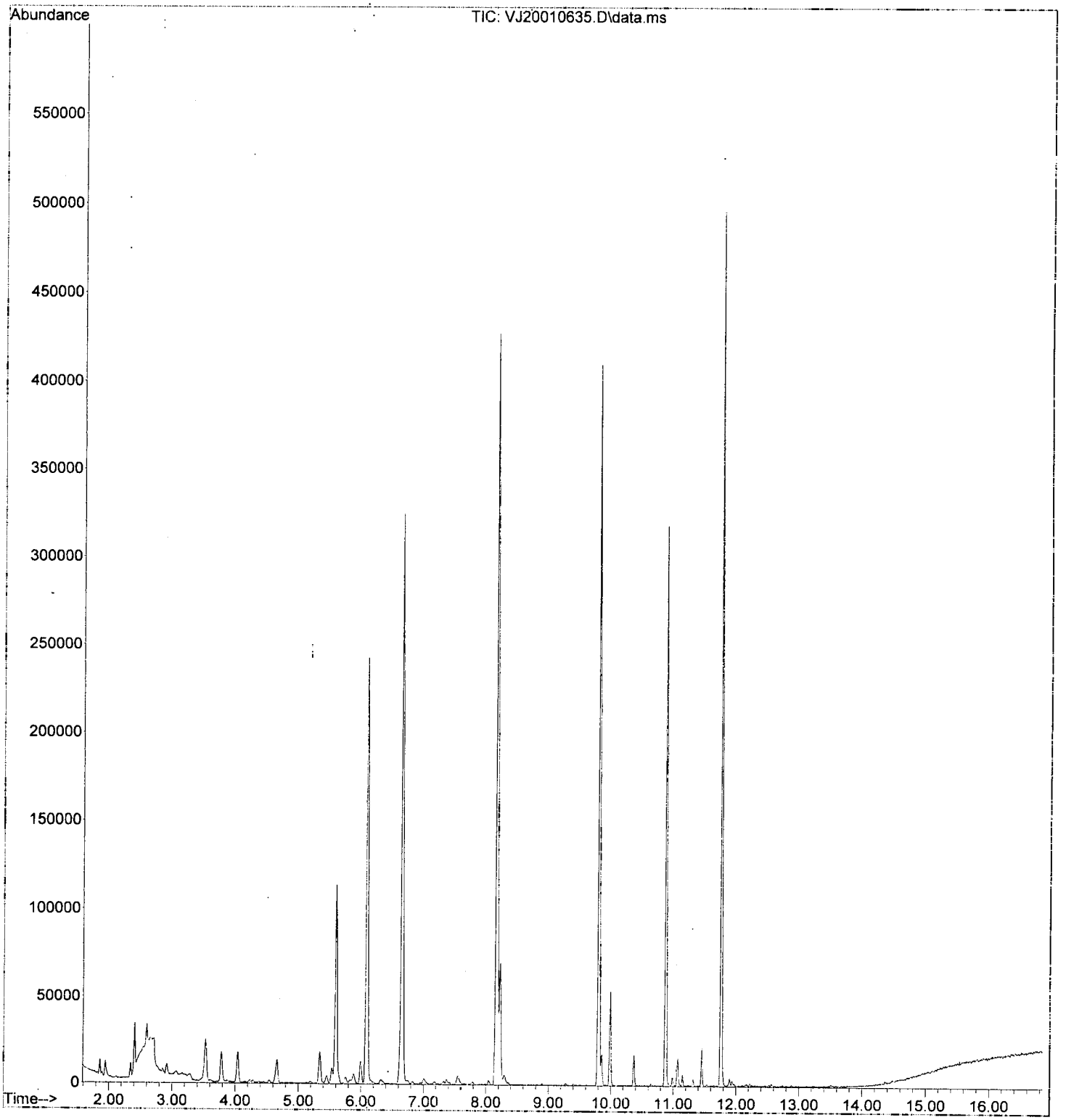
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	179443	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	288672	49.77	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	81750	48.74	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	330854	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	230207	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	167223	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	531697m	86.51	ug/L	
5) TPHg (C5-C9)	9.239	TIC	1249492m	145.41	ug/L	
6) TPHg (C6-C10)	9.239	TIC	852839m	116.37	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	1366640m	135.46	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010635.D
Acq On : 7 Jan 2020 2:36 am
Operator : tb
Sample : 0A06051-CALD
Misc : 1X 5mL 100ppb GX DI+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 07 15:41:30 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010636.D
Acq On : 7 Jan 2020 3:03 am
Operator : tb
Sample : 0A06051-CALE
Misc : 1X 5mL 250ppb GX DI+MeOH
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 07 15:41:32 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

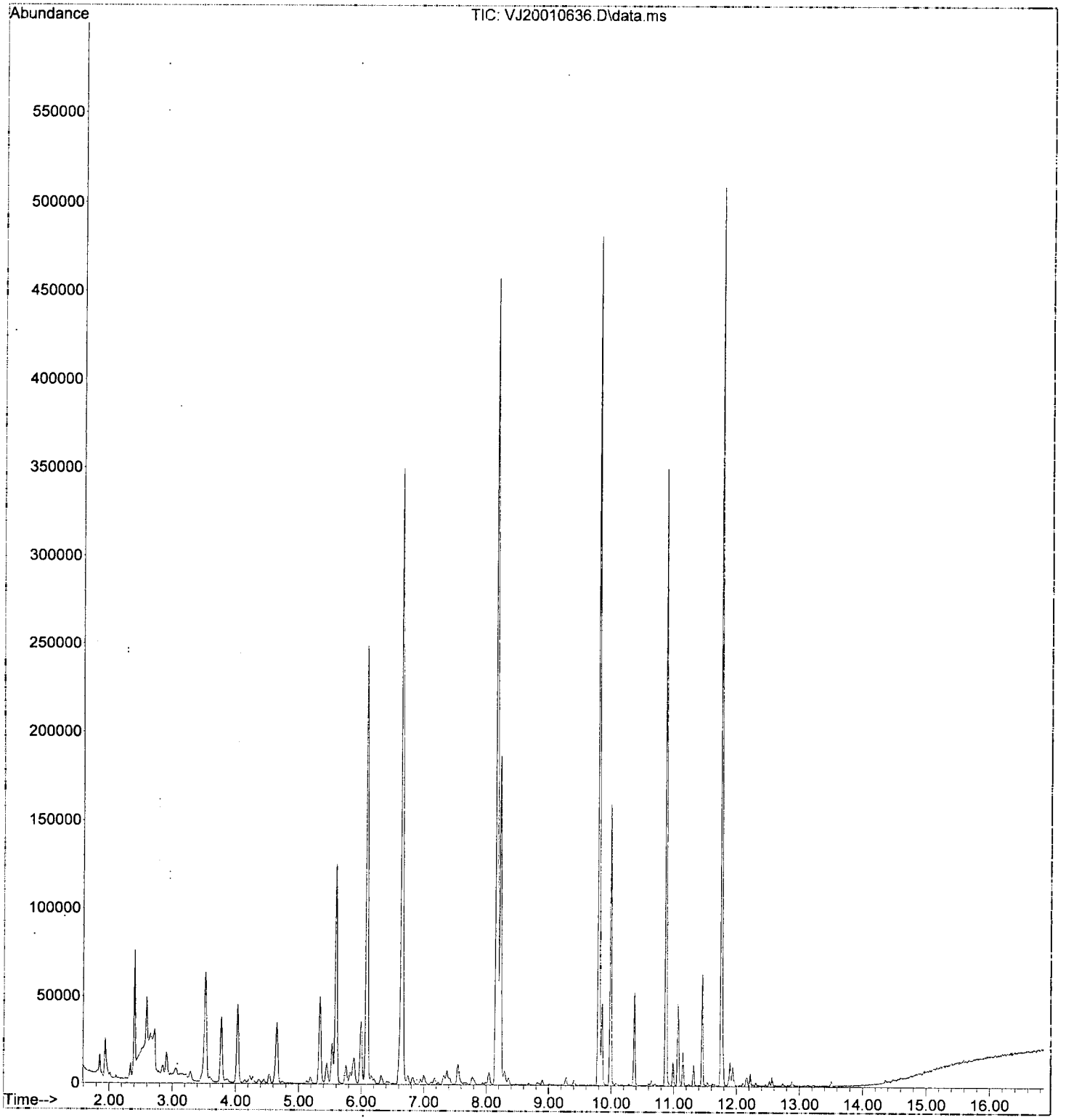
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	186189	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	302044	50.19	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	87530	50.30	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	351964	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	251411	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	172881	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	1506348m	236.21	ug/L	
5) TPHg (C5-C9)	9.239	TIC	2523781m	283.07	ug/L	
6) TPHg (C6-C10)	9.239	TIC	1968325m	258.86	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	2871923m	274.35	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010636.D
Acq On : 7 Jan 2020 3:03 am
Operator : tb
Sample : 0A06051-CALE
Misc : 1X 5mL 250ppb GX DI+MeOH
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 07 15:41:32 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010637.D
Acq On : 7 Jan 2020 3:30 am
Operator : tb
Sample : 0A06051-CALF
Misc : 1X 5mL 500ppb GX DI+MeOH
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 07 15:41:34 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

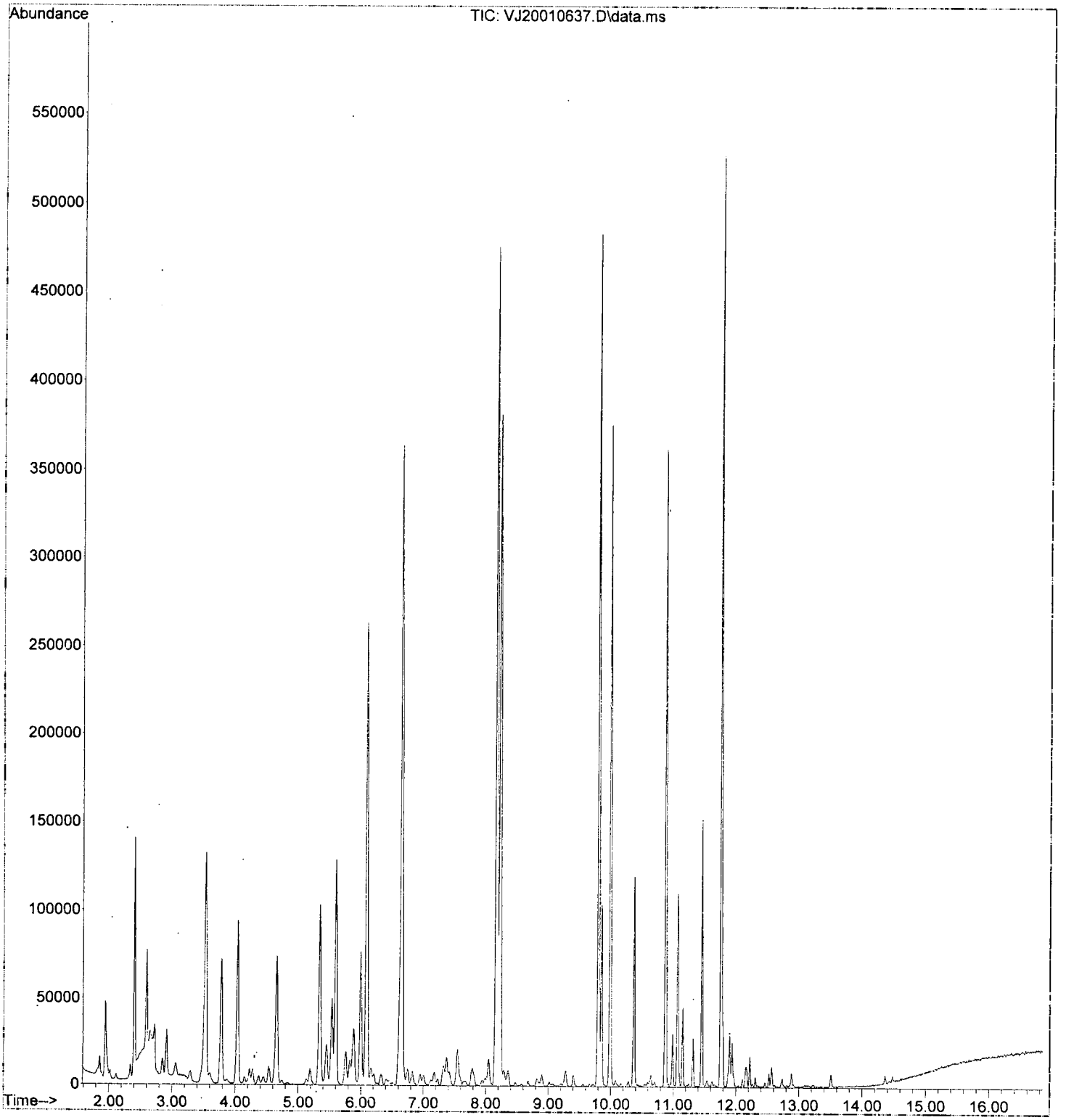
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	192629	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	311330	50.00	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	90026	50.00	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	358267	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	256239	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	176976	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3298839m	500.00	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4612017m	500.00	ug/L	
6) TPHg (C6-C10)	9.239	TIC	3933470m	500.00	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5414996m	500.00	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010637.D
Acq On : 7 Jan 2020 3:30 am
Operator : tb
Sample : 0A06051-CALF
Misc : 1X 5mL 500ppb GX DI+MeOH
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 07 15:41:34 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010638.D
Acq On : 7 Jan 2020 3:57 am
Operator : tb
Sample : 0A06051-CALG
Misc : 1X 5mL 1000ppb GX DI+MeOH
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 07 15:41:36 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

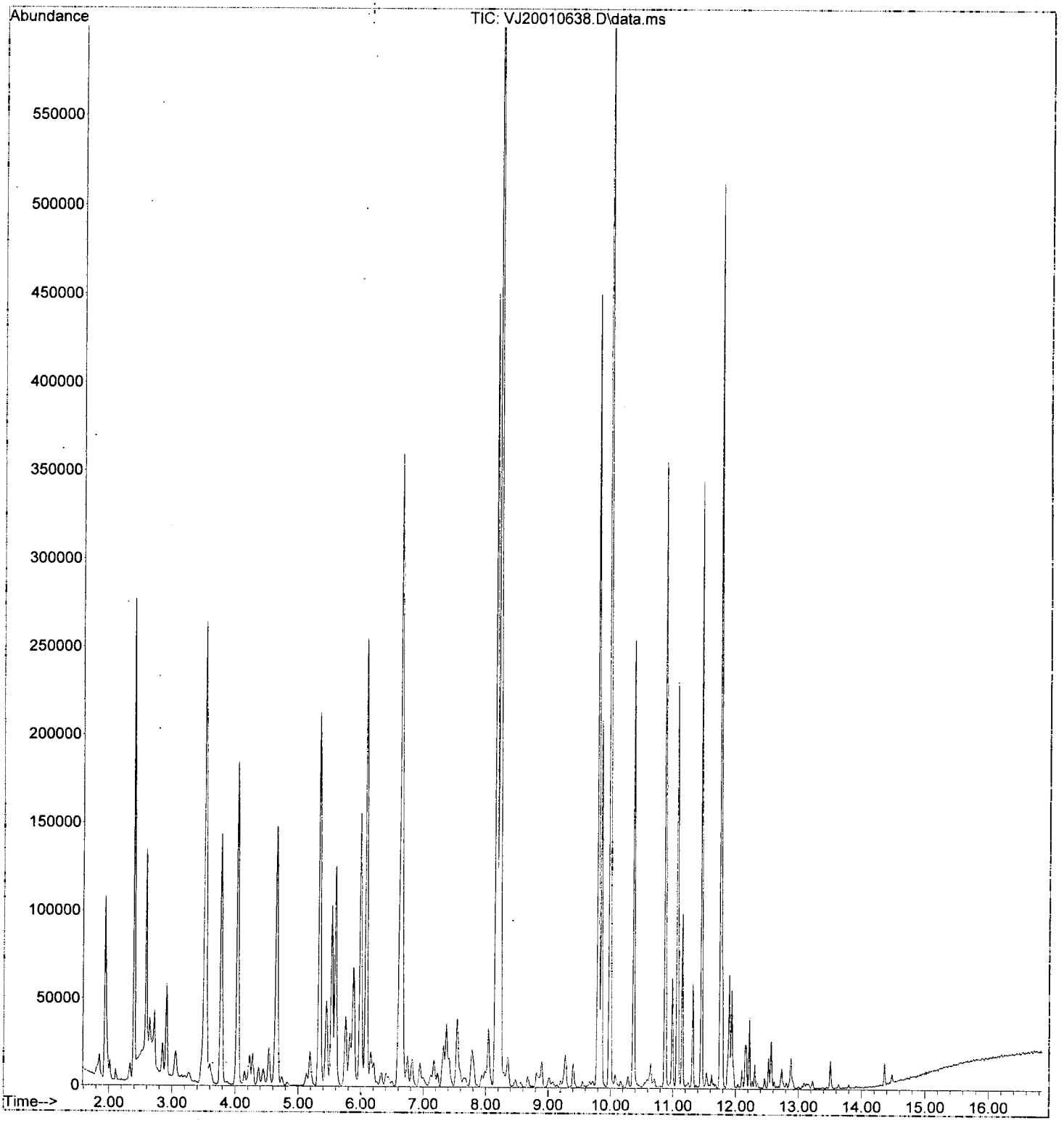
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	191267	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	307334	49.71	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	89389	50.00	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	348198	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	248975	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	178922	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	6810936m	1039.67	ug/L	
5) TPHg (C5-C9)	9.239	TIC	9037989m	986.81	ug/L	
6) TPHg (C6-C10)	9.239	TIC	7738058m	990.62	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	10732551m	998.06	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010638.D
Acq On : 7 Jan 2020 3:57 am
Operator : tb
Sample : 0A06051-CALG
Misc : 1X 5mL 1000ppb GX DI+MeOH
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 07 15:41:36 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010639.D
Acq On : 7 Jan 2020 4:24 am
Operator : tb
Sample : 0A06051-CALH
Misc : 1X 5mL 2500ppb GX DI+MeOH
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 07 15:41:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

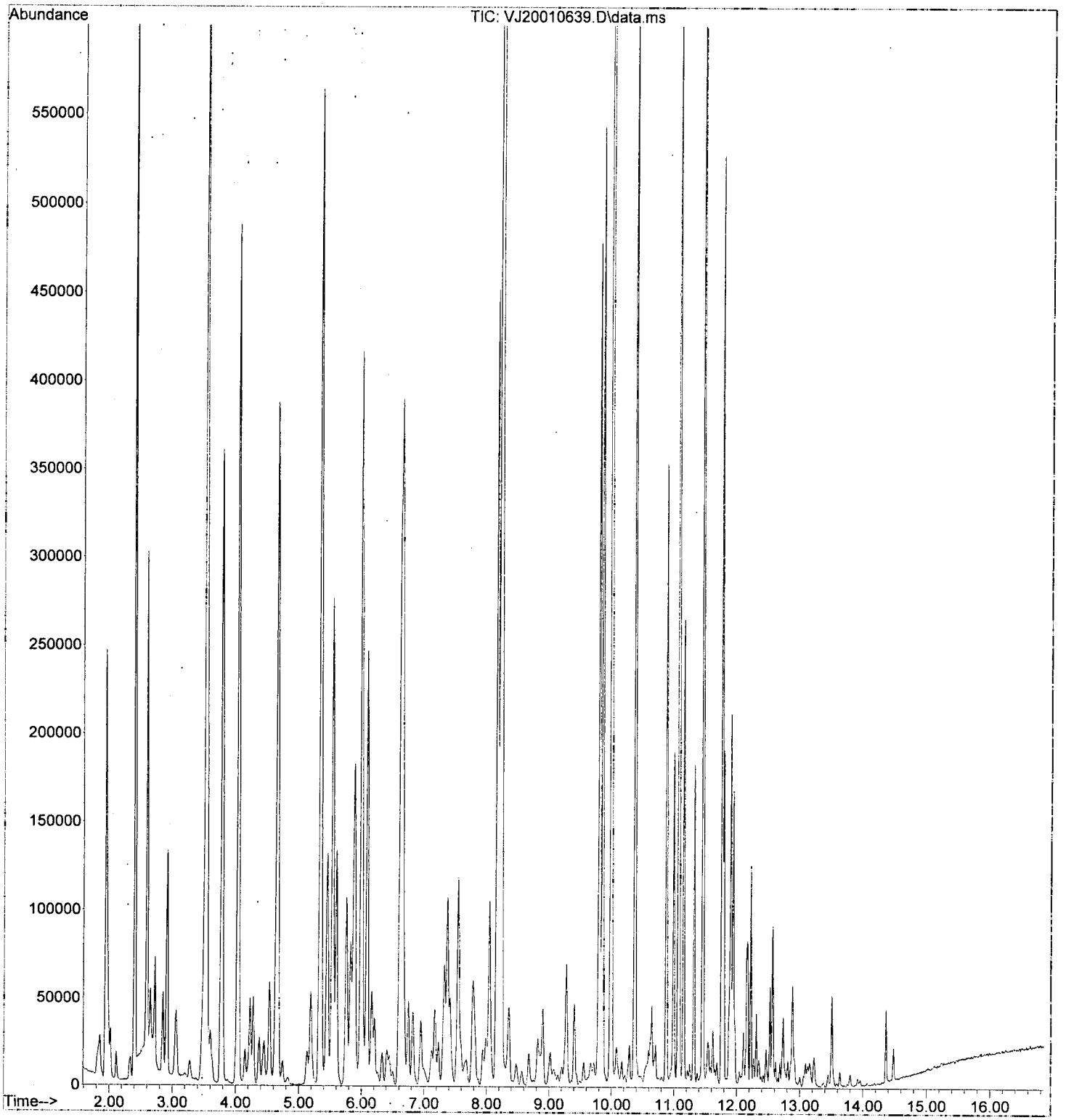
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	186048	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	297873	49.53	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	89534	51.49	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	345300	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	249487	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	178930	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	18803553m	2950.84	ug/L	
5) TPHg (C5-C9)	9.239	TIC	23432028m	2630.18	ug/L	
6) TPHg (C6-C10)	9.239	TIC	20109770m	2646.66	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	28273390m	2703.00	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010639.D
Acq On : 7 Jan 2020 4:24 am
Operator : tb
Sample : 0A06051-CALH
Misc : 1X 5mL 2500ppb GX DI+MeOH
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 07 15:41:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010640.D
Acq On : 7 Jan 2020 4:50 am
Operator : tb
Sample : 0A06051-CALI
Misc : 1X 5mL 5000ppb GX DI+MeOH
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 07 15:41:40 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

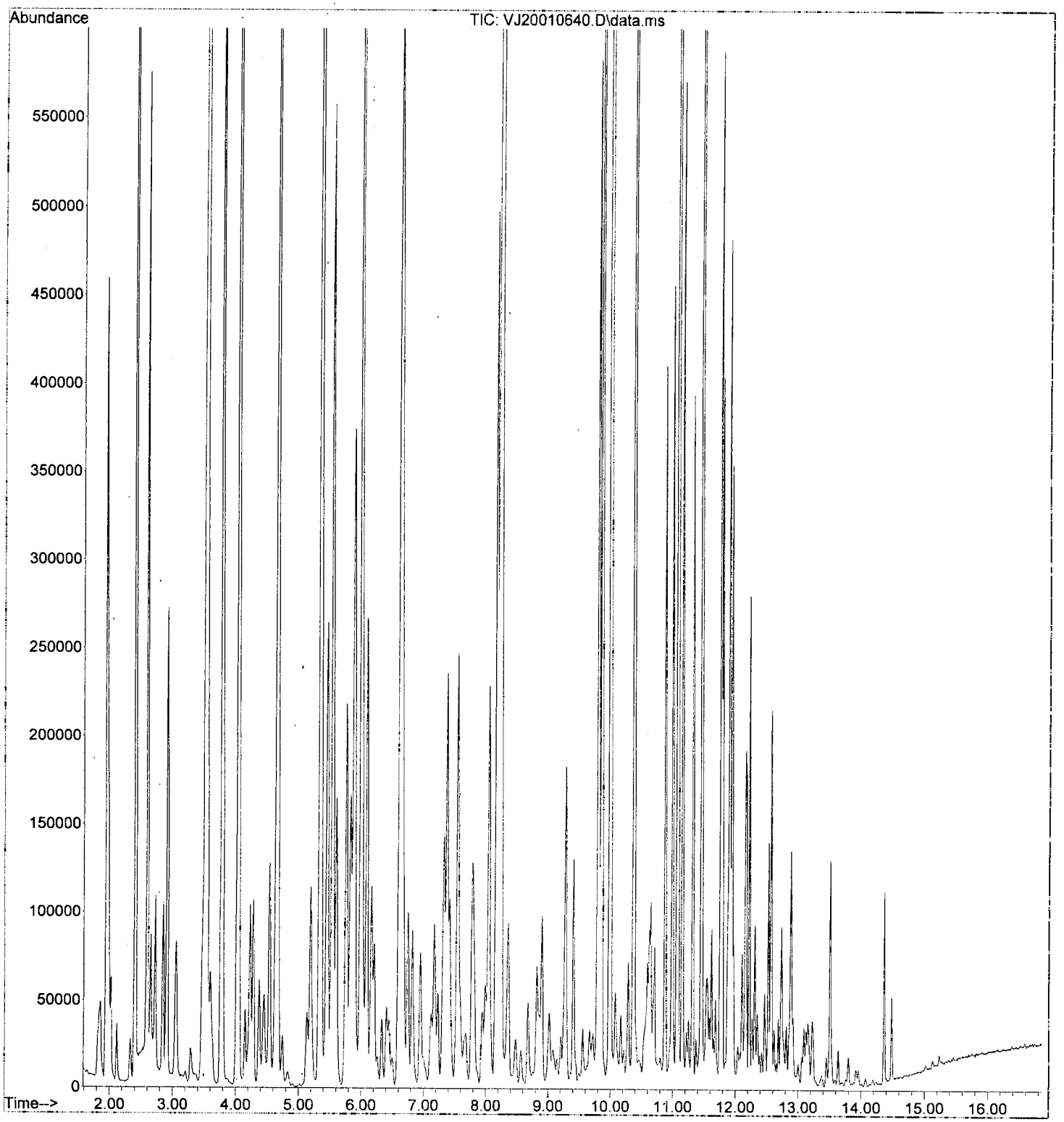
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	209694	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	336080	49.58	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	102563	52.33	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	384587	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	277169	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	203059	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	39793296m	5540.57	ug/L	
5) TPHg (C5-C9)	9.239	TIC	47990967m	4779.41	ug/L	
6) TPHg (C6-C10)	9.239	TIC	41178682m	4808.42	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	58616237m	4971.93	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010640.D
Acq On : 7 Jan 2020 4:50 am
Operator : tb
Sample : 0A06051-CALI
Misc : 1X 5mL 5000ppb GX DI+MeOH
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 07 15:41:40 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010641.D
Acq On : 7 Jan 2020 5:17 am
Operator : tb
Sample : 0A06051-CALJ
Misc : 1X 5mL 10000ppb GX DI+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 07 15:41:42 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

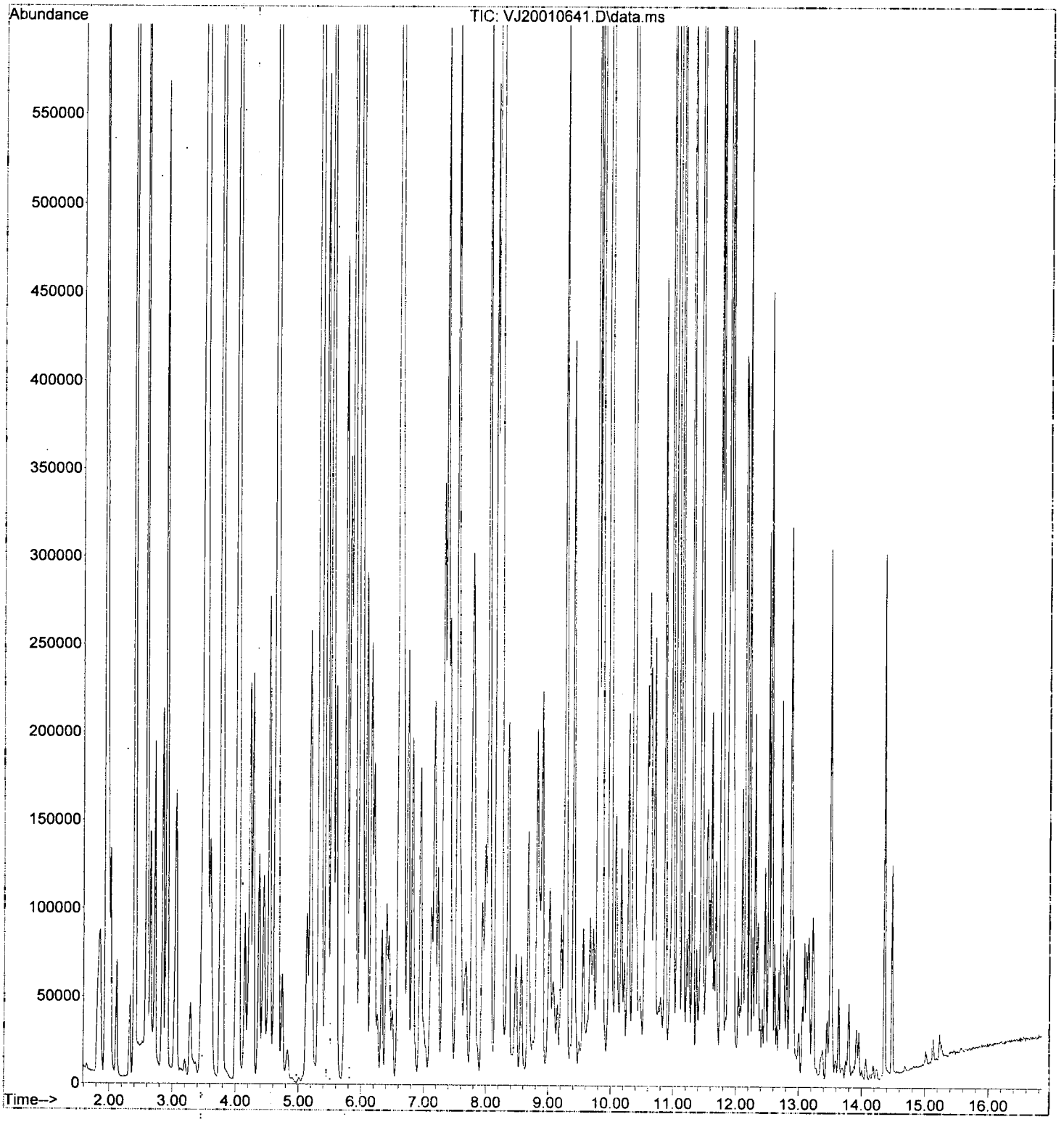
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	222960	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	356334	49.44	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	107899	51.77	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	407557	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	286881	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	210440	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	88988164m	11652.95	ug/L	
5) TPHg (C5-C9)	9.239	TIC	104787947m	9814.88	ug/L	
6) TPHg (C6-C10)	9.239	TIC	90130483m	9898.30	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	128172125m	10224.93	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010641.D
Acq On : 7 Jan 2020 5:17 am
Operator : tb
Sample : 0A06051-CALJ
Misc : 1X 5mL 10000ppb GX DI+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 07 15:41:42 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010642.D
Acq On : 7 Jan 2020 5:44 am
Operator : tb
Sample : 0A06051-IBL8
Misc : 1X 5mL DI+MeOH
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 08 10:53:49 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

NR

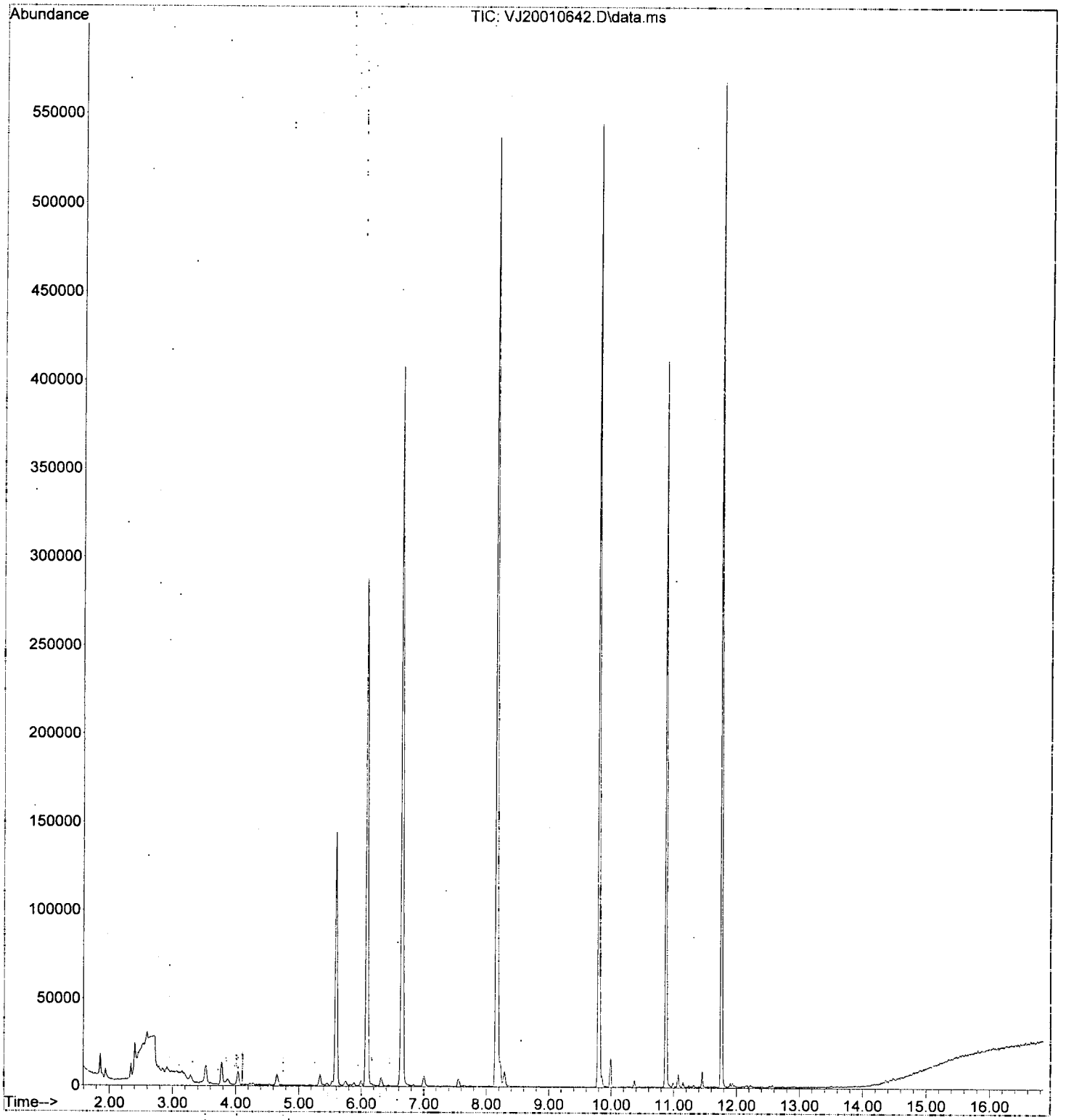
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	223068	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	362661	50.43	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	108125	51.18	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	412423	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	302933	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	205396	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	239672m	46.72	ug/L	
5) TPHg (C5-C9)	9.239	TIC	692335m	19.81	ug/L	
6) TPHg (C6-C10)	9.239	TIC	530090m	37.71	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	771024m	27.69	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010642.D
Acq On : 7 Jan 2020 5:44 am
Operator : tb
Sample : 0A06051-IBL8
Misc : 1X 5mL DI+MeOH
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 08 10:53:49 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010643.D
Acq On : 7 Jan 2020 6:11 am
Operator : tb
Sample : 0A06051-IBL9
Misc : 1X 5mL DI+MeOH
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 08 10:53:51 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

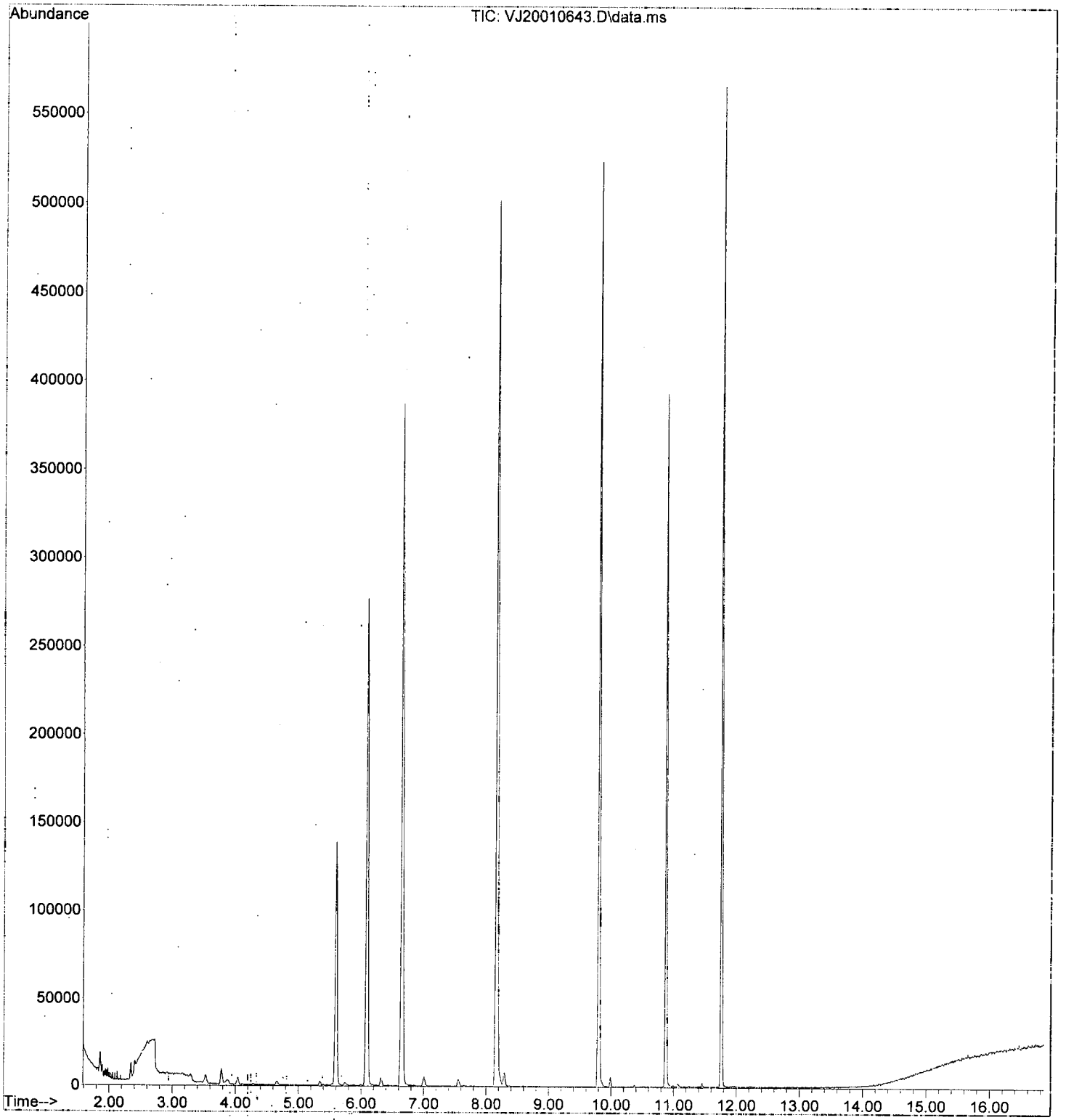
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	212078	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	345200	50.49	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	102246	50.91	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	391979	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	285605	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	197963	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	126016m	33.97	ug/L	
5) TPHg (C5-C9)	9.239	TIC	444129m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	404365m	26.10	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	489111m	7.21	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010643.D
Acq On : 7 Jan 2020 6:11 am
Operator : tb
Sample : 0A06051-IBL9
Misc : 1X 5mL DI+MeOH
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 08 10:53:51 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010644.D
Acq On : 7 Jan 2020 6:38 am
Operator : tb
Sample : 0A06051-ICV2
Misc : 1X 5mL, 500ppb GX DI+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 08 10:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

1/8/20

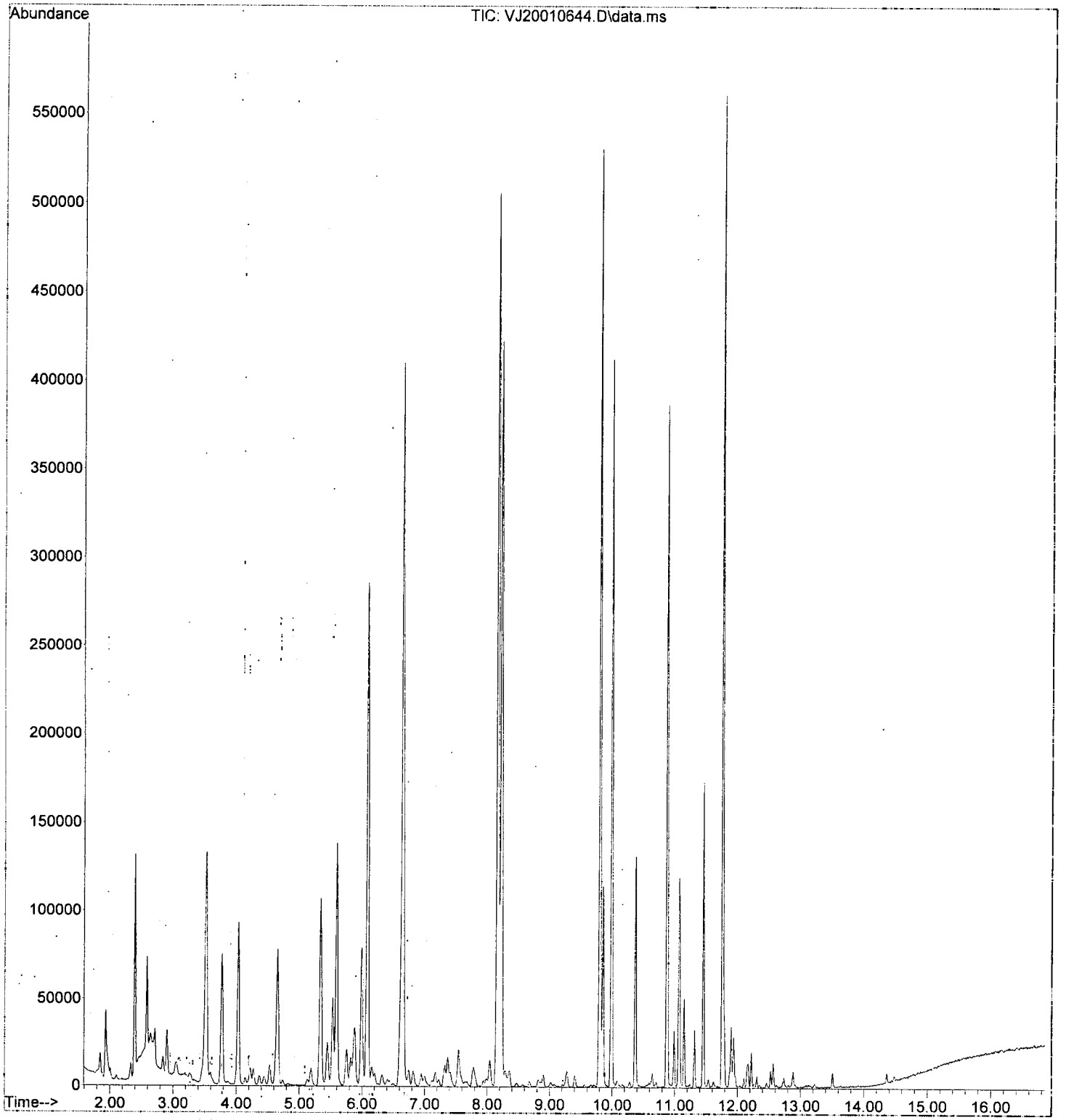
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	223341	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.643	114	354897	49.29	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.877	174	102701	48.55	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	401933	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	290557	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	198745	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3584391m	443.33	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4858419m	421.34	ug/L	
6) TPHg (C6-C10)	9.239	TIC	4209708m	445.10	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5756973m	424.73	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010644.D
Acq On : 7 Jan 2020 6:38 am
Operator : tb
Sample : 0A06051-ICV2
Misc : 1X 5mL 500ppb GX DI+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 08 10:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010645.D
Acq On : 7 Jan 2020 7:05 am
Operator : tb
Sample : 0A06051-IBLA
Misc : 1X 5mL DI+MeOH
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 08 10:53:55 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

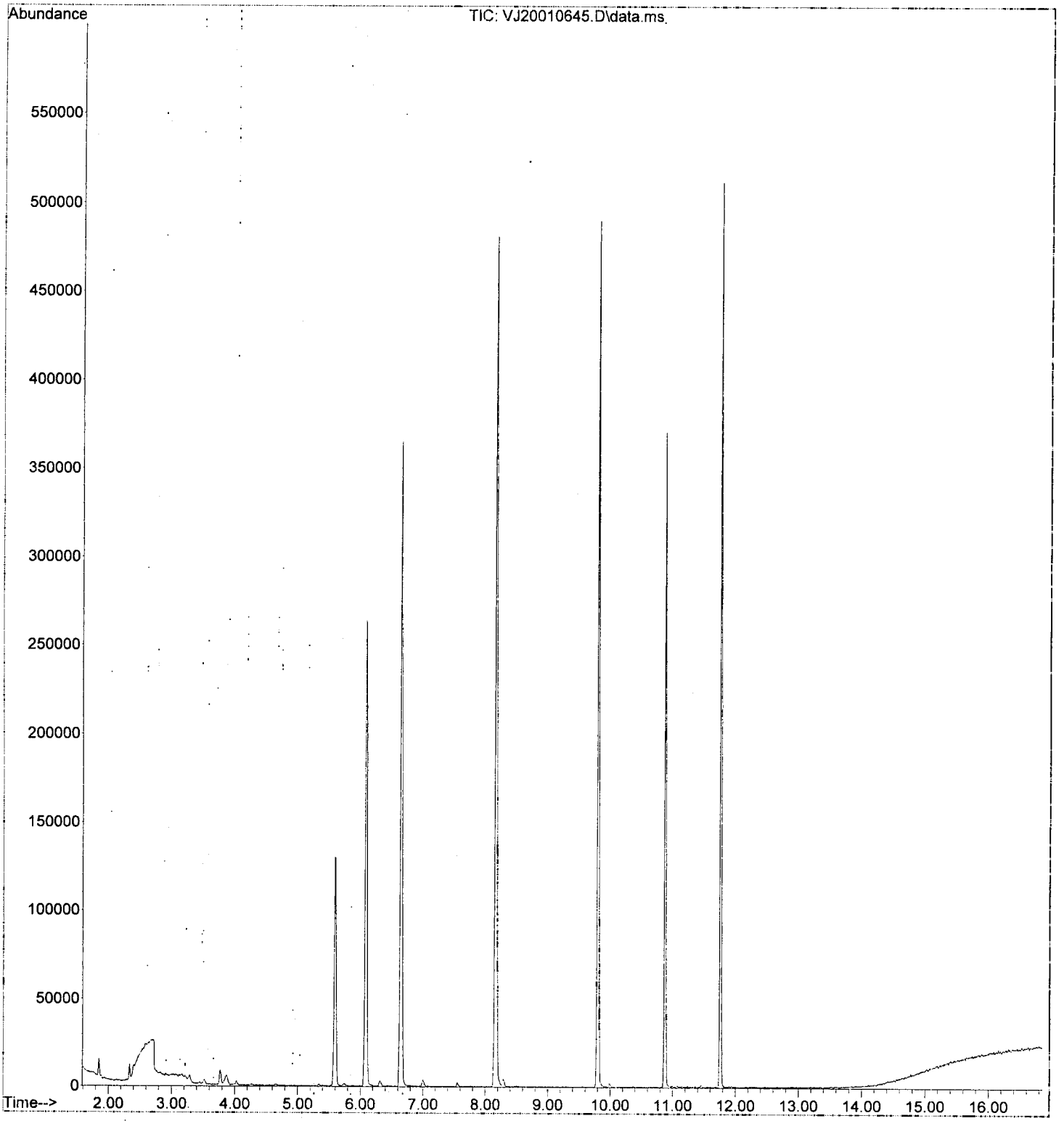
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	200497	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	327019	50.59	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	94643	49.84	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	373467	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	271141	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	184098	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	92945m	30.50	ug/L	
5) TPHg (C5-C9)	9.239	TIC	436196m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	365444m	24.02	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	464596m	7.41	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010645.D
Acq On : 7 Jan 2020 7:05 am
Operator : tb
Sample : 0A06051-IBLA
Misc : 1X 5mL DI+MeOH
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 08 10:53:55 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



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

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

Batch 0010530
Sequence 0A17017 (A0A0539-01,02)

PREPARATION BENCH SHEET

BATCH #: 0010530 (Soil)

Apex Laboratories

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*
0010530-BLK1		QC	01/16/20 09:00	7.5	5							
0010530-BS1		QC	01/16/20 09:00	5	5	A19L349		250				
0010530-BS2		QC	01/16/20 09:00	5	5	A20A132		250				
A0A0436-03	B	8260C BTEX	(Date Sampled)	6.28	5					HC03-14	FP	
A0A0436-03	B	NWTPH-Gx	(Date Sampled)	6.28	5					HC03-14	FP	
A0A0507-03	B	8260C BTEX+N	(Date Sampled)	6.37	5					SPW@7' BGS	FP	
A0A0538-01	D	8260C Full List	(Date Sampled)	6.33	5					PDI-WC-011420-01	FP	
A0A0538-01	D	8260C BTEX	(Date Sampled)	6.33	5					PDI-WC-011420-01	FP Added for BatchQC in: 0010530	
A0A0538-01	D	8260C BTEX+N	(Date Sampled)	6.33	5					PDI-WC-011420-01	FP Added for BatchQC in: 0010530	
A0A0538-01	D	NWTPH-Gx	(Date Sampled)	6.33	5					PDI-WC-011420-01	FP	
0010530-MS1		QC	01/14/20 09:00	6.33	5	A19L349	A0A0538-01	278			91.1@50X	
A0A0538-02	D	8260C Full List	(Date Sampled)	6.54	5					PDI-WC-011420-03	FP	
A0A0538-02	D	NWTPH-Gx	(Date Sampled)	6.54	5					PDI-WC-011420-03	FP	
A0A0539-01	D	8260C Full List	(Date Sampled)	5.66	5					PDI-WC-011420-02	FP	
A0A0539-01	D	8260C BTEX	(Date Sampled)	5.66	5					PDI-WC-011420-02	FP Added for BatchQC in: 0010530	
A0A0539-01	D	8260C BTEX+N	(Date Sampled)	5.66	5					PDI-WC-011420-02	FP Added for BatchQC in: 0010530	
A0A0539-01	D	NWTPH-Gx	(Date Sampled)	5.66	5					PDI-WC-011420-02	FP	
0010530-DUP1		QC	01/14/20 09:30	5.42	5		A0A0539-01					
A0A0539-02	D	8260C Full List	(Date Sampled)	5.45	5					PDI-WC-011420-04	FP	
A0A0539-02	D	NWTPH-Gx	(Date Sampled)	5.45	5					PDI-WC-011420-04	FP	
A0A0547-01	B	8260C Full List	(Date Sampled)	6.21	5					F-18	FP	
A0A0547-01	B	NWTPH-Gx	(Date Sampled)	6.21	5					F-18	FP	

IMA 1/20/20

Prepared By: Date

Reviewed By: 1/20/20

Date

PREPARATION BENCH SHEET

BATCH #: 0010530 (Soil)

Apex Laboratories

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*

*pH <2 verified _____

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18J327	11/30/23	Balance s/n 593312
A19J076	10/04/20	Methanol - Fisher (P/T) #191722
A19J148	10/09/20	Methanol - B&J (P/T) #DX212-US

Analyte Spike(s)

Std ID	Exp. Date	Description
A19L349	05/04/20	8260 Cal. Std. B VOC+OXY Spike (20-40ug/mL
A20A132	06/15/20	Prim NWTPH-Gx Spike (500 ug/mL)

Surrogate(s)

Std ID	Exp. Date	Description

SOIL MS10

Prepared By: _____ Date _____

Reviewed By: _____ Date _____

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: 10530

Matrix Spike

Sample Weight	Final Volume	Dilution	Dry Weight
g	mL		%
6.330	5	50	91.1
			0.911

Final Spike Level	**Spike Amount**
ug/kg	**ul**
964.75	**278**

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

A0A0538-01

IMA
1/20/20

Worksheet

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

Sample ID	Container	Container Weight (g)	Tare Weight (g)	Net Sample Weight (g)	Formula Check
A0A0436-03	B	40.16	33.88	6.28	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	

IMA
1/20/20

Worksheet

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

Sample ID	Container	Container Weight (g)	Tare Weight (g)	Net Sample Weight (g)	Formula Check
A0A0507-03	B	39.74	33.37	6.37	
A0A0538-01	D	40.1	33.77	6.33	
2	D	40.3	33.76	6.54	
A0A0539-01	D	39.07	33.41	5.66	
1	E	38.89	33.47	5.42	
2	D	38.89	33.44	5.45	
A0A0547-01	B	40.04	33.83	6.21	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	

IMA
1/17/20

A0A0436

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0A0436-01 HC01-14 Sampled: 01/14/20 12:50

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.84	33.98	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.63	33.60	5 10 15 Other	

Due: TAT:

A0A0436-02 HC02-14 Sampled: 01/14/20 11:55

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.85	33.62	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.54	33.32	5 10 15 Other	

Due: TAT:

A0A0436-03 HC03-14 Sampled: 01/14/20 10:50

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	40.16	33.88	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	40.28	33.89	5 10 15 Other	100X ~~50X~~

GX BTEX Due: TAT:

A0A0436-04 HC04-14 Sampled: 01/14/20 10:25

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.90	33.81	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.90	33.76	5 10 15 Other	

Due: TAT:

A0A0436-05 HC05-14 Sampled: 01/14/20 09:40

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.30	33.64	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	38.90	33.51	5 10 15 Other	

Due: TAT:

Weighed by: KS @ 1/14/20 16:58

Methanol Reagent ID: A19J076 Balance ID: A183327

A0A0507

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0A0507-01 SPB@9'BGS Sampled: 01/15/20 14:37

B Soil	40 mL VOA 5035 (MeOH)	Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
		37.29	32.96	5 10 15 Other	

Due: TAT:

A0A0507-02 NPB@9'BGS Sampled: 01/15/20 14:37

B Soil	40 mL VOA 5035 (MeOH)	Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
		39.26	33.70	5 10 15 Other	

Due: TAT:

A0A0507-03 SPW@7'BGS Sampled: 01/15/20 14:40

B Soil	40 mL VOA 5035 (MeOH)	Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
		34.74	33.37	5 10 15 Other	Dx@8240

BTEX + N Due: TAT:

Weighed by: ms @ 1/15/20 17:55

Methanol Reagent ID: A19J076~ Balance ID: A18J327~

Print Date: 1/15/2020 5:47:26PM

A0A0538

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0A0538-01	PDI-WC-011420-01	Sampled: 01/14/20 09:00

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	40.10	33.77	5 10 15 Other	MS
E Sediment	40 mL VOA - 5035 (MeOH)	37.79	33.31	5 10 15 Other	

Gx / 8260 Due: TAT:

A0A0538-02	PDI-WC-011420-03	Sampled: 01/14/20 10:10

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	40.30	33.76	5 10 15 Other	
E Sediment	40 mL VOA - 5035 (MeOH)	41.11	33.62	5 10 15 Other	

Due: TAT:

Weighed by: [signature] @ 1/16/20 1641

Methanol Reagent ID: A19J076 Balance ID: A18J327

Print Date: 1/16/2020 4:28:29PM

A0A0539

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0A0539-01 — **PDI-WC-011420-02** — Sampled: **01/14/20 09:30**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	39.07	33.41	(5) 10 15 Other	
E Sediment	40 mL VOA - 5035 (MeOH)	38.89	33.47	(5) 10 15 Other	DUP

Gx/8260 — Due: — TAT:

A0A0539-02 — **PDI-WC-011420-04** — Sampled: **01/14/20 10:35**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
D Sediment	40 mL VOA - 5035 (MeOH)	38.89	33.44	(5) 10 15 Other	
E Sediment	40 mL VOA - 5035 (MeOH)	38.83	33.28	(5) 10 15 Other	

Due: — TAT:

Weighed by: (8) @ 1/16/20 1642

Methanol Reagent ID: A19J076 — Balance ID: A18J327

A0A0547

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A0A0547-01	F-18	Sampled: 01/16/20 13:55

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	40.04	33.83	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	40.21	33.93	5 10 15 Other	

Gx/8260 Due: TAT:

Weighed by: AKK @ 1714 1/16/20

Methanol Reagent ID: A190076 Balance ID: A189327

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**0A17017**	Instrument:	**VOA-GCMS10**
Date:	**01/17/20 09:11**	Calibration:	**A0A0801**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A17017-IBL1	Soil	QC	QC			A19L200	
2	0A17017-TUN1	Soil	QC	QC			A19L200	
3	0A17017-CCV1	Soil	QC	QC			A19L200	
4	0010530-BS1	Soil	QC	QC		0010530	A19L200	
5	0A17017-CCV2	Soil	QC	QC			A19L200	
6	0010530-BS2	Soil	QC	QC		0010530	A19L200	
7	0010530-BLK1	Soil	QC	QC		0010530	A19L200	
8	A0A0547-01	Soil	8260C Full List		01/17/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/17/20	0010530	A19L200	
9	A0A0539-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
10	0010530-DUP1	Soil	QC	QC		0010530	A19L200	
11	A0A0538-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
12	0010530-MS1	Soil	QC	QC		0010530	A19L200	
13	0A17017-IBL2	Soil	QC	QC			A19L200	
14	A0A0539-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
15	A0A0507-03	Soil	8260C BTEX+N		01/20/20	0010530	A19L200	
16	A0A0538-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
17	0A17017-IBL3	Soil	QC	QC			A19L200	
18	0A17017-IBL4	Soil	QC	QC			A19L200	
19	A0A0436-03	Soil	8260C BTEX		01/20/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/20/20	0010530	A19L200	
20	0A17017-IBL5	Soil	QC	QC			A19L200	
21	0010544-BS1	Soil	QC	QC		0010544	A19L200	
22	0010544-BLK1	Soil	QC	QC		0010544	A19L200	
23	0010544-BS2	Soil	QC	QC		0010544	A19L200	
24	0010544-BS3	Soil	QC	QC		0010544	A19L200	
25	0010544-BS4	Soil	QC	QC		0010544	A19L200	
26	0010545-BLK1	Soil	QC	QC		0010545	A19L200	
27	0010545-BS1	Soil	QC	QC		0010545	A19L200	
28	0010545-BS3	Soil	QC	QC		0010545	A19L200	
29	0010545-BS2	Soil	QC	QC		0010545	A19L200	
30	0010545-BS4	Soil	QC	QC		0010545	A19L200	
31	0A17017-IBL6	Soil	QC	QC			A19L200	

Data Entered By: IMA 1/20/20

Data Reviewed By: [signature] 1/21/20

Comments:

T12DCPA to 1/2 ppb

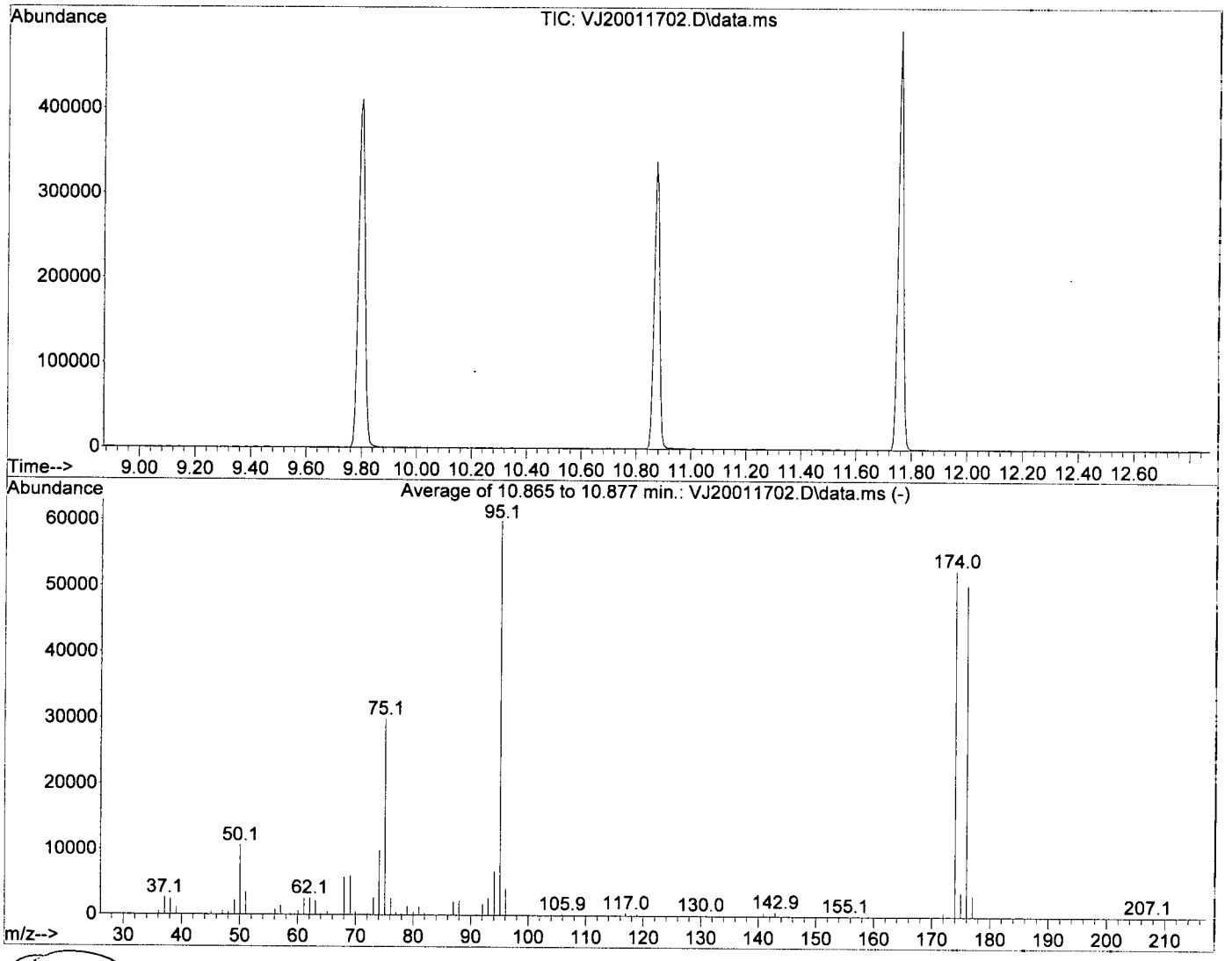
BFB

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011702.D
Acq On : 17 Jan 2020 9:57 am
Operator : IMA
Sample : 0A17017-TUN1
Misc : 1X 5mL A19L200 IS/SURR
ALS Vial : 2 Sample Multiplier: 1

IMA
1/17/20

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Tue Jan 07 15:08:13 2020



AutoFind: Scans 1526, 1527, 1528; Background Corrected with Scan 1519

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	113.9	59984	PASS
96	95	5	9	6.9	4128	PASS
173	174	0.00	2	0.2	107	PASS
174	95	50	200	87.8	52680	PASS
175	174	5	9	7.0	3708	PASS
176	174	95	105	95.8	50488	PASS
177	176	5	10	6.5	3270	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011702.D
Acq On : 17 Jan 2020 9:57 am
Operator : IMA
Sample : 0A17017-TUN1
Misc : 1X 5mL A19L200 IS/SURR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 12:00:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

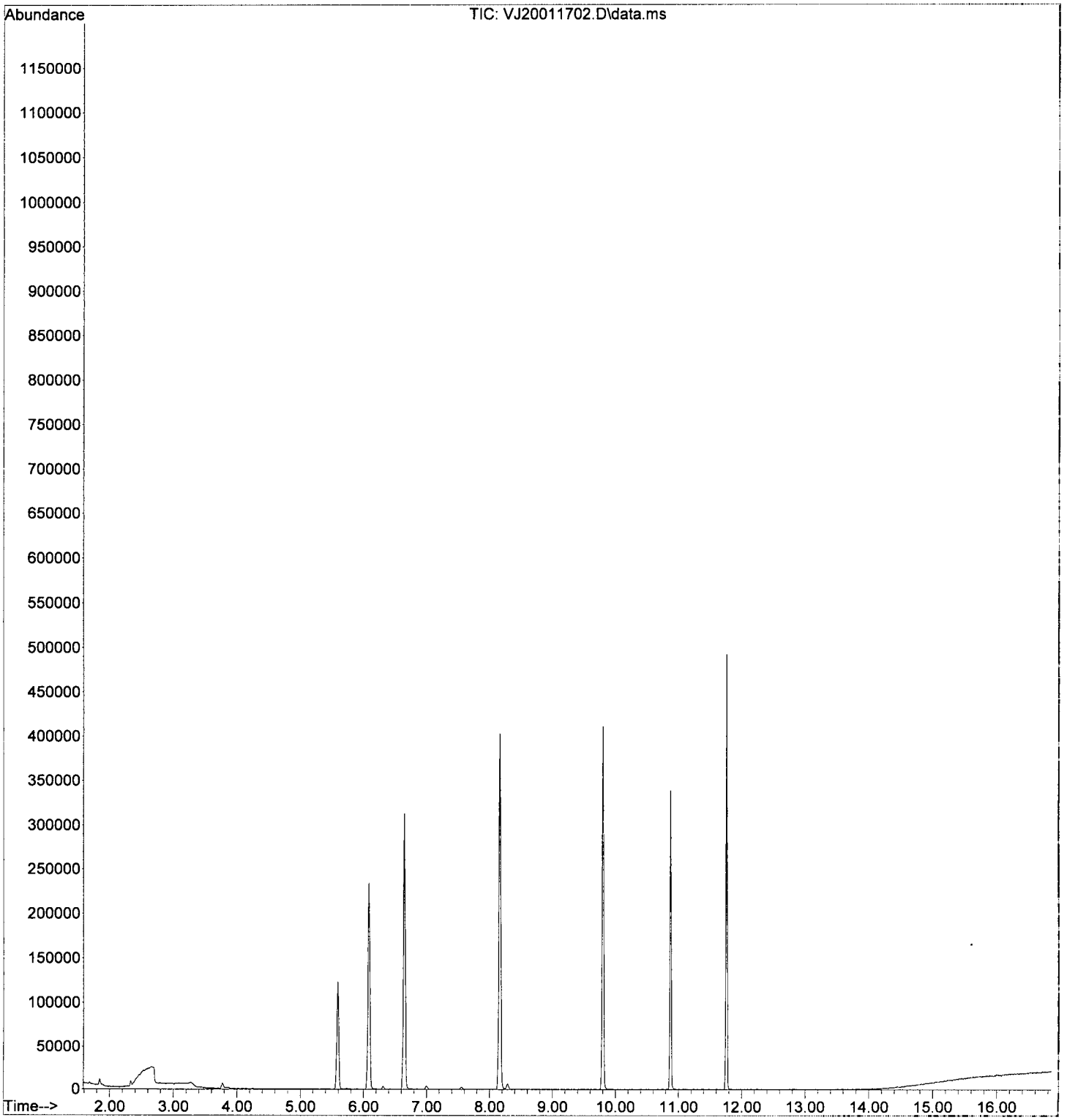
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	93728	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	234848	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	109043	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	81128	53.58	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	278813	50.99	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	316613	48.63	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	86831	51.58	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.885	50	1226	0.46	ug/L		94
5) Bromomethane	2.330	96	2817	Below Cal			98
6) Chloroethane	2.530	64	58	0.12	ug/L	#	1
8) Ethanol	3.266	45	2914	0.15	ug/L		95
12) Iodomethane	3.285	142	777	2.36	ug/L		78
13) Methylene Chloride	3.771	84	3243	0.75	ug/L		92
14) Acetone	3.850	43	1840	1.55	ug/L		90
18) tert-Butanol (TBA)	4.258	59	187	0.35	ug/L	#	46
32) 2-Butanone (MEK)	5.730	43	1841	0.99	ug/L		89
36) iso-Butyl Alcohol	6.314	43	1231	6.13	ug/L	#	59
84) Naphthalene	13.505	128	113	0.12	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011702.D
Acq On : 17 Jan 2020 9:57 am
Operator : IMA
Sample : 0A17017-TUN1
Misc : 1X 5mL A19L200 IS/SURR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 17 12:00:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 12:01:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	91	0.00
2		Dichlorodifluoromethane	20.000	18.326	8.4	92	-0.01
3	P	Chloromethane	20.000	17.114	14.4	84	-0.01
4	C	Vinyl Chloride	20.000	18.941	5.3	87	0.00
5		Bromomethane	20.000	19.352	3.2	90	0.00
6		Chloroethane	20.000	18.753	6.2	95	0.00
7		Trichlorofluoromethane	20.000	21.715	-8.6	102	-0.01
8		Ethanol	1250.000	1043.647	16.5	80	-0.01
9	C	1,1-Dichloroethene	20.000	19.918	0.4	94	-0.01
10		Carbon Disulfide	20.000	19.552	2.2	95	-0.01
11		Freon 113	20.000	21.348	-6.7	96	-0.01
12		Iodomethane	20.000	22.777	-13.9	115	-0.01
13		Methylene Chloride	20.000	19.964	0.2	94	-0.01
14		Acetone	40.000	36.213	9.5	90	-0.01
15		t-1,2-Dichloroethene	20.000	19.819	0.9	92	0.00
16		n-Hexane	20.000	21.179	-5.9	93	0.00
17		Methyl-tert-butyl-ether	20.000	20.118	-0.6	92	0.00
18		tert-Butanol (TBA)	1250.000	1251.513	-0.1	87	-0.01
19		Diisopropyl ether (DIPE)	5.000	4.876	2.5	84	0.00
20	P	1,1-Dichloroethane	20.000	20.508	-2.5	93	0.00
21		Acrylonitrile	20.000	16.205	19.0	71	-0.01
22		Ethyl-tert-butyl ether (ETB	5.000	4.790	4.2	80	0.00
23		c-1,2-Dichloroethene	20.000	20.460	-2.3	90	0.00
24		2,2-Dichloropropane	20.000	22.363	-11.8	102	0.00
25		Bromochloromethane	20.000	19.223	3.9	87	0.00
26	C	Chloroform	20.000	21.031	-5.2	96	0.00
27		Carbon Tetrachloride	20.000	22.247	-11.2	101	0.00
28		Tetrahydrofuran	20.000	17.814	10.9	81	0.00
29		1,1,1-Trichloroethane	20.000	21.854	-9.3	97	0.00
30	S	Dibromofluoromethane (S)	50.000	50.570	-1.1	95	0.00
31		1,1-Dichloropropene	20.000	20.595	-3.0	90	0.00
32		2-Butanone (MEK)	40.000	34.820	13.0	85	0.00
33		Benzene	20.000	20.638	-3.2	94	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.762	4.8	90	0.00
35		1,2-Dichloroethane (EDC)	20.000	20.651	-3.3	93	0.00
36		iso-Butyl Alcohol	500.000	422.950	15.4	81	0.00
37	S	1,4-Difluorobenzene (S)	50.000	50.956	-1.9	94	0.00
38		Trichloroethene (TCE)	20.000	22.951	-14.8	101	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	4.915	1.7	88	0.00
40		Dibromomethane	20.000	21.540	-7.7	96	0.00
41	C	1,2-Dichloropropane	20.000	19.695	1.5	90	0.00
42		Bromodichloromethane	20.000	21.493	-7.5	95	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	97	0.00
44		c-1,3-Dichloropropene	20.000	19.270	3.7	87	-0.01
45	S	Toluene-d8 (S)	50.000	47.051	5.9	90	0.00
46	C	Toluene	20.000	19.678	1.6	95	0.00
47		Tetrachloroethene (PCE)	20.000	22.387	-11.9	103	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	33.646	15.9	82	0.00
49		t-1,3-Dichloropropene	20.000	21.765	-8.8	95	0.00
50		1,1,2-Trichloroethane	20.000	20.052	-0.3	96	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	21.355	-6.8	103	0.00
52		1,3-Dichloropropane	20.000	20.191	-1.0	95	0.00
53		1,2-Dibromoethane (EDB)	20.000	20.848	-4.2	99	0.00
54		2-Hexanone	40.000	31.946	20.1	82	0.00
55	P	Chlorobenzene	20.000	20.593	-3.0	99	0.00
56	C	Ethylbenzene	20.000	20.658	-3.3	96	0.00
57		1,1,1,2-Tetrachloroethane	20.000	21.890	-9.5	105	0.00
58		m,p-Xylenes (2)	40.000	44.193	-10.5	97	0.00
59		o-Xylene	20.000	21.793	-9.0	95	0.00
60		Styrene	20.000	19.368	3.2	100	0.00
61	P	Bromoform	20.000	22.236	-11.2	105	0.00
62		Isopropylbenzene	20.000	21.488	-7.4	97	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	102	0.00
64	S	4-Bromofluorobenzene (S)	50.000	49.960	0.1	102	0.00
65		Bromobenzene	20.000	21.393	-7.0	106	0.00
66		n-Propylbenzene	20.000	19.884	0.6	95	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	19.262	3.7	91	0.00
68		2-Chlorotoluene	20.000	21.335	-6.7	100	0.00
69		1,3,5-Trimethylbenzene	20.000	22.194	-11.0	100	0.00
70		1,2,3-Trichloropropane	20.000	20.482	-2.4	99	0.00
71		t-1,4-Dichloro-2-butene	20.000	19.613	1.9	100	0.00
72		4-Chlorotoluene	20.000	20.659	-3.3	97	0.00
73		tert-Butylbenzene	20.000	20.646	-3.2	97	0.00
74		1,2,4-Trimethylbenzene	20.000	22.369	-11.8	100	0.00
75		sec-Butylbenzene	20.000	21.448	-7.2	97	0.00
76		4-Isopropyltoluene	20.000	22.466	-12.3	100	0.00
77		1,3-Dichlorobenzene	20.000	21.518	-7.6	102	0.00
78		1,4-Dichlorobenzene	20.000	20.039	-0.2	104	0.00
79		n-Butylbenzene	20.000	19.833	0.8	96	0.00
80		1,2-Dichlorobenzene	20.000	21.572	-7.9	102	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	18.826	5.9	100	0.00
82		Hexachlorobutadiene	20.000	21.754	-8.8	104	0.00
83		1,2,4-Trichlorobenzene	20.000	21.454	-7.3	103	0.00
84		Naphthalene	20.000	18.279	8.6	96	0.00
85		1,2,3-Trichlorobenzene	20.000	22.244	-11.2	103	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene (I)	6.083	99	99045	50.00	ug/L		0.00	
43) Chlorobenzene-d5 (I)	9.800	117	249894	50.00	ug/L		0.00	
63) 1,4-Dichlorobenzene-d4...	11.759	152	123313	50.00	ug/L		0.00	
System Monitoring Compounds								
30) Dibromofluoromethane (S)	5.590	111	80912	50.57	ug/L		0.00	
37) 1,4-Difluorobenzene (S)	6.643	114	294409	50.96	ug/L		0.00	
45) Toluene-d8 (S)	8.158	98	325943	47.05	ug/L		0.00	
64) 4-Bromofluorobenzene (S)	10.871	174	95101	49.96	ug/L		0.00	
Target Compounds							Qvalue	
2) Dichlorodifluoromethane	1.685	85	35329	18.33	ug/L		97	
3) Chloromethane	1.886	50	48630	17.11	ug/L		99	
4) Vinyl Chloride	1.995	62	40599	18.94	ug/L		93	
5) Bromomethane	2.336	96	22244	19.35	ug/L		99	
6) Chloroethane	2.457	64	9654	18.75	ug/L		94	
7) Trichlorofluoromethane	2.585	101	16510	21.72	ug/L		99	
8) Ethanol	~~3.254~~	~~45~~	~~36901~~	~~555.24~~	~~ug/L~~		~~88~~	M.I.
9) 1,1-Dichloroethene	3.139	61	47926	19.92	ug/L		94	
10) Carbon Disulfide	3.151	76	84519	19.55	ug/L		97	
11) Freon 113	3.194	101	38167	21.35	ug/L		97	
12) Iodomethane	3.291	142	9166	22.78	ug/L		90	
13) Methylene Chloride	3.771	84	40646	19.96	ug/L		96	
14) Acetone	~~3.857~~	~~43~~	~~36287~~	~~28.97~~	~~ug/L~~		~~98~~	M.I.
15) t-1,2-Dichloroethene	3.942	61	58411	19.82	ug/L		93	
16) n-Hexane	4.039	86	9555	21.18	ug/L	#	94	
17) Methyl-tert-butyl-ether	4.100	73	146025	20.12	ug/L		61	
18) tert-Butanol (TBA)	~~4.246~~	~~59~~	~~400642~~	~~714.87~~	~~ug/L~~	#	~~91~~	M.I.
19) Diisopropyl ether (DIPE)	4.495	45	31525	4.88	ug/L		97	
20) 1,1-Dichloroethane	4.575	63	69678	20.51	ug/L		99	
21) Acrylonitrile	4.623	53	20677	16.21	ug/L		97	
22) Ethyl-tert-butyl ether...	4.867	59	29455	4.79	ug/L		94	
23) c-1,2-Dichloroethene	5.122	61	56117	20.46	ug/L		94	
24) 2,2-Dichloropropane	5.232	77	70011	22.36	ug/L		97	
25) Bromochloromethane	5.323	49	32605	19.22	ug/L		91	
26) Chloroform	5.408	83	78516	21.03	ug/L		96	
27) Carbon Tetrachloride	5.548	117	59688	22.25	ug/L		94	
28) Tetrahydrofuran	5.578	42	21629	17.81	ug/L		88	
29) 1,1,1-Trichloroethane	5.615	97	75163	21.85	ug/L		96	
31) 1,1-Dichloropropene	5.743	75	58415	20.59	ug/L		97	
32) 2-Butanone (MEK)	5.724	43	68427	34.82	ug/L		95	
33) Benzene	5.992	78	187250	20.64	ug/L		98	
34) tert-Amyl methyl ether...	6.144	73	28068	4.76	ug/L		95	
35) 1,2-Dichloroethane (EDC)	6.199	62	66400	20.65	ug/L		100	
36) iso-Butyl Alcohol	~~6.266~~	~~43~~	~~53795~~	~~253.59~~	~~ug/L~~		~~86~~	M.I.
38) Trichloroethene (TCE)	6.613	130	48970	22.95	ug/L		98	
39) tert-Amyl ethyl ether ...	6.892	59	20058	4.91	ug/L		92	
40) Dibromomethane	7.051	93	27460	21.54	ug/L		99	
41) 1,2-Dichloropropane	7.160	63	42034	19.69	ug/L		87	
42) Bromodichloromethane	7.239	83	54292	21.49	ug/L		95	
44) c-1,3-Dichloropropene	7.939	75	60146	19.27	ug/L		97	
46) Toluene	8.219	91	192638	19.68	ug/L		97	
47) Tetrachloroethene (PCE)	8.669	166	50817	22.39	ug/L		98	
48) 4-Methyl-2-Pentanone (...	8.663	43	98375	33.65	ug/L		97	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

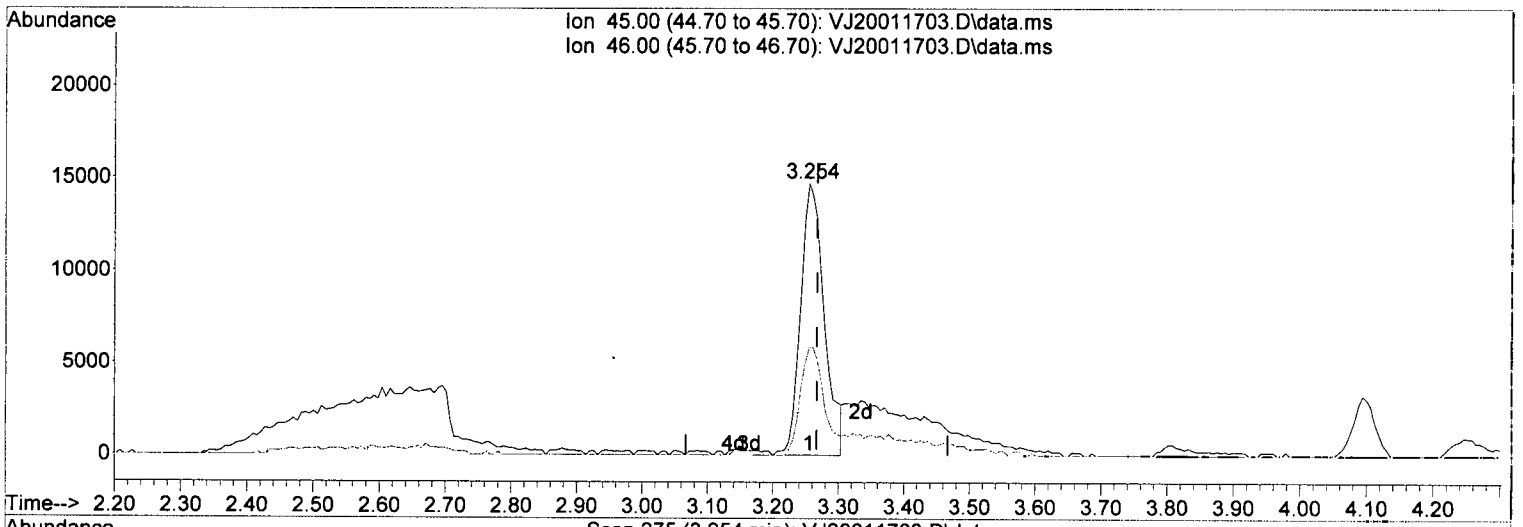
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	64804	21.76	ug/L		100
50) 1,1,2-Trichloroethane	8.870	97	40456	20.05	ug/L		99
51) Dibromochloromethane	9.058	129	39892	21.36	ug/L		96
52) 1,3-Dichloropropane	9.149	76	69649	20.19	ug/L		99
53) 1,2-Dibromoethane (EDB)	9.295	107	41911	20.85	ug/L		99
54) 2-Hexanone	9.539	43	71377	31.95	ug/L		97
55) Chlorobenzene	9.812	112	122093	20.59	ug/L		100
56) Ethylbenzene	9.849	91	204329	20.66	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.879	131	43449	21.89	ug/L		98
58) m,p-Xylenes (2)	9.989	91	307002	44.19	ug/L		98
59) o-Xylene	10.372	91	140612	21.79	ug/L		98
60) Styrene	10.415	104	105254	19.37	ug/L		96
61) Bromoform	10.433	173	28996	22.24	ug/L		97
62) Isopropylbenzene	10.646	105	182599	21.49	ug/L		100
65) Bromobenzene	10.956	156	49740	21.39	ug/L		95
66) n-Propylbenzene	10.987	91	213941	19.88	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	52530	19.26	ug/L		97
68) 2-Chlorotoluene	11.108	126	43097	21.34	ug/L		98
69) 1,3,5-Trimethylbenzene	11.145	105	160598	22.19	ug/L		95
70) 1,2,3-Trichloropropane	11.145	110	21094	20.48	ug/L	#	85
71) t-1,4-Dichloro-2-butene	11.181	88	8696	19.61	ug/L	#	80
72) 4-Chlorotoluene	11.242	91	127842	20.66	ug/L		98
73) tert-Butylbenzene	11.400	91	82958	20.65	ug/L		97
74) 1,2,4-Trimethylbenzene	11.455	105	161082	22.37	ug/L		98
75) sec-Butylbenzene	11.540	105	186089	21.45	ug/L		99
76) 4-Isopropyltoluene	11.650	119	159475	22.47	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	89447	21.52	ug/L		99
78) 1,4-Dichlorobenzene	11.771	146	90139	20.04	ug/L		99
79) n-Butylbenzene	11.966	91	131542	19.83	ug/L		97
80) 1,2-Dichlorobenzene	12.088	146	81807	21.57	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	14211	18.83	ug/L		90
82) Hexachlorobutadiene	13.213	223	13356	21.75	ug/L		94
83) 1,2,4-Trichlorobenzene	13.238	180	50294	21.45	ug/L		98
84) Naphthalene	13.505	128	162604	18.28	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	52907	22.24	ug/L		98

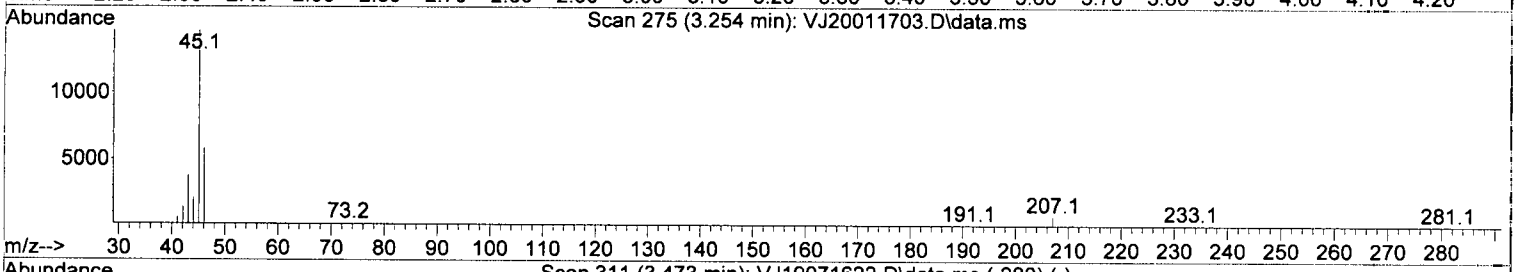
(#) = qualifier out of range (m) = manual integration (+) = signals summed

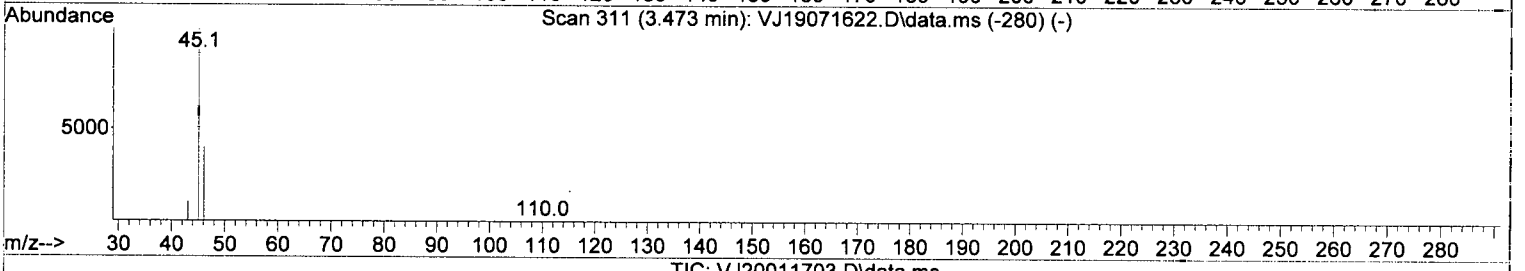
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(8) Ethanol

3.254min (-0.012) 555.24 ug/L

response 36901

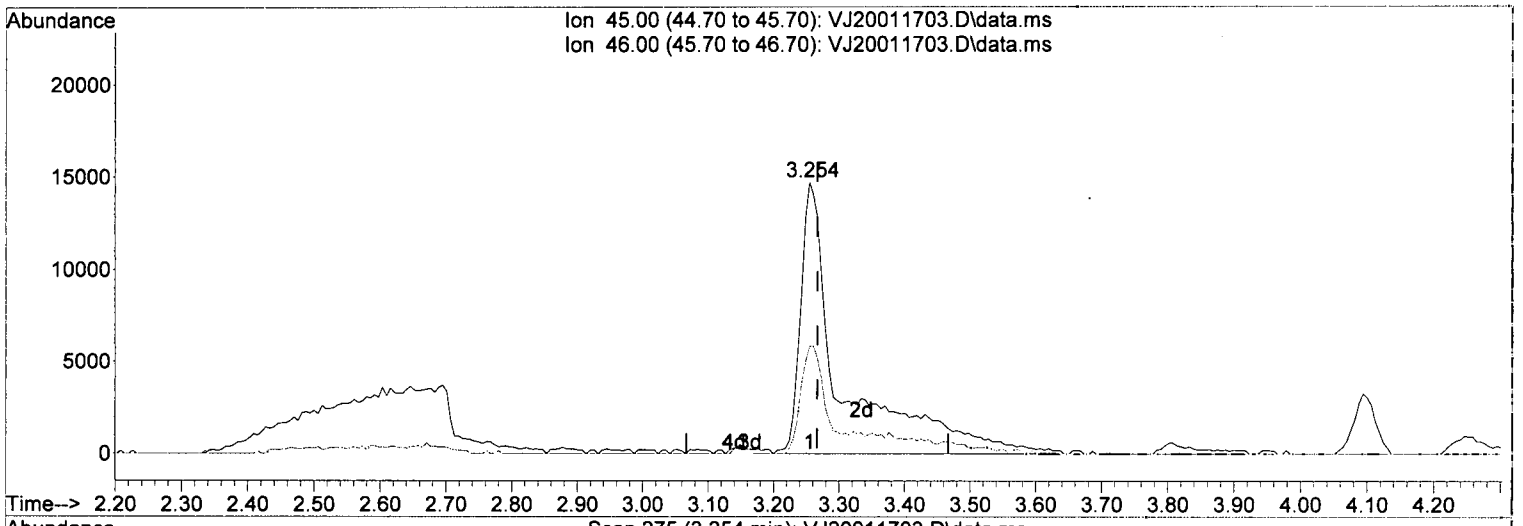
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.54
0.00	0.00	0.00
0.00	0.00	0.00

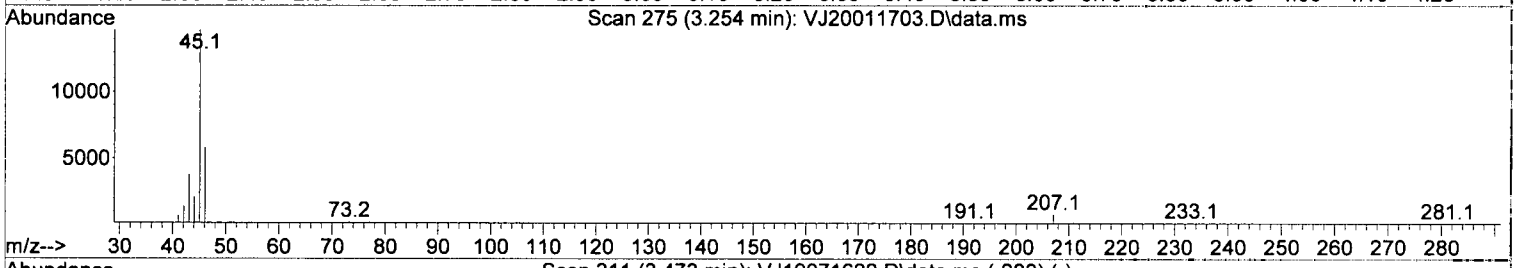
M.I.

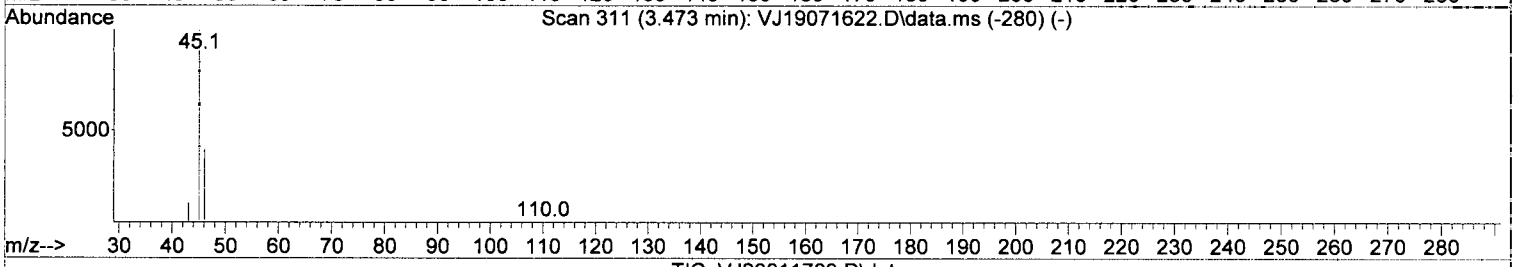
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(8) Ethanol

3.254min (-0.012) 1043.65 ug/L (m)

IMA 1/17/20

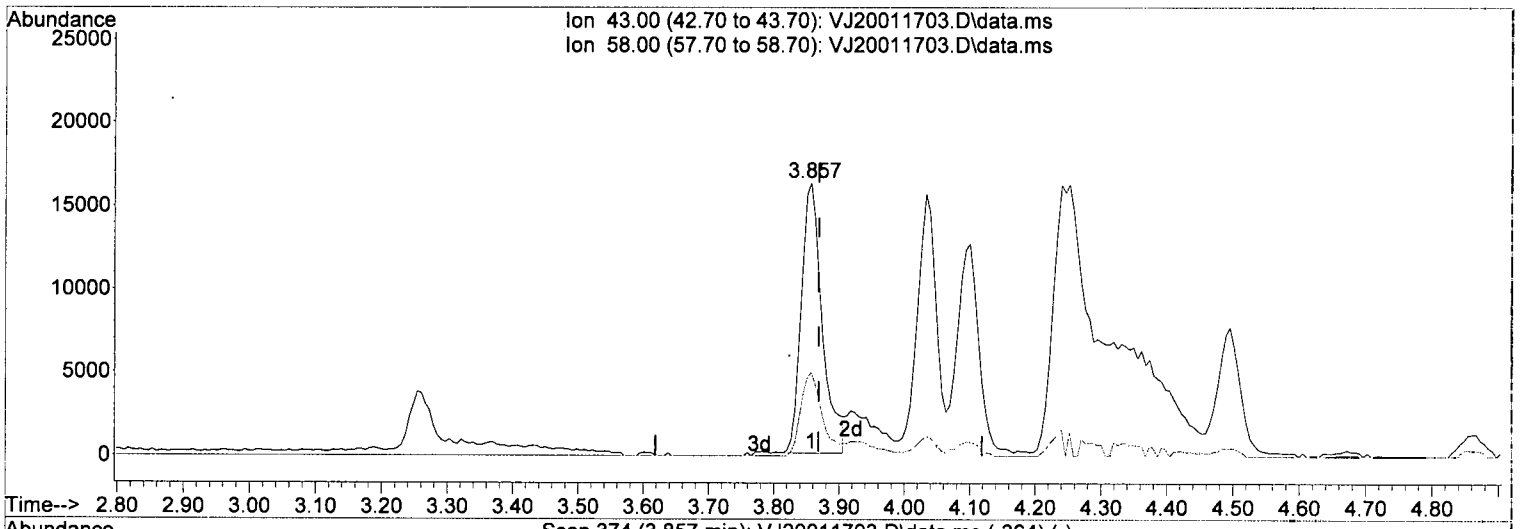
response 65613

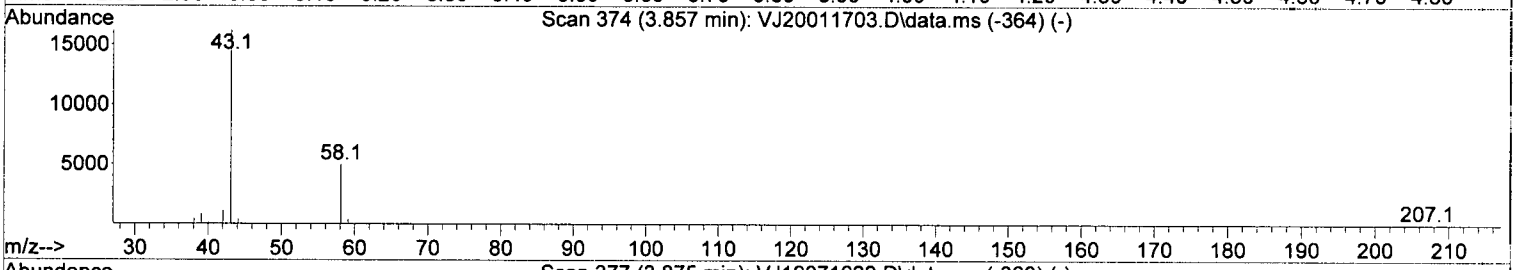
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.54
0.00	0.00	0.00
0.00	0.00	0.00

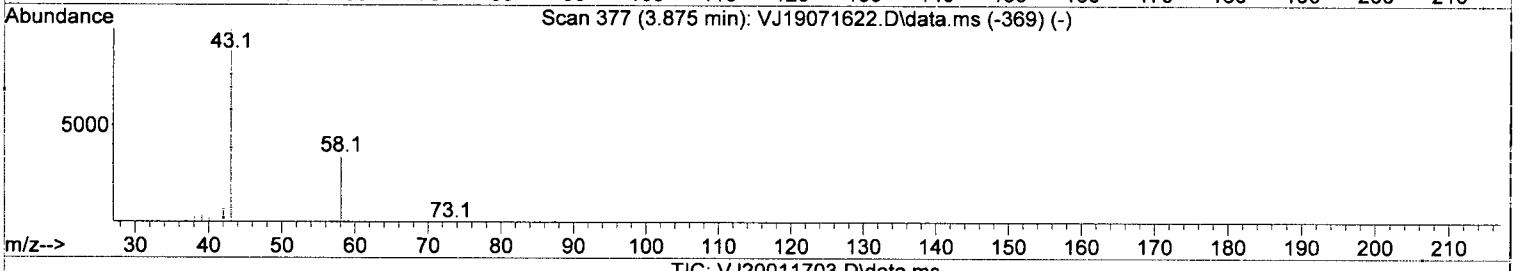
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(14) Acetone

3.857min (-0.011) 28.97 ug/L

response 36287

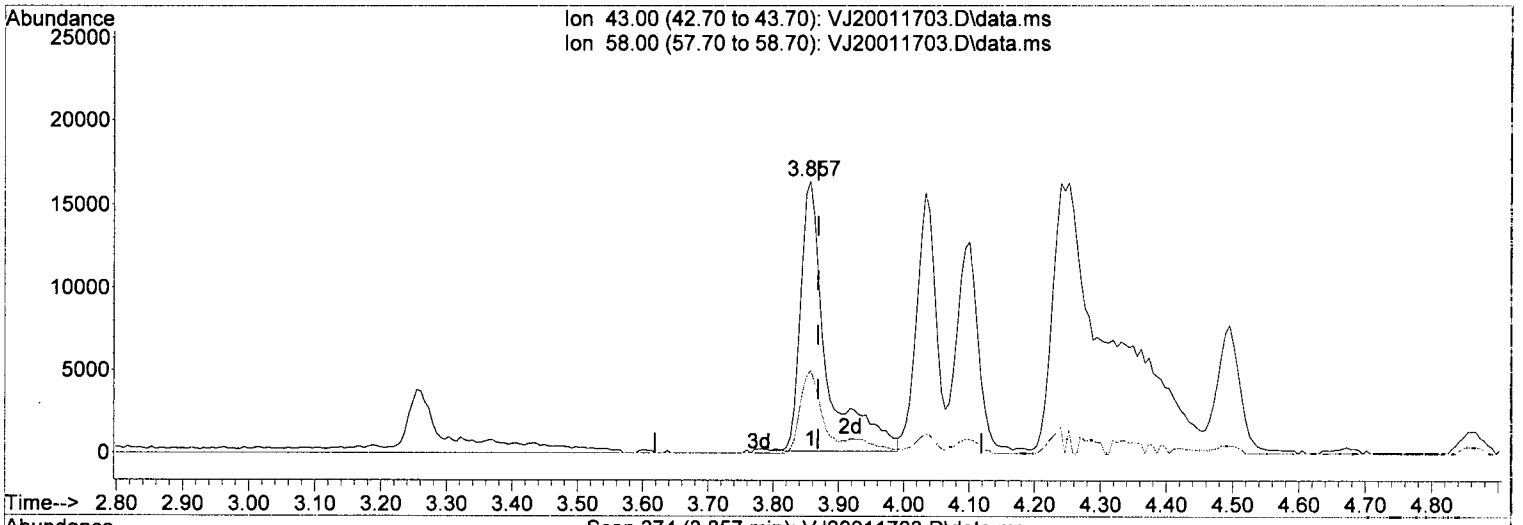
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.85
0.00	0.00	0.00
0.00	0.00	0.00

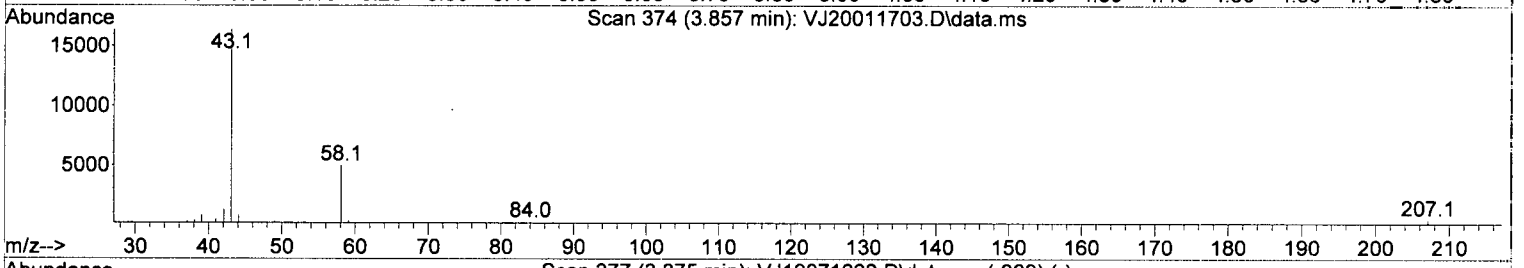
M.I.

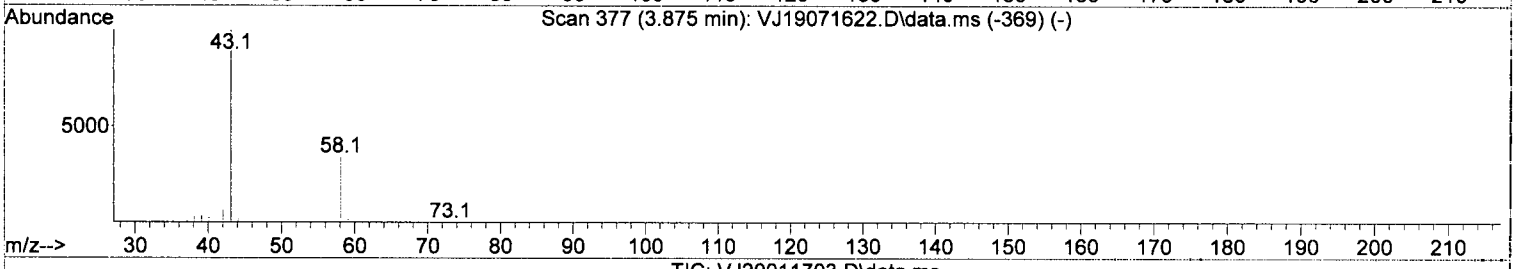
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(14) Acetone

3.857min (-0.011) 36.21 ug/L (m)

IMA 1/17/20

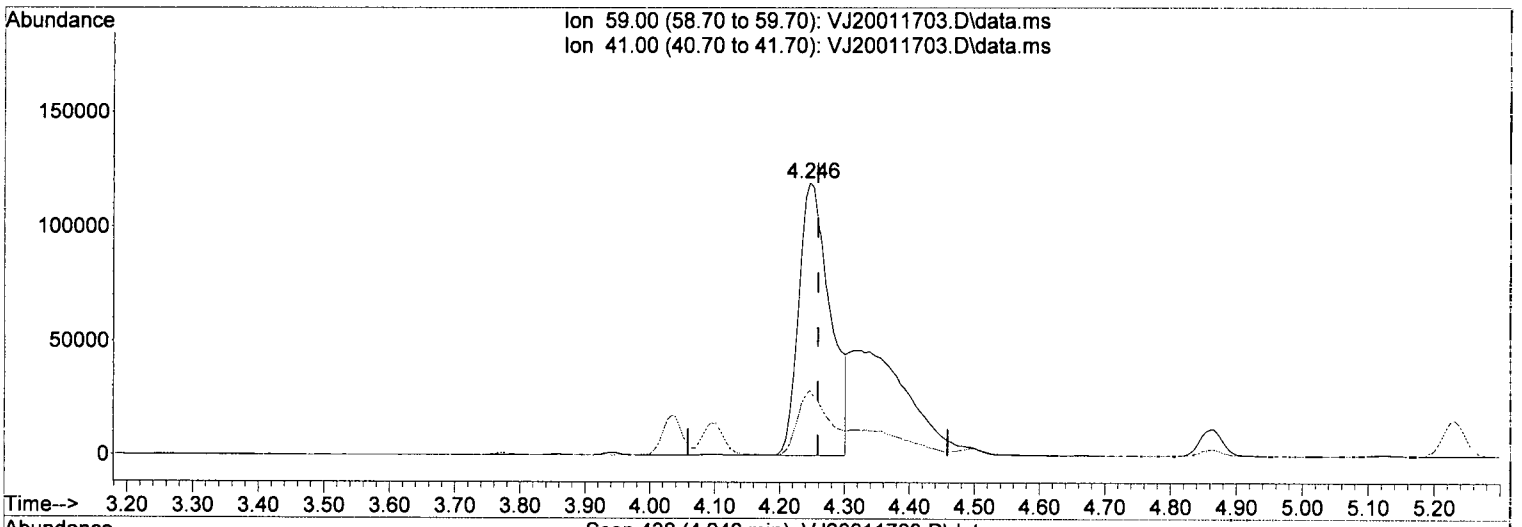
response 45357

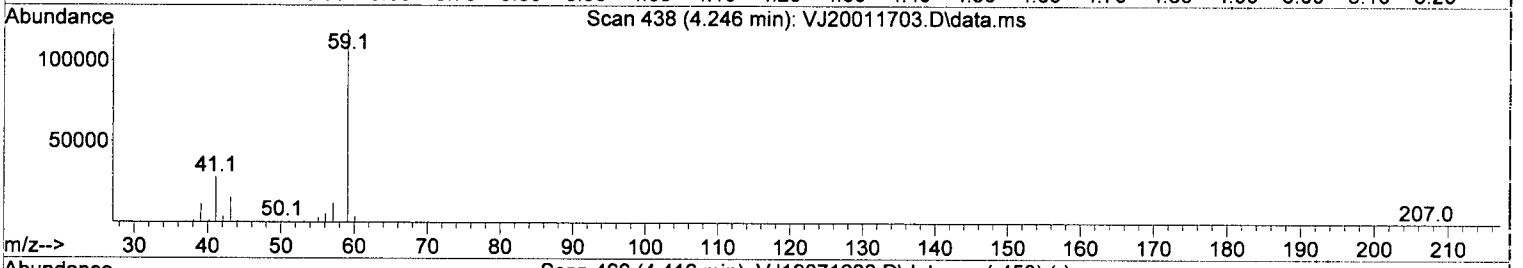
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.54
0.00	0.00	0.00
0.00	0.00	0.00

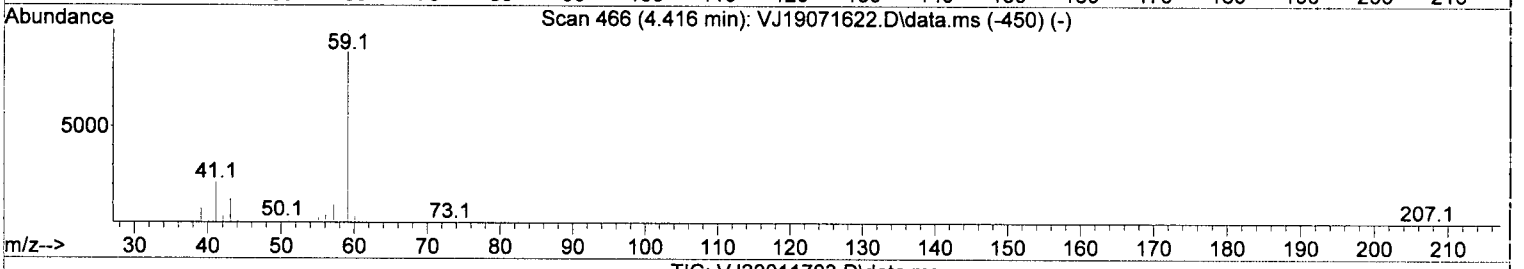
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(18) tert-Butanol (TBA)

4.246min (-0.012) 714.87 ug/L

response 400642

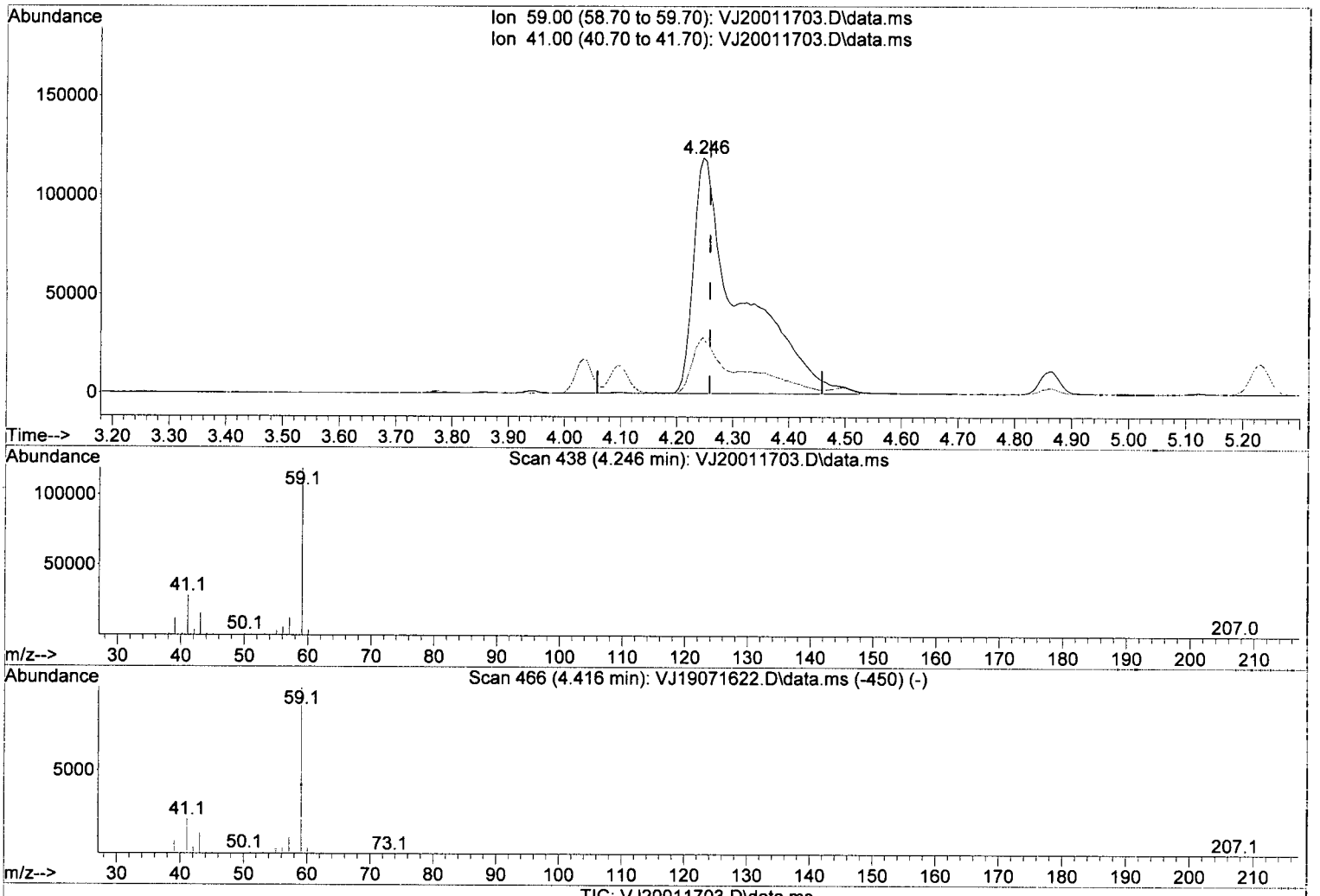
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	23.94#
0.00	0.00	0.00
0.00	0.00	0.00

MI

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20011703.D\data.ms

(18) tert-Butanol (TBA)

4.246min (-0.012) 1251.51 ug/L m

response 701396

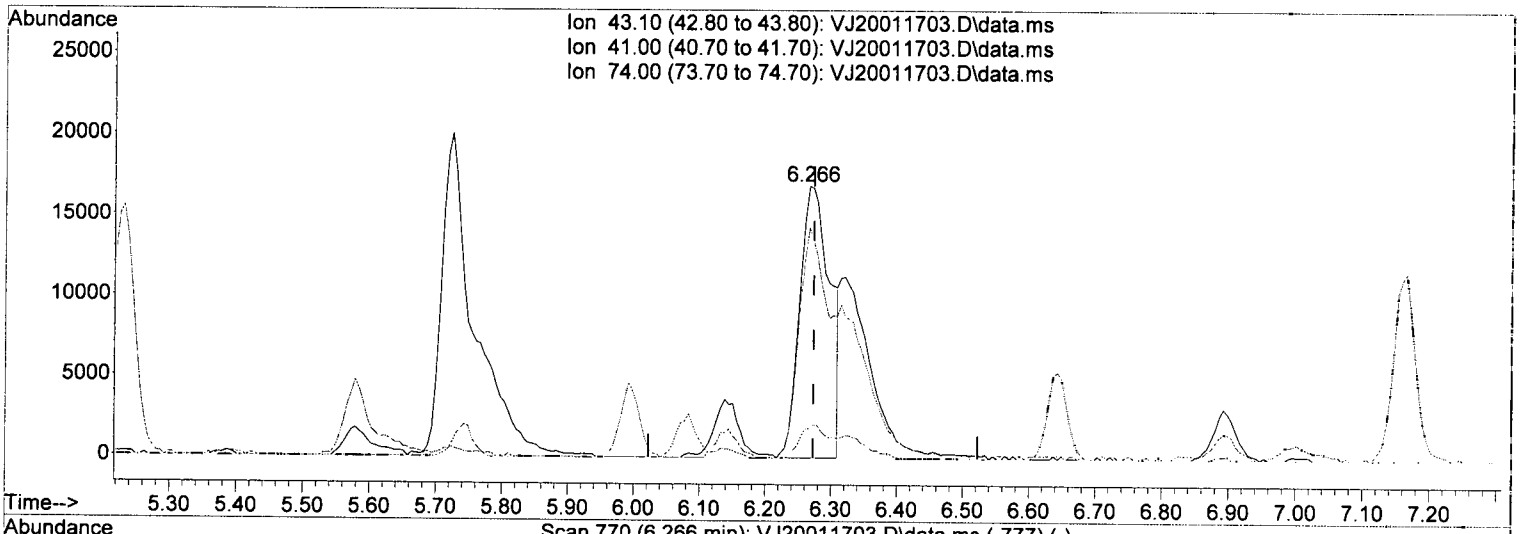
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	23.94#
0.00	0.00	0.00
0.00	0.00	0.00

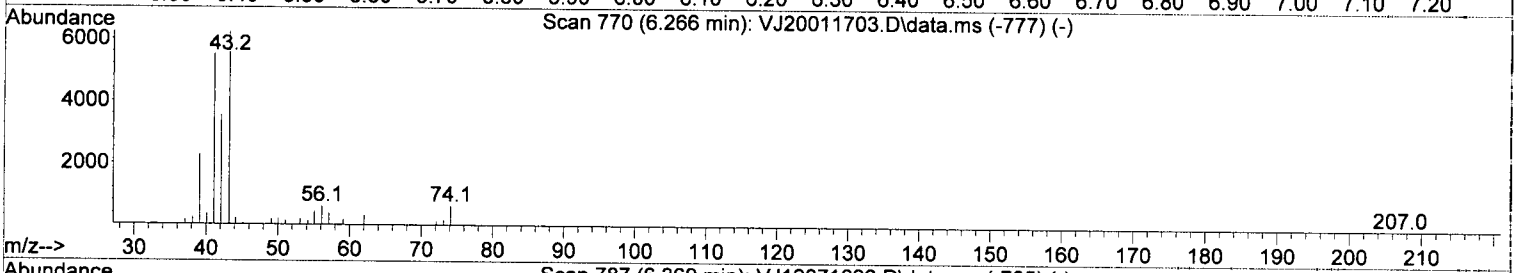
IMA 1/17/20

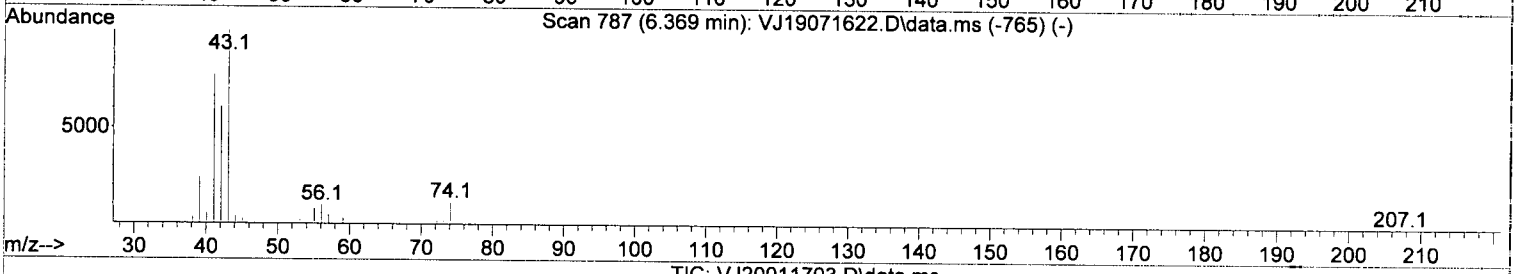
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(36) iso-Butyl Alcohol

6.266min (-0.006) 253.59 ug/L

response 53795

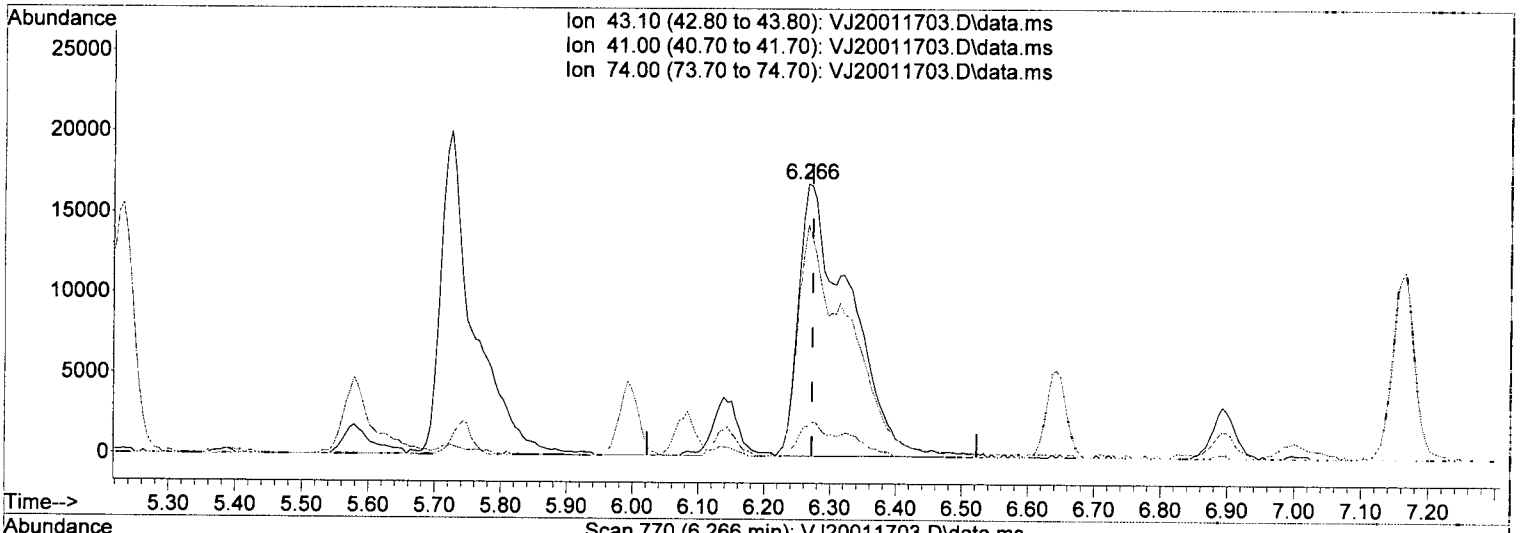
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	84.91
74.00	11.60	11.13
0.00	0.00	0.00

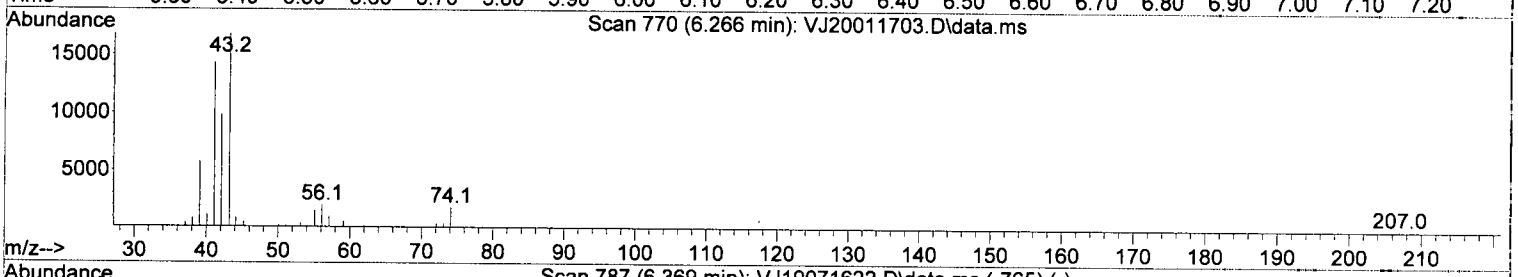
M.I.

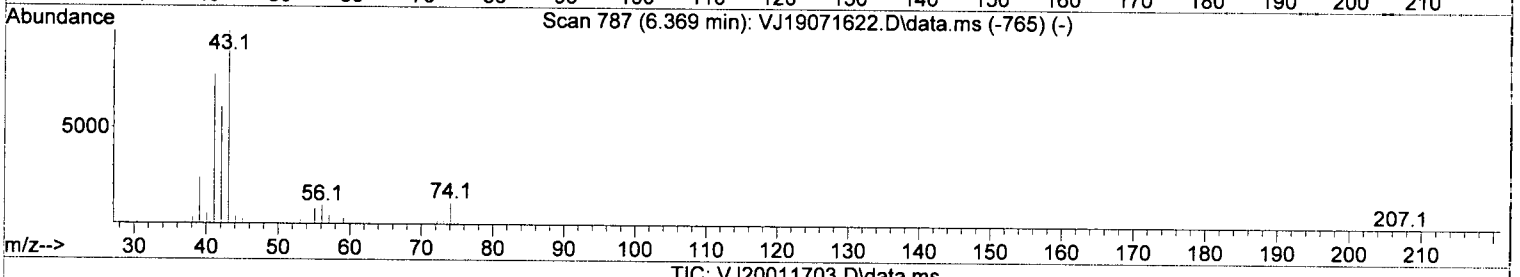
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011703.D\data.ms

(36) iso-Butyl Alcohol

6.266min (-0.006) 422.95 ug/L (m)

response 89721

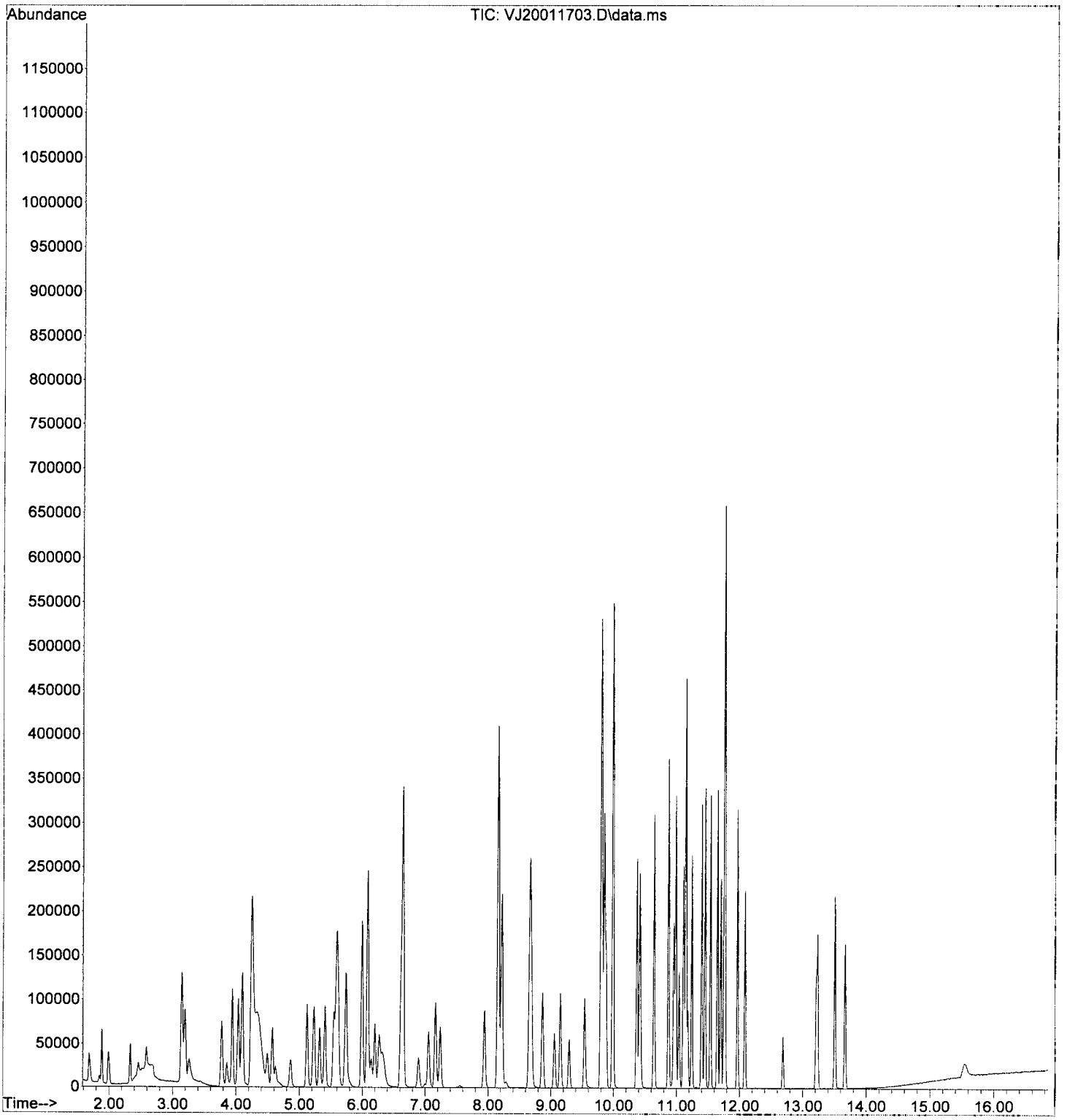
IMA
1/17/20

Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	84.91
74.00	11.60	11.13
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011703.D
Acq On : 17 Jan 2020 10:24 am
Operator : IMA
Sample : 0010530-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 17 12:01:01 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011704.D
Acq On : 17 Jan 2020 10:51 am
Operator : IMA
Sample : 0010530-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 12:02:13 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

IMA
1/17/20

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 (IS)	50.000	50.000	0.0	104	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	47.776	4.4	99	-0.01
3	S	4-Bromofluorobenzene (Sur)	50.000	50.508	-1.0	106	-0.01
4	H	NWTPH-Gx (TPH)	500.000	431.412	13.7	95	0.00
5	H	TPHg (C5-C9)	500.000	408.406	18.3	92	0.00
6	H	TPHg (C6-C10)	500.000	429.533	14.1	93	0.00
7	H	CA-LUFT (C5-C12)	500.000	410.587	17.9	92	0.00
8		Benzene (NR)	-1.000	0.000	0.0	99	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	96	0.00
10		Toluene (NR)	-1.000	0.000	0.0	97	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	100	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	106	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	112	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011704.D
Acq On : 17 Jan 2020 10:51 am
Operator : IMA
Sample : 0010530-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 4 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 12:02:13 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

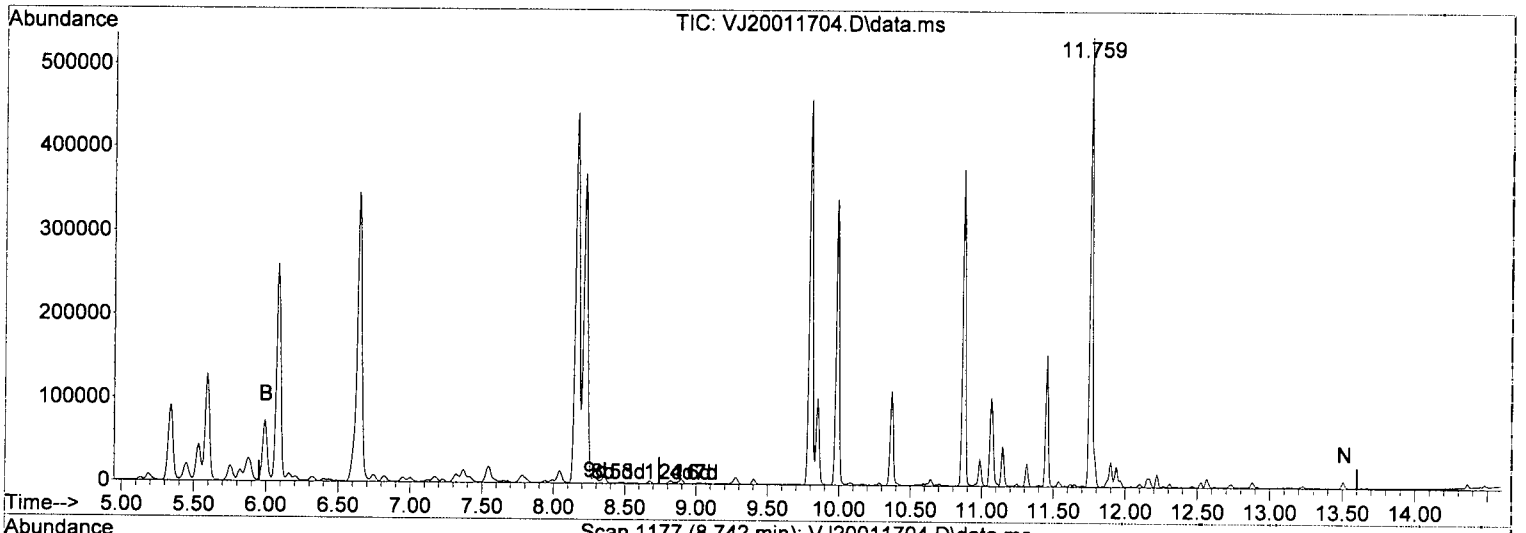
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	200193	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.643	114	308369	47.78	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.871	174	95762	50.51	ug/L	-0.01
9) Toluene-d8 (NR)	8.164	98	343723	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	255334	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	188145	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3122602m	431.41	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4234548m	408.41	ug/L	
6) TPHg (C6-C10)	9.239	TIC	3647439m	429.53	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5000978m	410.59	ug/L	

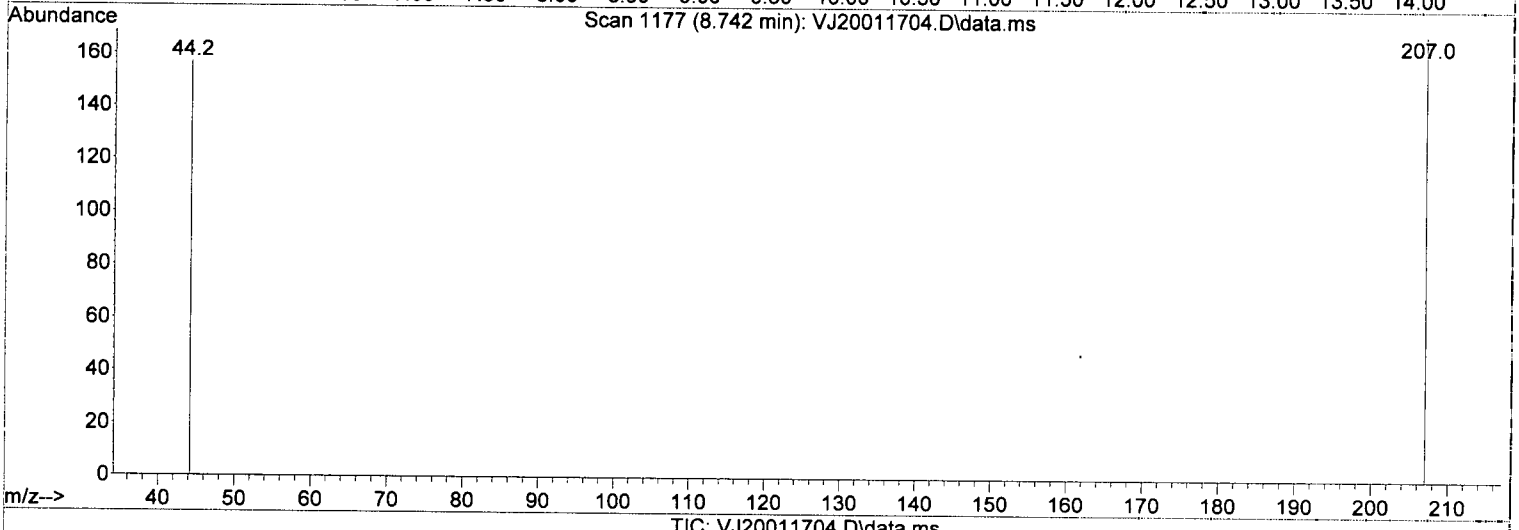
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011704.D
Acq On : 17 Jan 2020 10:51 am
Operator : IMA
Sample : 0010530-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 17 12:02:13 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011704.D\data.ms

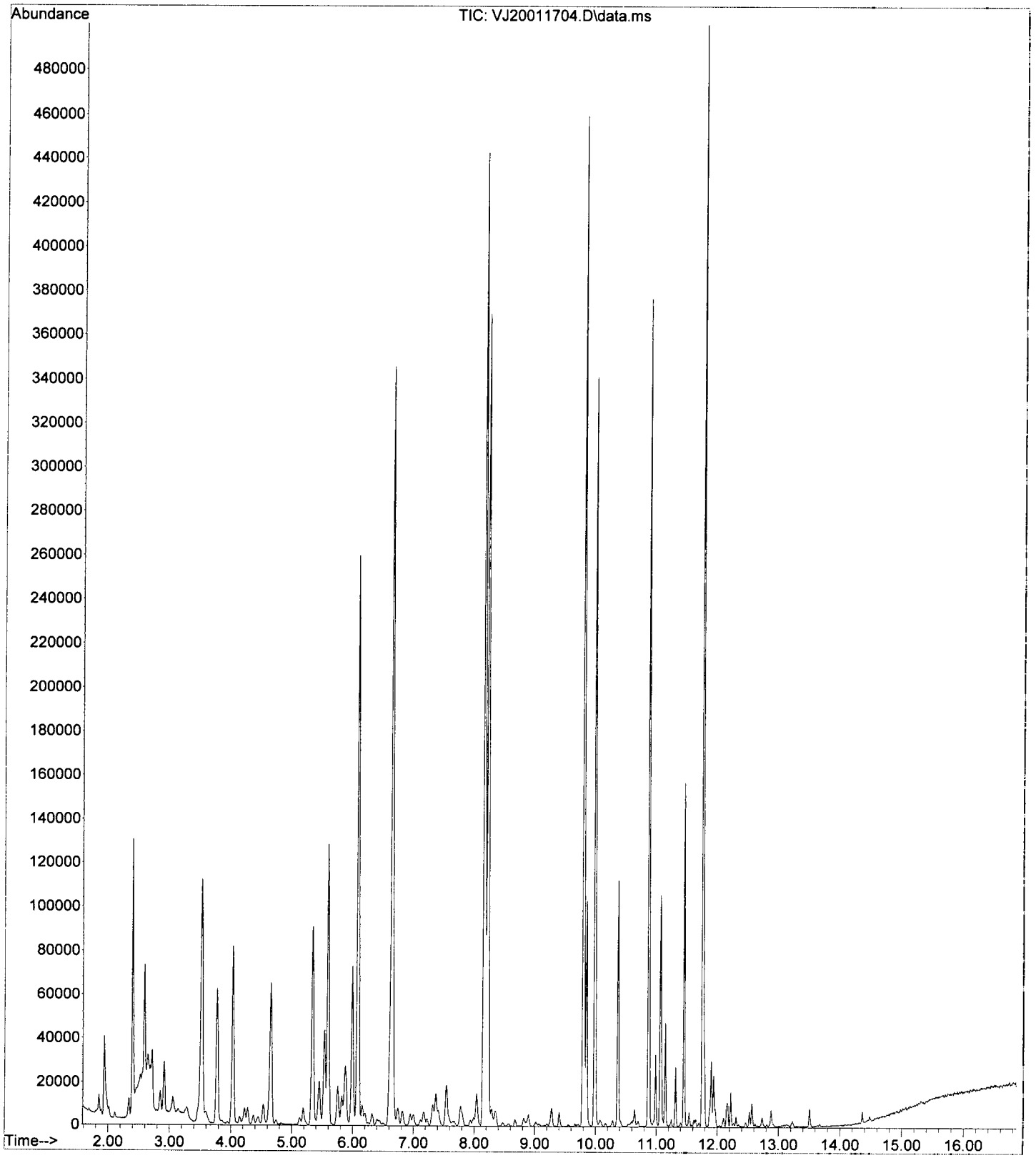
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 431.41 ug/L m

response 3122602

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

File :C:\msdchem\1\data\2020-01\0A17017\VJ20011704.D
Operator : IMA
Acquired : 17 Jan 2020 10:51 am using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010530-BS2
Misc Info : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011705.D
Acq On : 17 Jan 2020 11:18 am
Operator : IMA
Sample : 0010530-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 12:02:37 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	180685	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	281165	48.26	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	85611	50.03	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	318025	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	234186	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	166064	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	78764m	29.77	ug/L	<MDL
5) TPHg (C5-C9)	9.239	TIC	337466m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	321782m	22.99	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	362406m	1.86	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011705.D
Acq On : 17 Jan 2020 11:18 am
Operator : IMA
Sample : 0010530-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 17 12:02:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

IMA
1/17/20

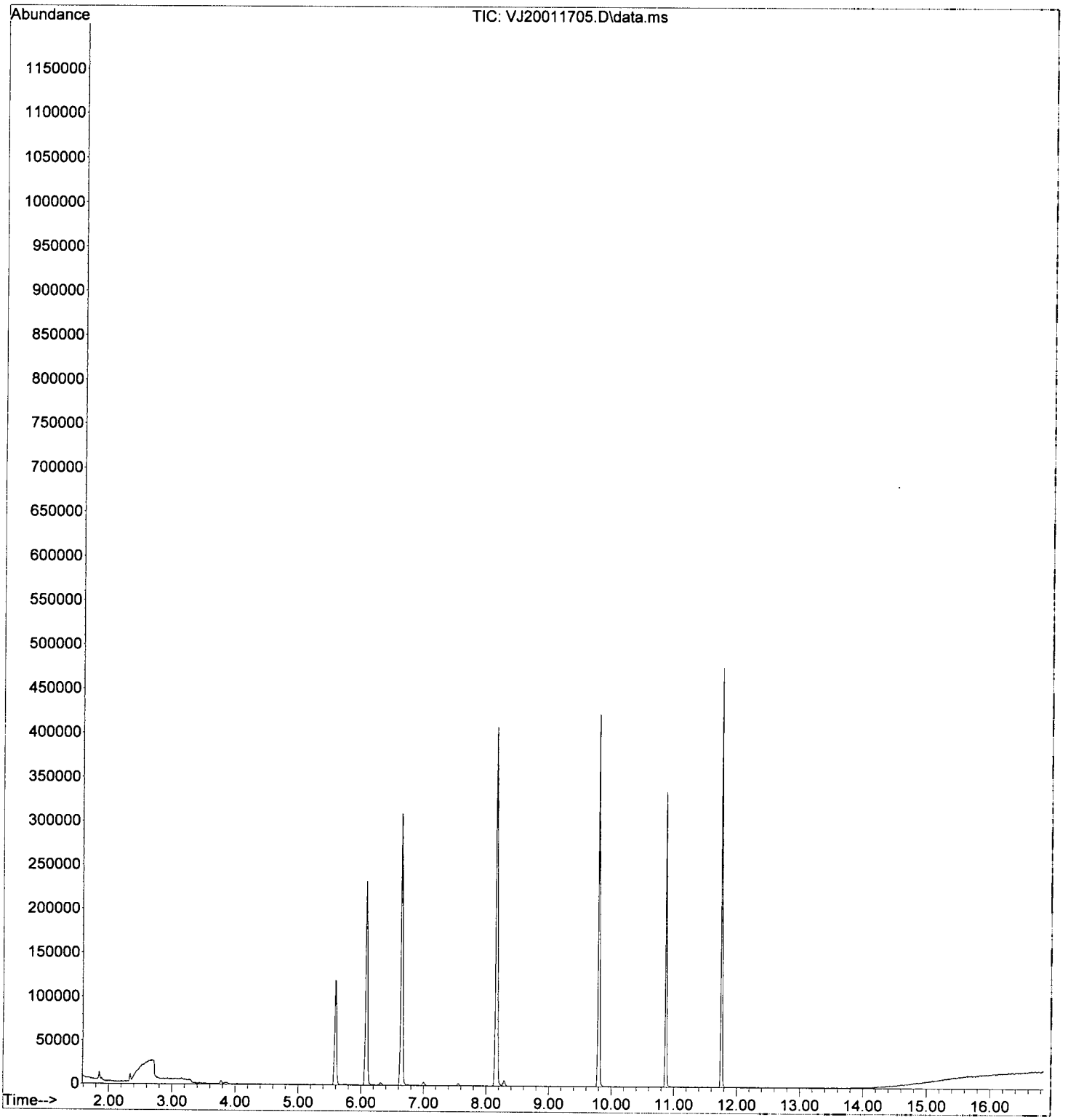
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	94406	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	234186	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	106578	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	80053	52.49	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	281165	51.05	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	317342	48.88	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	85611	52.04	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	1834	0.68	ug/L	<MDL	96
5) Bromomethane	2.342	96	3921	1.03	ug/L		91
6) Chloroethane	2.482	64	175	0.36	ug/L	#	1
8) Ethanol	3.285	45	3060	2.26	ug/L		86
12) Iodomethane	3.291	142	1343	4.08	ug/L		75
13) Methylene Chloride	3.777	84	1632	Below Cal			91
14) Acetone	3.869	43	1397	1.17	ug/L		75
32) 2-Butanone (MEK)	5.736	43	2003	1.07	ug/L		96
36) iso-Butyl Alcohol	6.314	43	1378	6.82	ug/L		82
58) m,p-Xylenes (2)	9.989	91	524	0.08	ug/L		70
84) Naphthalene	13.511	128	144	0.13	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011705.D
Acq On : 17 Jan 2020 11:18 am
Operator : IMA
Sample : 0010530-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 17 12:02:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 15:14:39 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

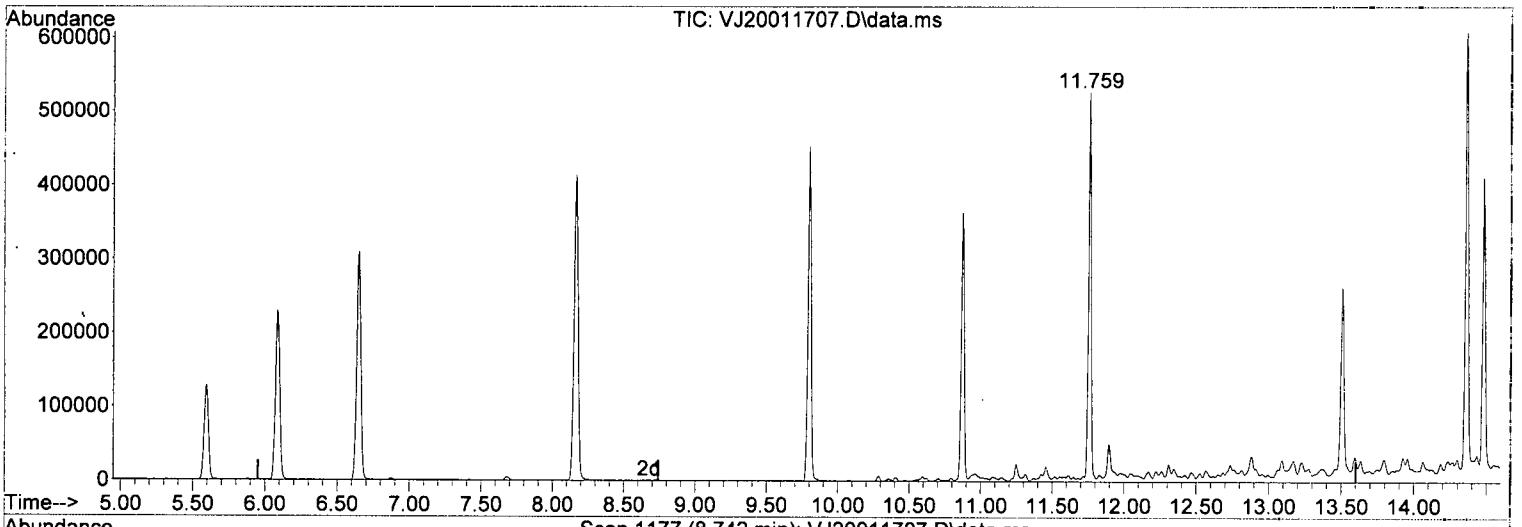
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	178483	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	277749	48.27	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.871	174	93367	55.23	ug/L	-0.01
9) Toluene-d8 (NR)	8.164	98	316485	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	240070	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	183185	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	1237747m	202.16	ug/L	
5) TPHg (C5-C9)	9.239	TIC	367617m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	351156m	27.60	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	845504m	50.49	ug/L	

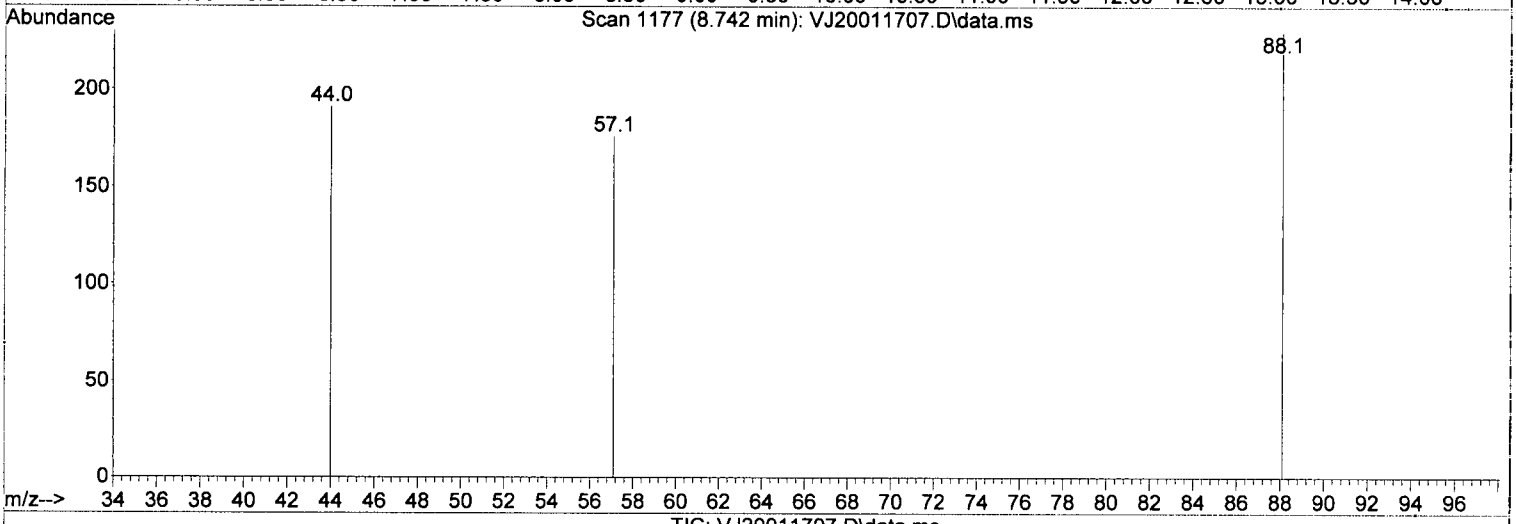
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 15:14:39 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011707.D\data.ms

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

8.739min (0.000) 202.16 ug/L m

response 1237747

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.20#
0.00	0.00	0.78#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

IMA 1/17/20

Quant Time: Jan 17 15:14:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

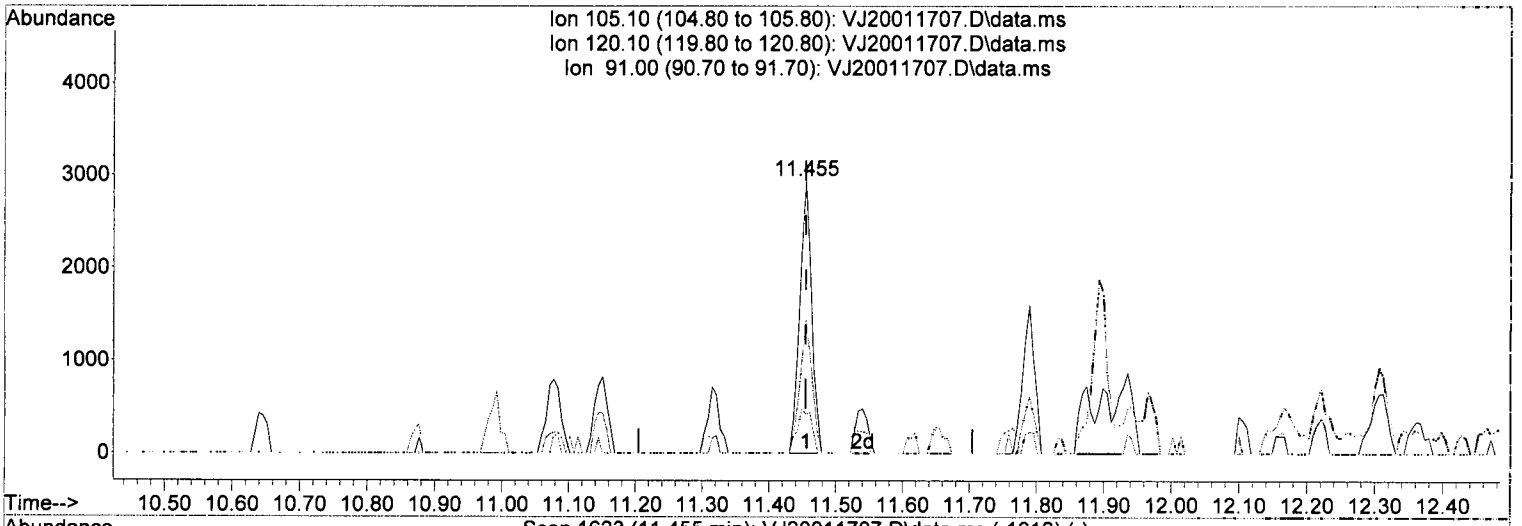
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	92795	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	239801	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	117501	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	85649	57.14	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	276765	51.13	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	316485	47.61	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	93367	51.48	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.891	50	1293	0.49	ug/L	<MDL	93
5) Bromomethane	2.342	96	2640	Below Cal			98
6) Chloroethane	2.451	64	130	0.27	ug/L	#	1
8) Ethanol	3.266	45	694	Below Cal		#	29
12) Iodomethane	3.303	142	745	2.28	ug/L		87
13) Methylene Chloride	3.777	84	1668	Below Cal			91
14) Acetone	3.863	43	2208	1.88	ug/L		93
18) tert-Butanol (TBA)	4.252	59	1022	1.95	ug/L	#	49
36) iso-Butyl Alcohol	6.314	43	134	0.67	ug/L		84
39) tert-Amyl ethyl ether ...	6.880	59	348	0.09	ug/L	#	53
47) Tetrachloroethene (PCE)	8.681	166	387	0.18	ug/L	#	66
56) Ethylbenzene	9.855	91	1287	0.14	ug/L		90
60) Styrene	10.415	104	233	0.26	ug/L		55
67) 1,1,2,2-Tetrachloroethane	11.047	83	1168	0.45	ug/L	#	24
69) 1,3,5-Trimethylbenzene	11.151	105	1113	0.16	ug/L		94
73) tert-Butylbenzene	11.449	91	732	0.19	ug/L	#	35
74) 1,2,4-Trimethylbenzene	11.455	105	3639	0.53	ug/L		97
76) 4-Isopropyltoluene	11.650	119	1373	0.20	ug/L	<MDL	90
79) n-Butylbenzene	11.966	91	715	0.11	ug/L		88
84) Naphthalene	13.505	128	183246	21.55	ug/L		98

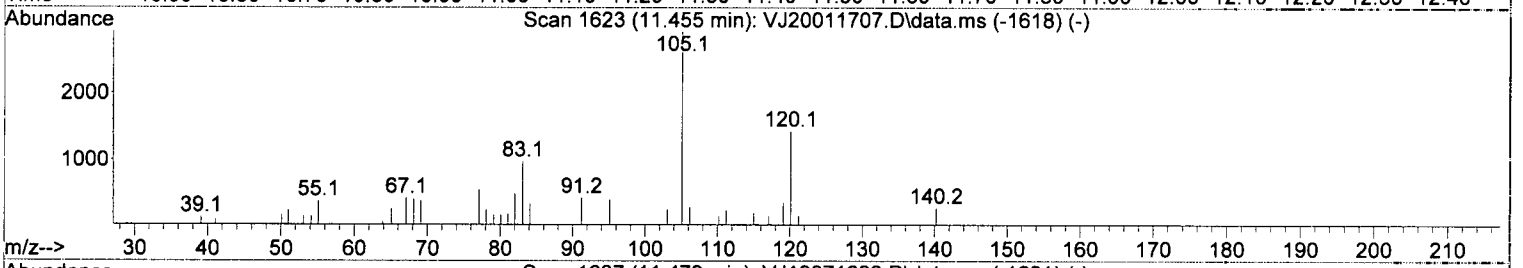
(#) = qualifier out of range (m) = manual integration (+) = signals summed

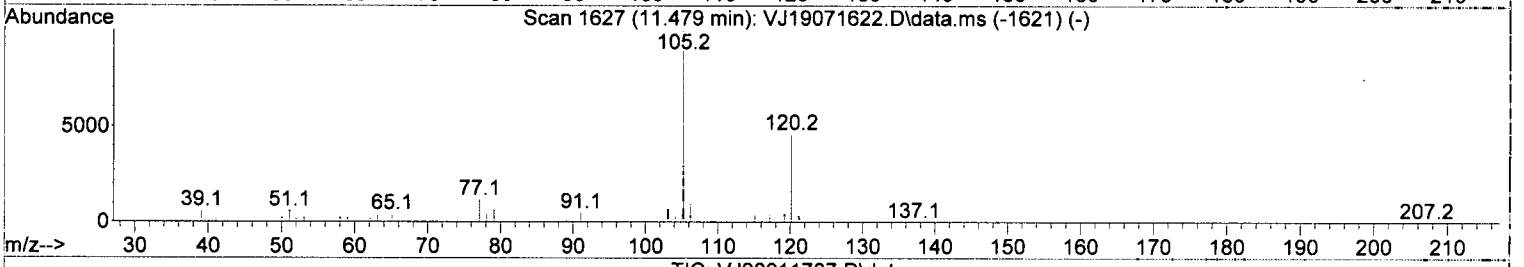
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 15:14:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011707.D\data.ms

(74) 1,2,4-Trimethylbenzene

11.455min (+ 0.001) 0.53 ug/L

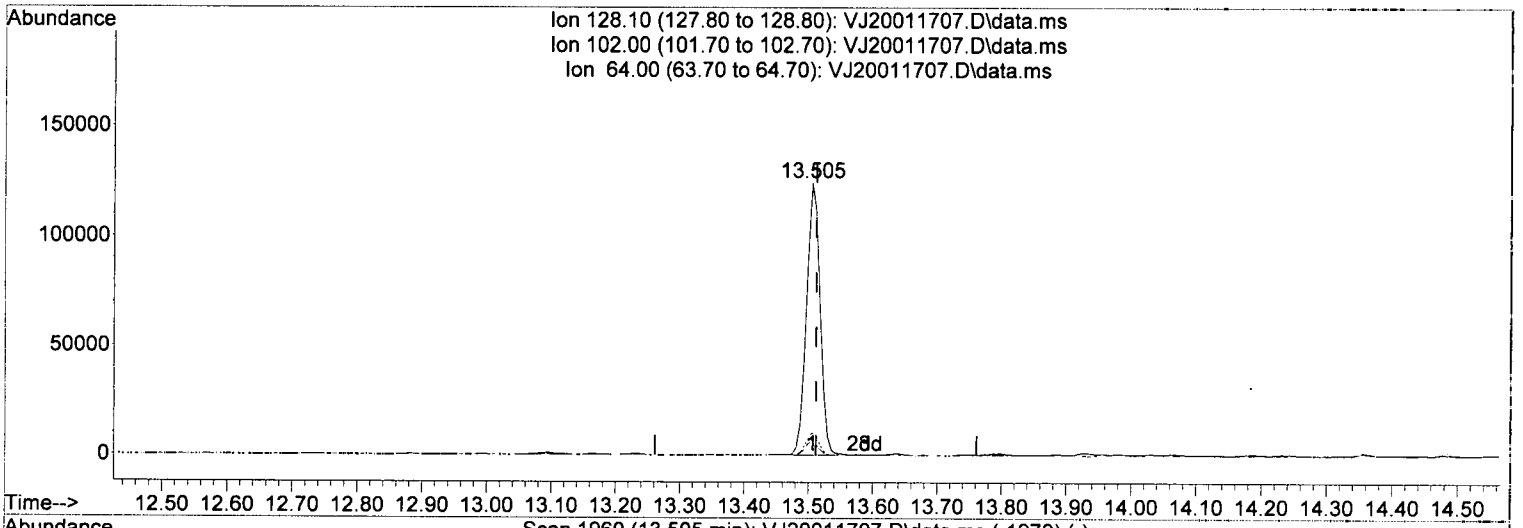
response 3639

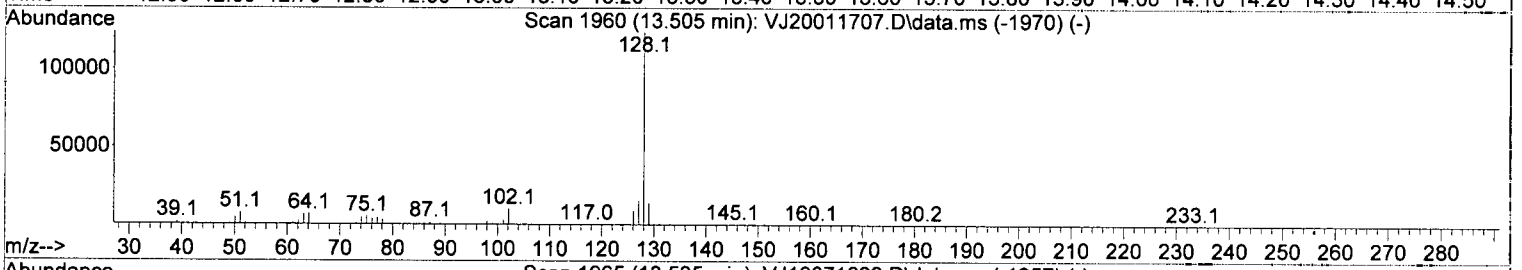
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	48.60	48.98
91.00	9.80	14.57
0.00	0.00	0.00

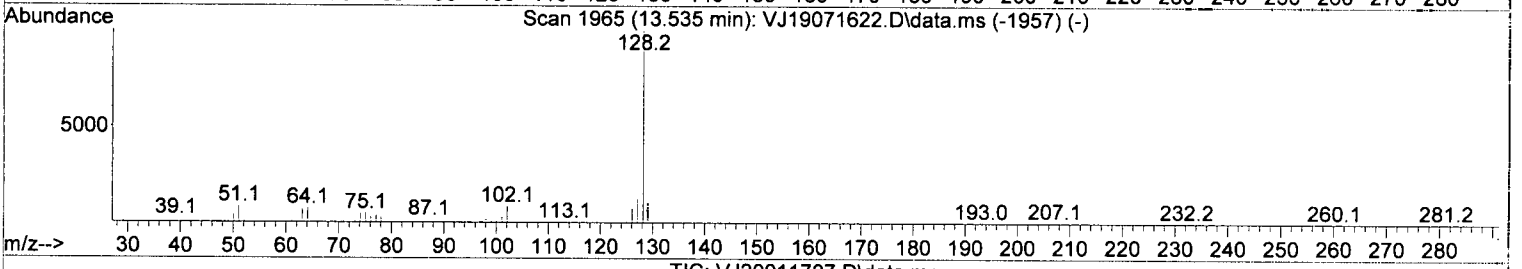
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 15:14:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011707.D\data.ms

(84) Naphthalene

13.505min (-0.006) 21.55 ug/L

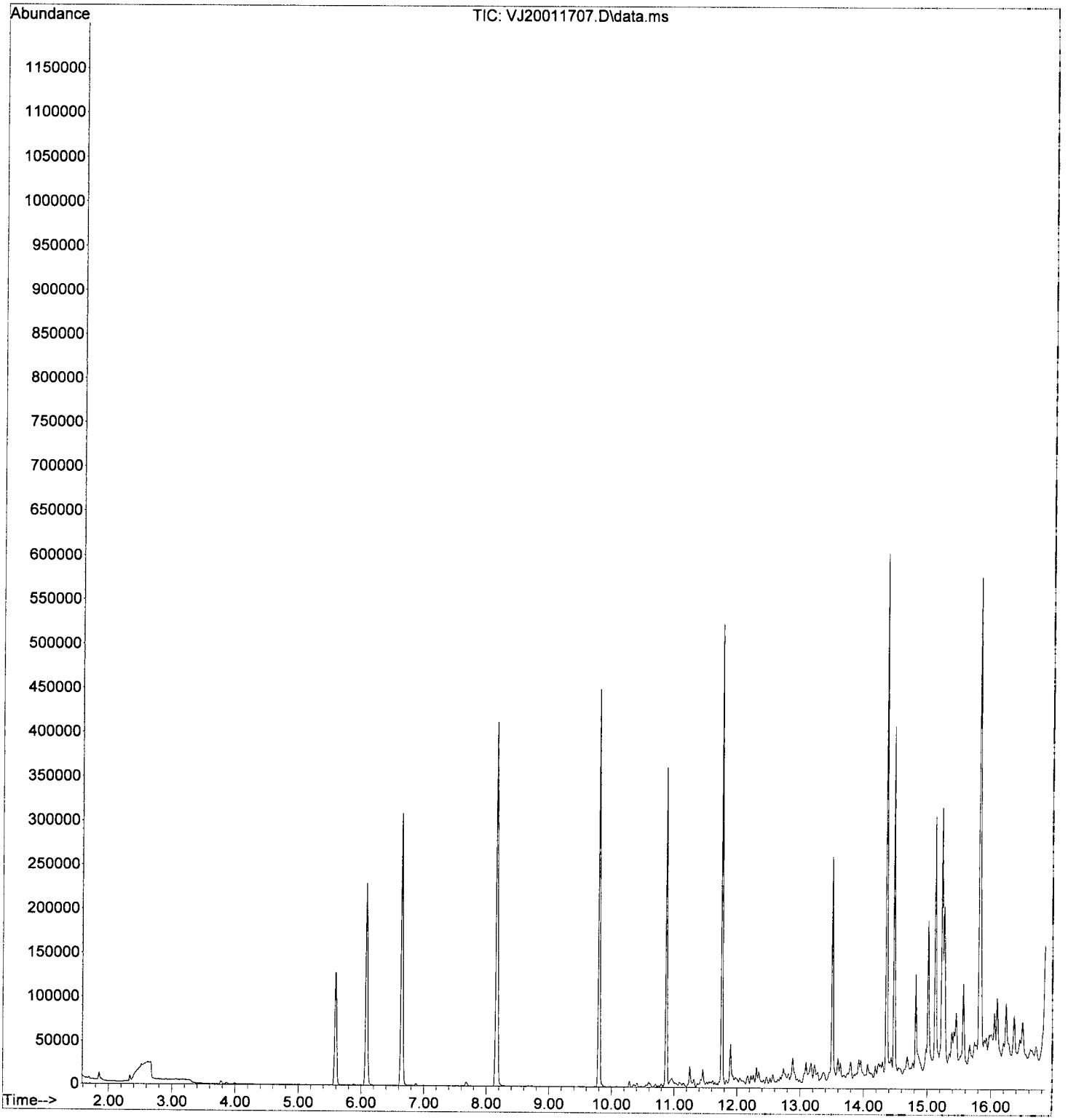
response 183246

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	8.16
64.00	6.30	5.35
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011707.D
Acq On : 17 Jan 2020 12:12 pm
Operator : IMA
Sample : A0A0539-01
Misc : 50X 5g/5mL 1000uL/50mL GX/8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 15:14:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 15:15:05 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

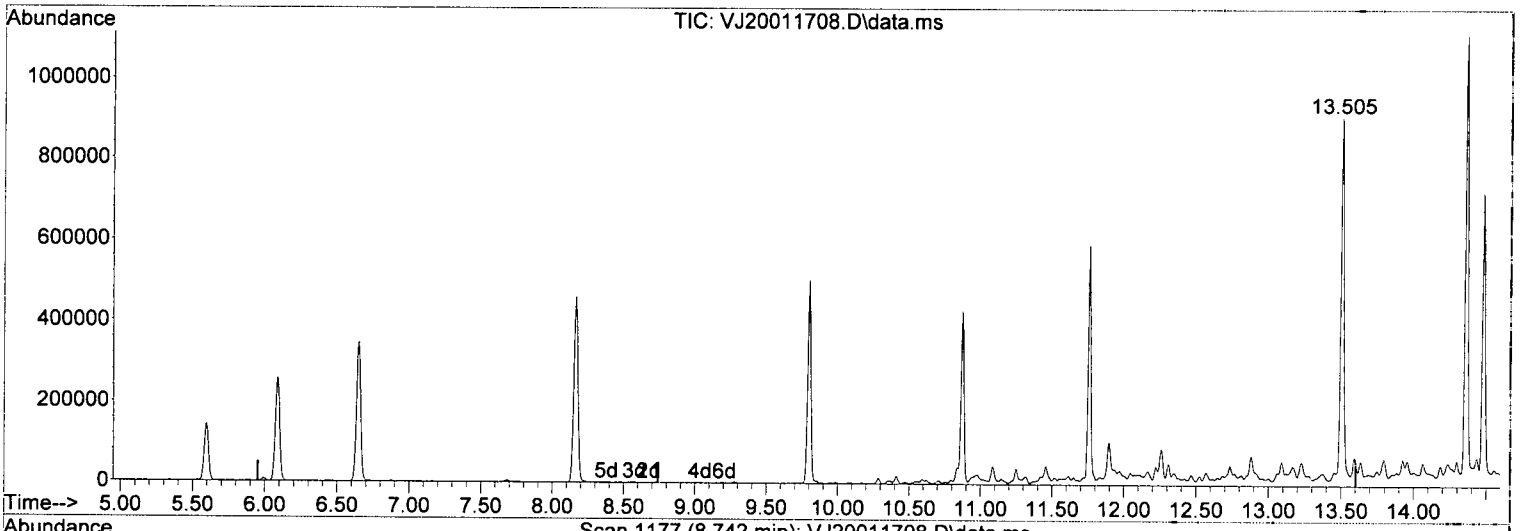
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	203825	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	318788	48.51	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	109791	56.88	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	355948	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	274951	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	211251	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3350897m	453.66	ug/L	
5) TPHg (C5-C9)	9.239	TIC	590870m	15.40	ug/L	
6) TPHg (C6-C10)	9.239	TIC	564891m	47.48	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	1807230m	123.98	ug/L	

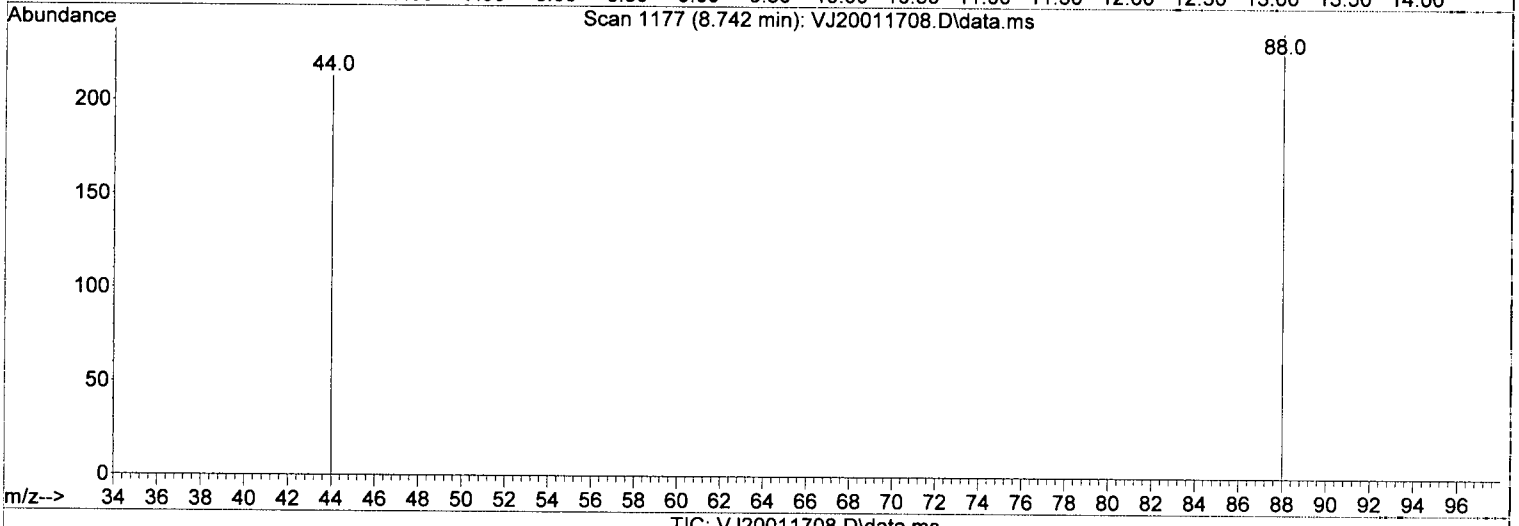
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:05 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011708.D\data.ms

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

8.739min (0.000) 453.66 ug/L m

response 3350897

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.60#
0.00	0.00	0.99#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	104610	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	274951	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	134877	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	94313	55.81	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	318236	52.15	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	355240	46.61	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	109791	52.73	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	1018	0.34	ug/L	<MDL	93
5) Bromomethane	2.342	96	2383	Below Cal			94
6) Chloroethane	2.470	64	56	0.10	ug/L	#	1
8) Ethanol	3.260	45	220	Below Cal		#	29
10) Carbon Disulfide	3.163	76	503	0.11	ug/L	#	33
12) Iodomethane	3.297	142	699	1.89	ug/L	#	47
13) Methylene Chloride	3.777	84	2047	Below Cal			96
14) Acetone	3.869	43	4695	3.55	ug/L		99
18) tert-Butanol (TBA)	4.246	59	3045	5.14	ug/L	#	94
33) Benzene	5.998	78	898	0.09	ug/L		56
36) iso-Butyl Alcohol	6.314	43	145	0.65	ug/L		73
46) Toluene	8.225	91	1532	0.14	ug/L		92
47) Tetrachloroethene (PCE)	8.669	166	408	0.16	ug/L	#	71
56) Ethylbenzene	9.849	91	3498	0.32	ug/L		98
58) m,p-Xylenes (2)	9.983	91	1849	0.24	ug/L	<MDL	87
59) o-Xylene	10.366	91	1311	0.18	ug/L		79
60) Styrene	10.415	104	4905	1.04	ug/L		96
62) Isopropylbenzene	10.646	105	1341	0.14	ug/L	<MDL	90
66) n-Propylbenzene	10.987	91	2754	0.23	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.047	83	1142	0.38	ug/L	#	24
69) 1,3,5-Trimethylbenzene	11.145	105	2285	0.29	ug/L		91
74) 1,2,4-Trimethylbenzene	11.455	105	9604	1.22	ug/L		96
75) sec-Butylbenzene	11.540	105	1051	0.11	ug/L	<MDL	61
76) 4-Isopropyltoluene	11.650	119	2952	0.38	ug/L		88
79) n-Butylbenzene	11.966	91	1367	0.19	ug/L		85
83) 1,2,4-Trichlorobenzene	13.244	180	296	0.12	ug/L	#	1
84) Naphthalene	13.505	128	647459	64.36	ug/L		98
85) 1,2,3-Trichlorobenzene	13.657	180	422	0.16	ug/L	#<MDL	12

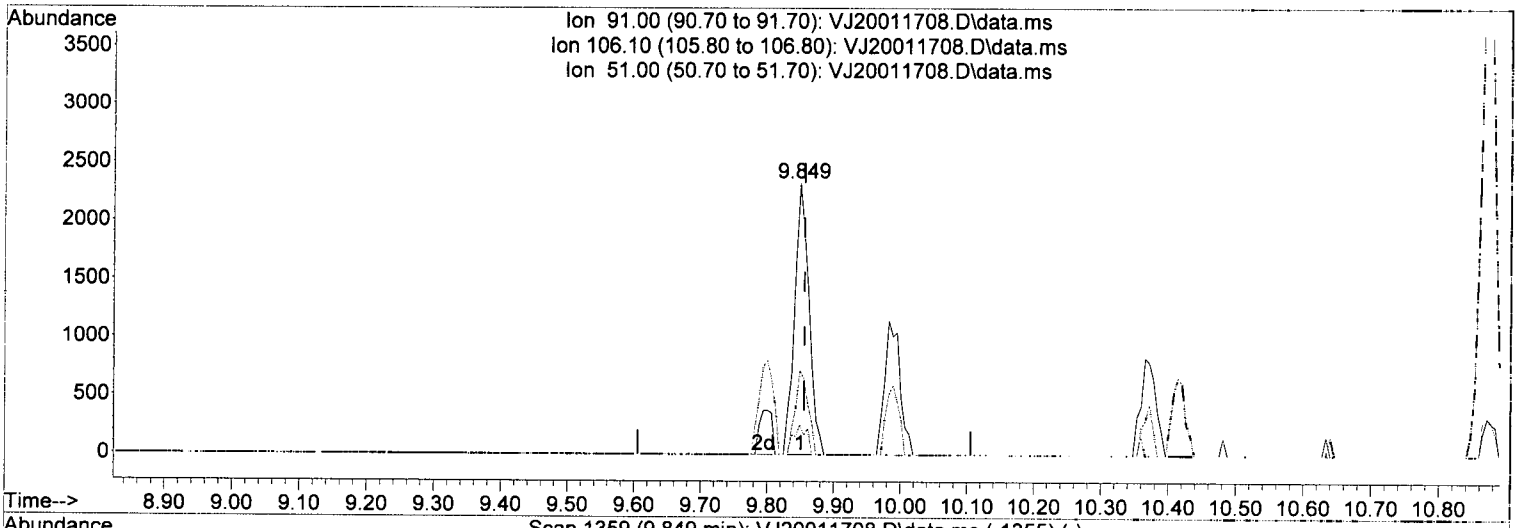
↑MDL=RL

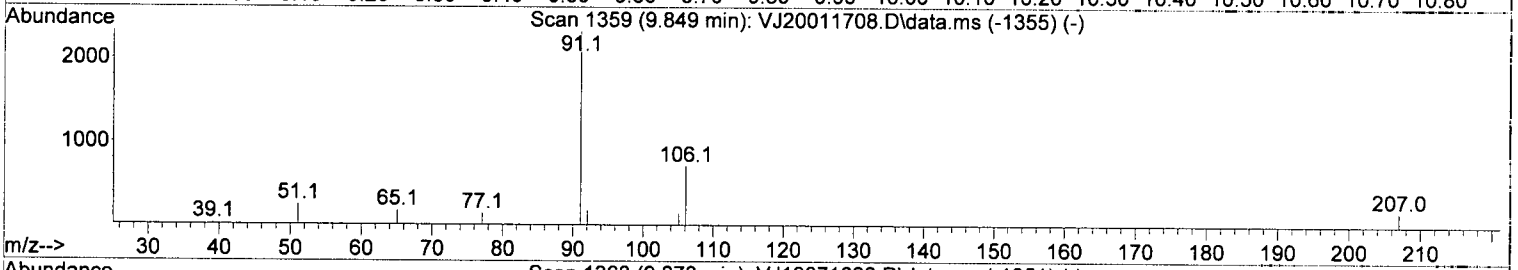
(#) = qualifier out of range (m) = manual integration (+) = signals summed

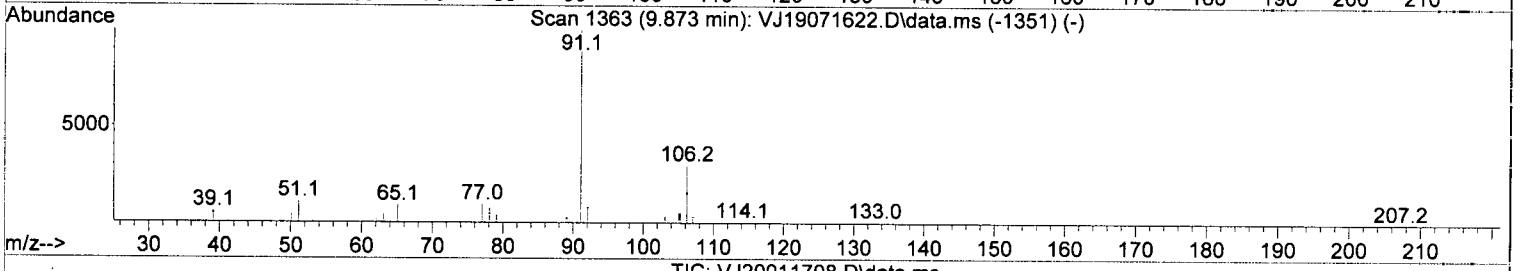
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011708.D\data.ms

(56) Ethylbenzene (C)

9.849min (-0.006) 0.32 ug/L

response 3498

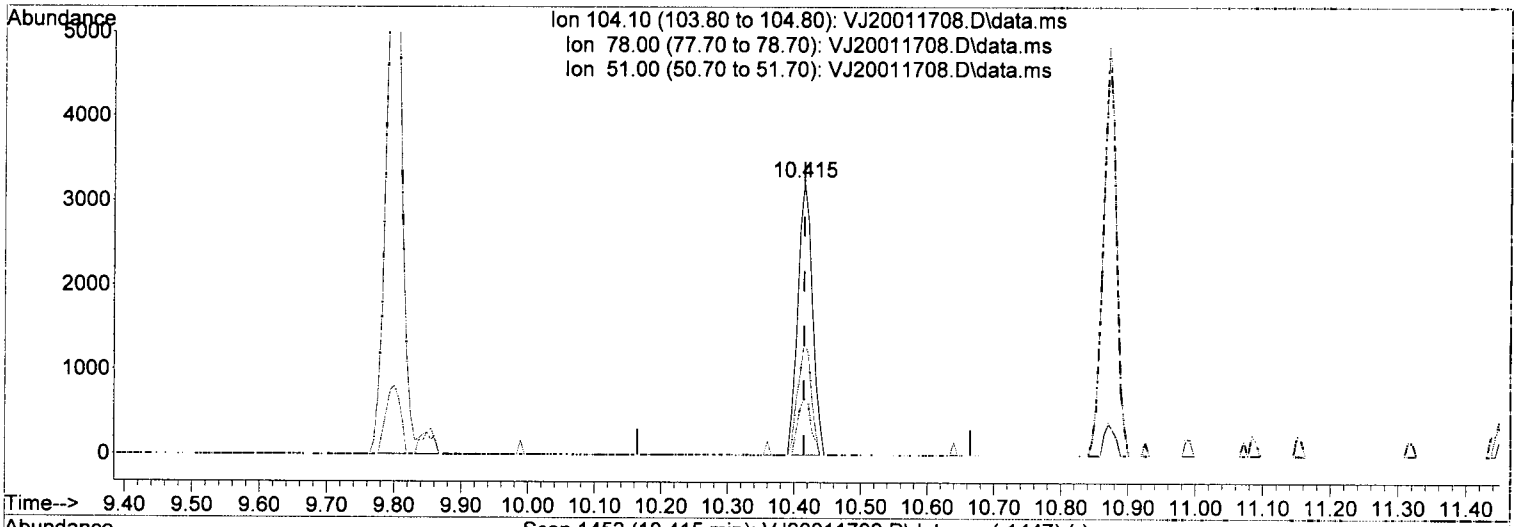
↑MDL=RL

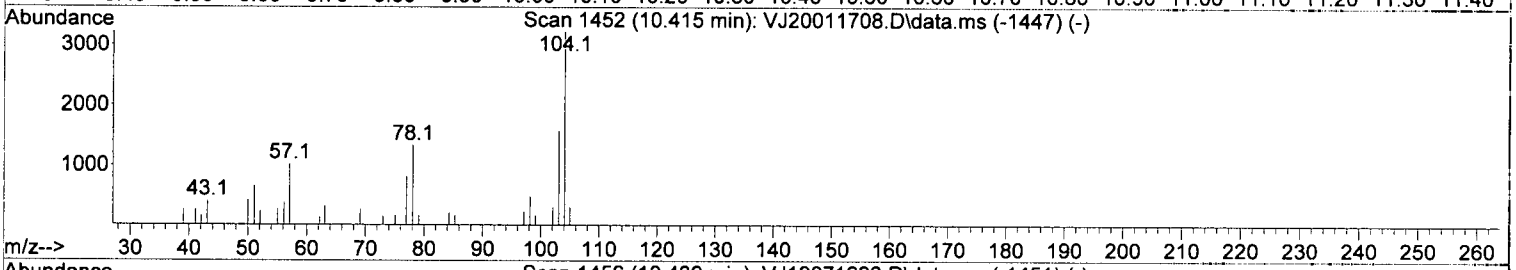
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	31.80	31.00
51.00	9.80	11.08
0.00	0.00	0.00

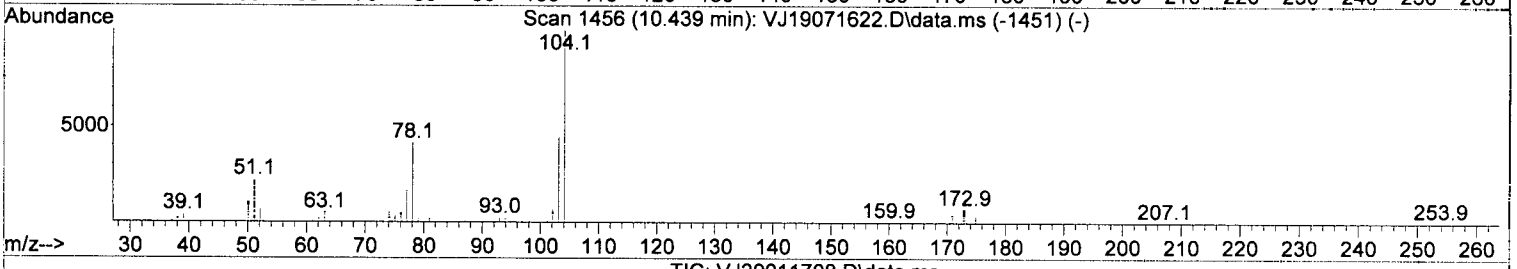
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011708.D\data.ms

(60) Styrene

10.415min (+ 0.001) 1.04 ug/L

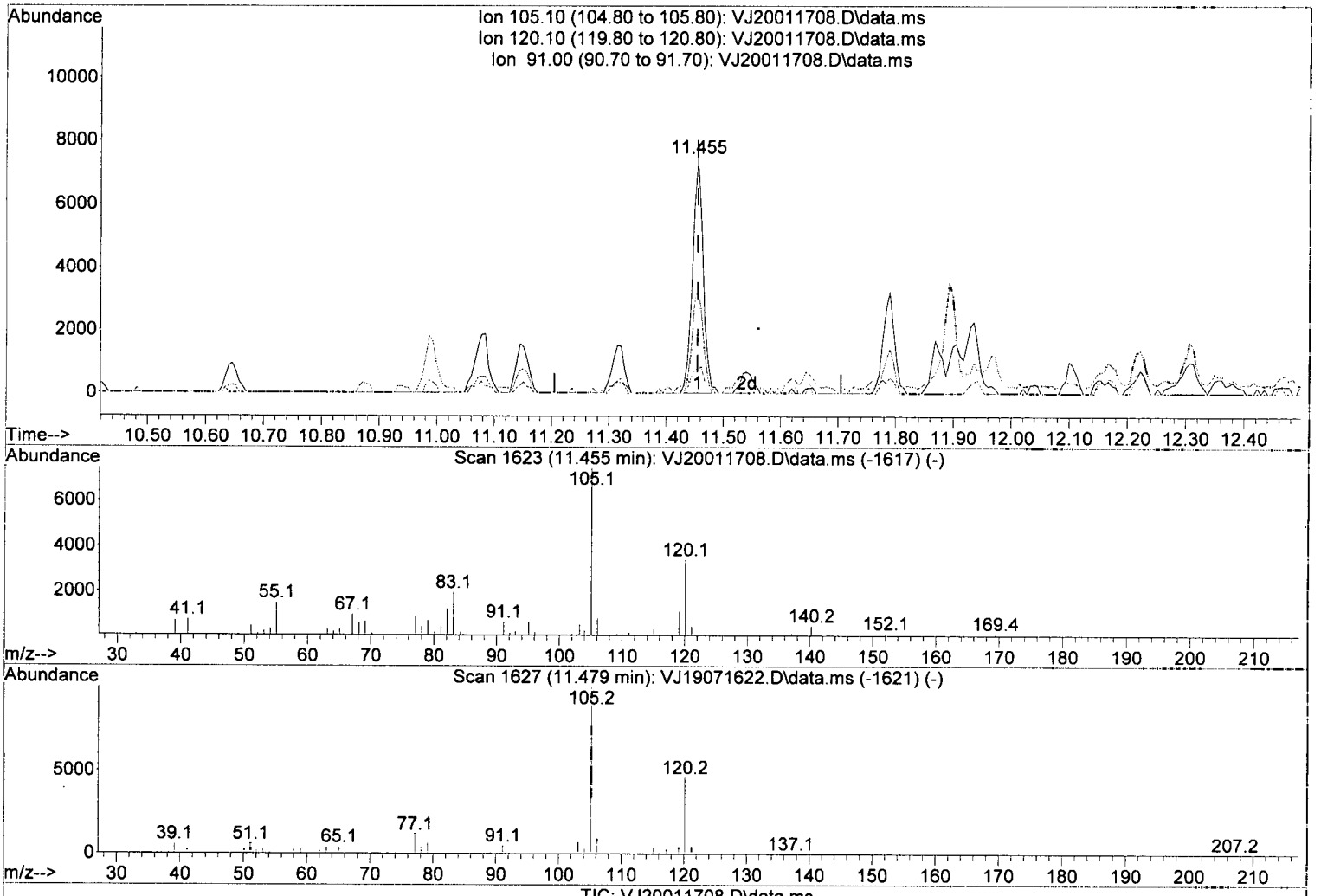
response 4905

Ion	Exp%	Act%
104.10	100.00	100.00
78.00	42.20	41.40
51.00	24.70	20.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20011708.D\data.ms

(74) 1,2,4-Trimethylbenzene

11.455min (+ 0.001) 1.22 ug/L

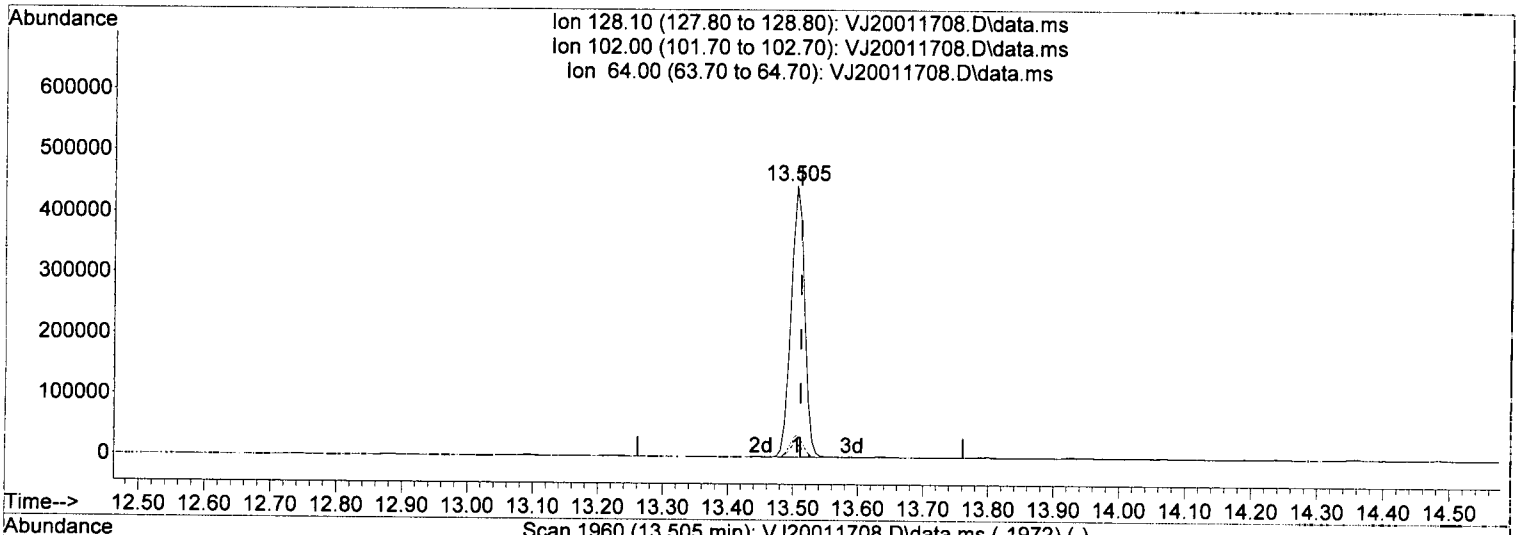
response 9604

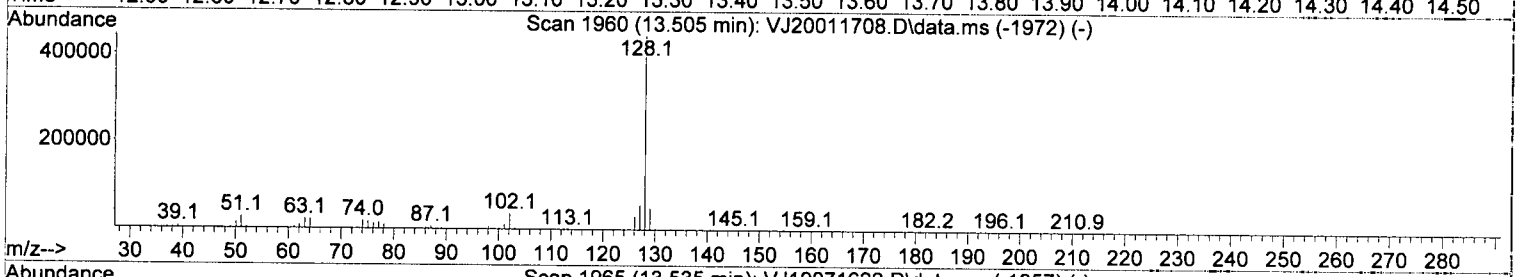
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	48.60	45.66
91.00	9.80	10.99
0.00	0.00	0.00

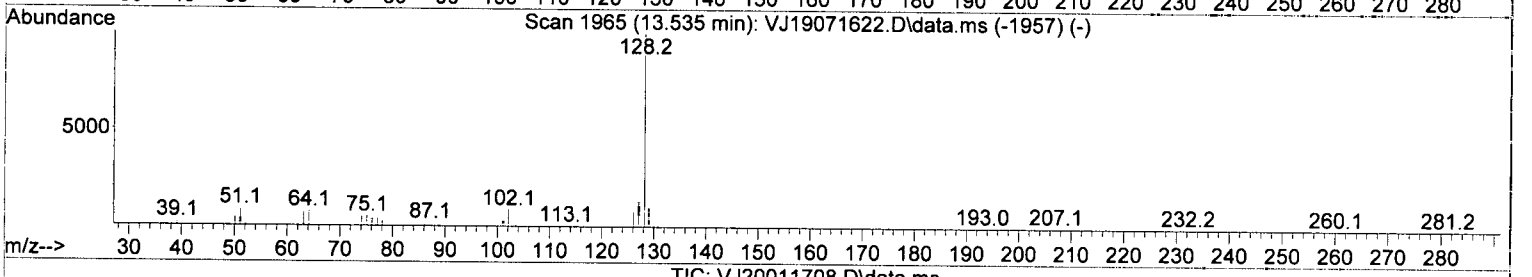
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011708.D\data.ms

(84) Naphthalene

13.505min (-0.006) 64.36 ug/L

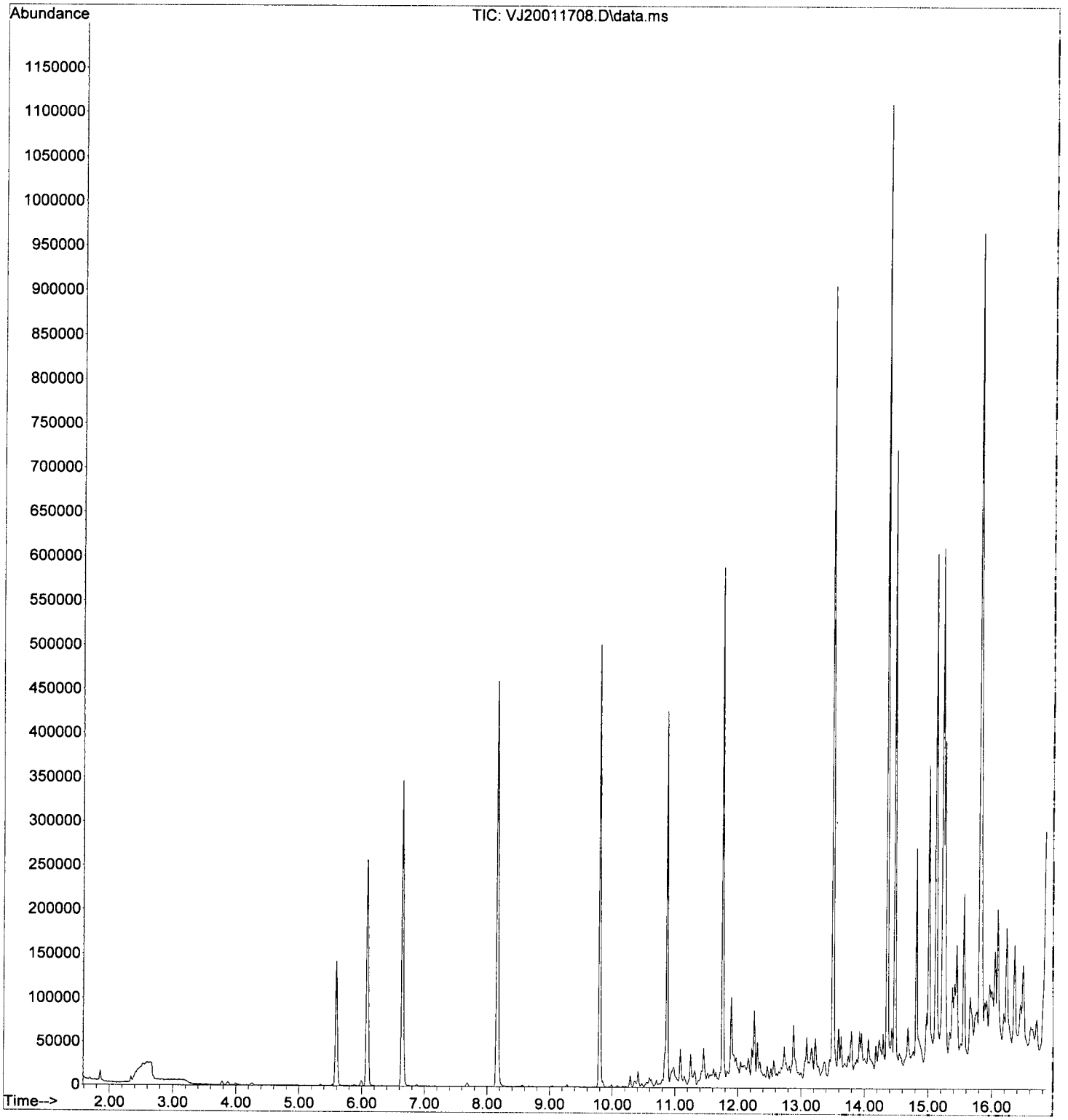
response 647459

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	8.15
64.00	6.30	5.05
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011708.D
Acq On : 17 Jan 2020 12:39 pm
Operator : IMA
Sample : 0010530-DUP1
Misc : 50X 5g/5mL 1000uL/50mL (A0A0539-01)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 15:15:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 17 15:25:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

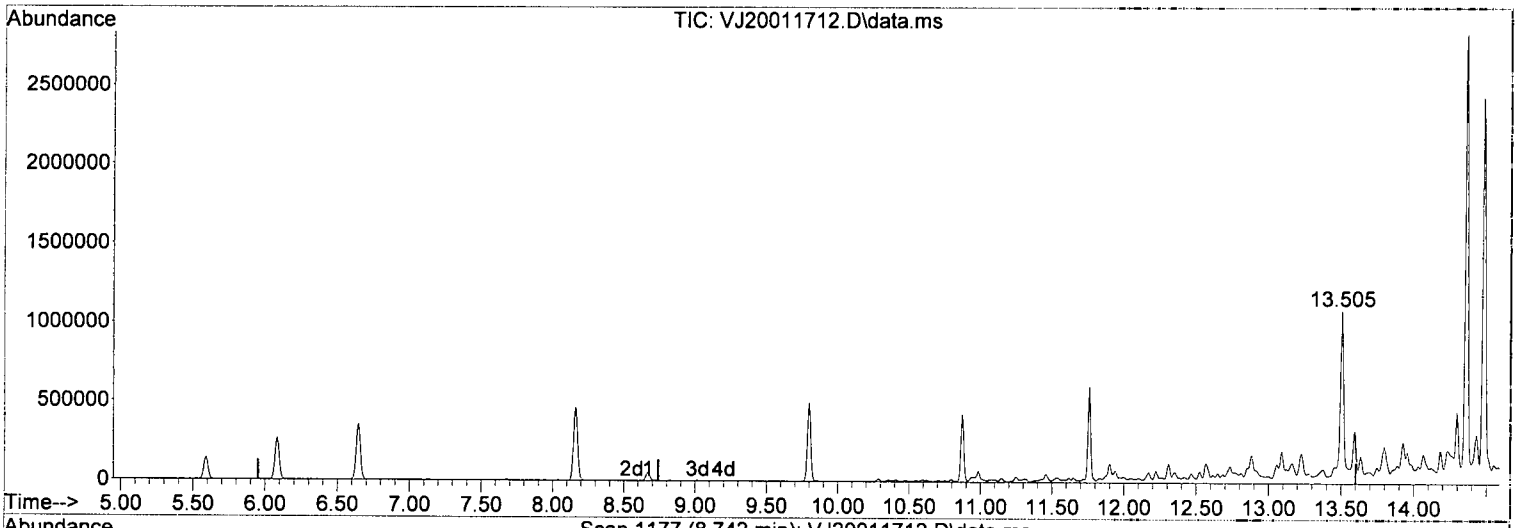
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	208609	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.643	114	327172	48.64	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.871	174	111804	56.59	ug/L	-0.01
9) Toluene-d8 (NR)	8.164	98	367785	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	283382	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	217986	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	5214952m	679.46	ug/L	
5) TPHg (C5-C9)	9.239	TIC	690733m	24.27	ug/L	
6) TPHg (C6-C10)	9.239	TIC	669073m	58.26	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	2396864m	170.66	ug/L	

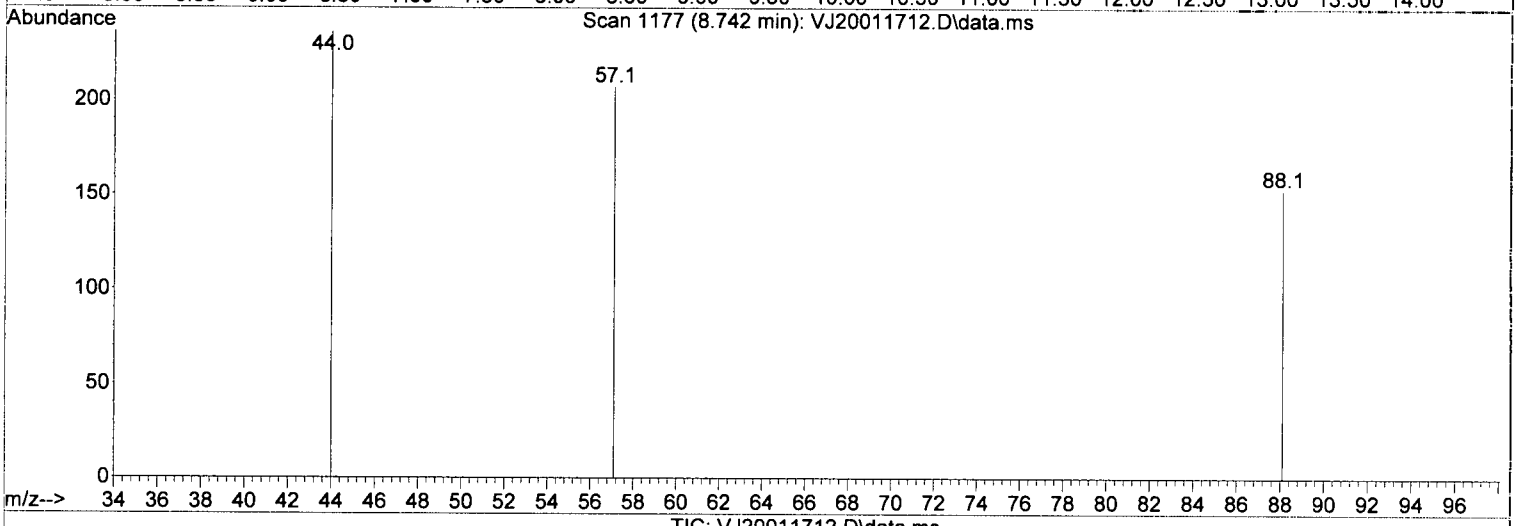
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:25:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011712.D\data.ms

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

8.739min (0.000) 679.46 ug/L m

response 5214952

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.13#
0.00	0.00	0.72#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

IMA
1/17/20

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

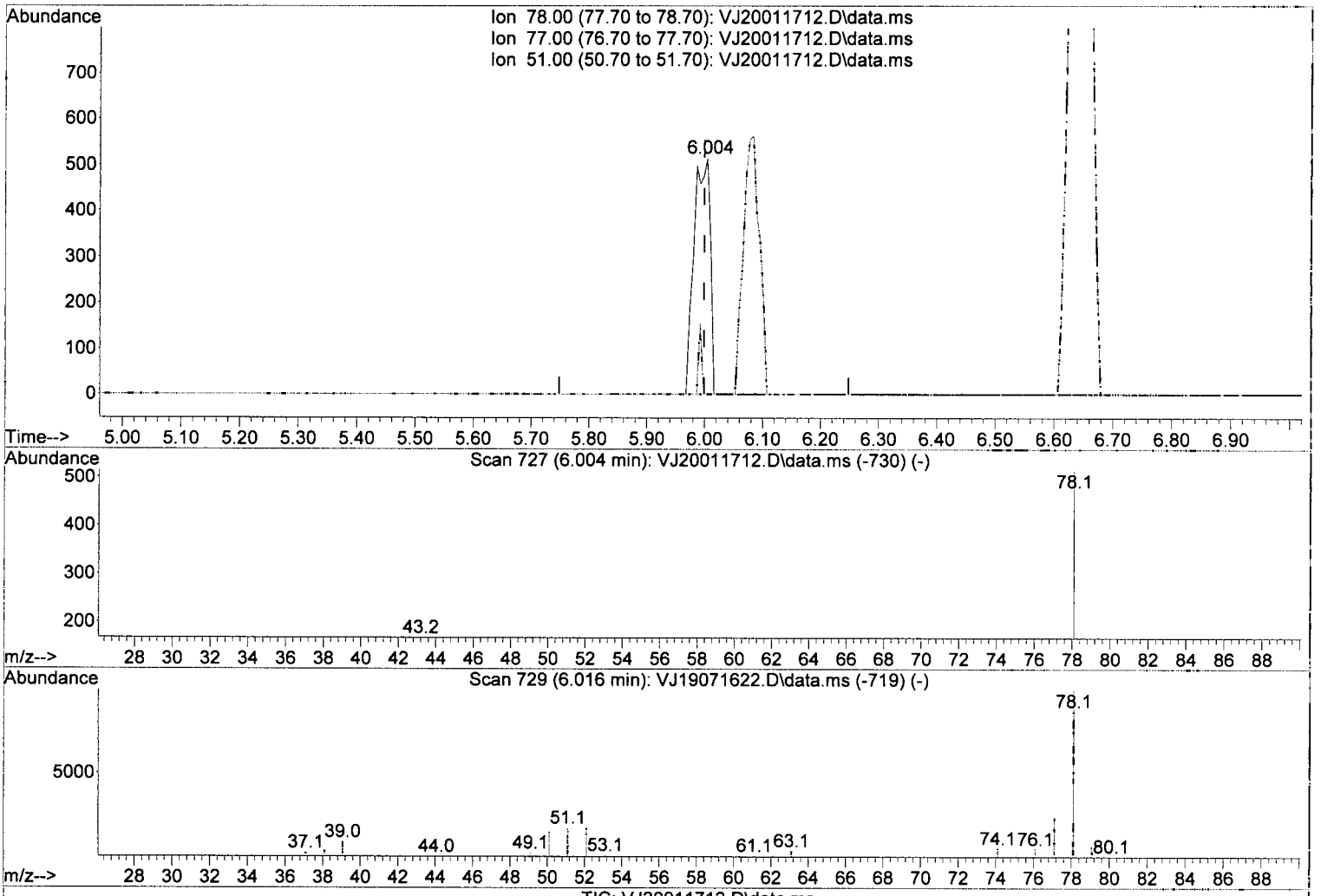
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	104693	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	283382	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	138740	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	95643	56.55	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	326684	53.49	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	367785	46.82	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	111804	52.20	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.885	50	1783	0.59	ug/L	<MDL	91
5) Bromomethane	2.329	96	3447	0.19	ug/L		93
6) Chloroethane	2.457	64	57	0.10	ug/L	#	26
8) Ethanol	3.266	45	175	Below Cal		#	29
10) Carbon Disulfide	3.145	76	566	0.12	ug/L	#	26
12) Iodomethane	3.291	142	1084	2.96	ug/L		80
13) Methylene Chloride	3.765	84	2061	Below Cal			91
14) Acetone	3.863	43	3086	2.33	ug/L		100
18) tert-Butanol (TBA)	4.264	59	1547	2.61	ug/L	#	80
23) c-1,2-Dichloroethene	5.116	61	303	0.10	ug/L	#	65
33) Benzene	6.004	78	998	0.10	ug/L		56
36) iso-Butyl Alcohol	6.314	43	204	0.91	ug/L	<MDL	74
38) Trichloroethene (TCE)	6.618	130	2354	1.04	ug/L		88
39) tert-Amyl ethyl ether ...	6.874	59	380	0.09	ug/L	#<MDL	49
47) Tetrachloroethene (PCE)	8.669	166	19338	7.51	ug/L		97
48) 4-Methyl-2-Pentanone (...	8.675	43	430	0.13	ug/L	#<MDL	43
56) Ethylbenzene	9.849	91	2163	0.19	ug/L		90
58) m,p-Xylenes (2)	9.989	91	826	0.10	ug/L		92
59) o-Xylene	10.372	91	639	0.09	ug/L	#	35
60) Styrene	10.421	104	932	0.37	ug/L		68
62) Isopropylbenzene	10.646	105	1153	0.12	ug/L		78
66) n-Propylbenzene	10.993	91	1860	0.15	ug/L		92
67) 1,1,2,2-Tetrachloroethane	~~11.041~~	~~83~~	~~2629~~	~~0.86 ug/L~~		~~#~~	~~24~~ QDEL
69) 1,3,5-Trimethylbenzene	11.151	105	6388	0.78	ug/L		94
72) 4-Chlorotoluene	11.248	91	598	0.09	ug/L	#<MDL	46
73) tert-Butylbenzene	11.406	91	955	0.21	ug/L	#	44
74) 1,2,4-Trimethylbenzene	11.455	105	7194	0.89	ug/L		93
75) sec-Butylbenzene	11.540	105	10176	1.04	ug/L		98
76) 4-Isopropyltoluene	11.650	119	8575	1.07	ug/L		93 (MQL)
79) n-Butylbenzene	11.966	91	1989	0.27	ug/L	<MDL	89
83) 1,2,4-Trichlorobenzene	13.237	180	449	0.17	ug/L	#	1
84) Naphthalene	13.505	128	729717	70.25	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	627	0.23	ug/L	#<MDL	38

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20011712.D\data.ms

(33) Benzene

6.004min (+ 0.006) 0.10 ug/L

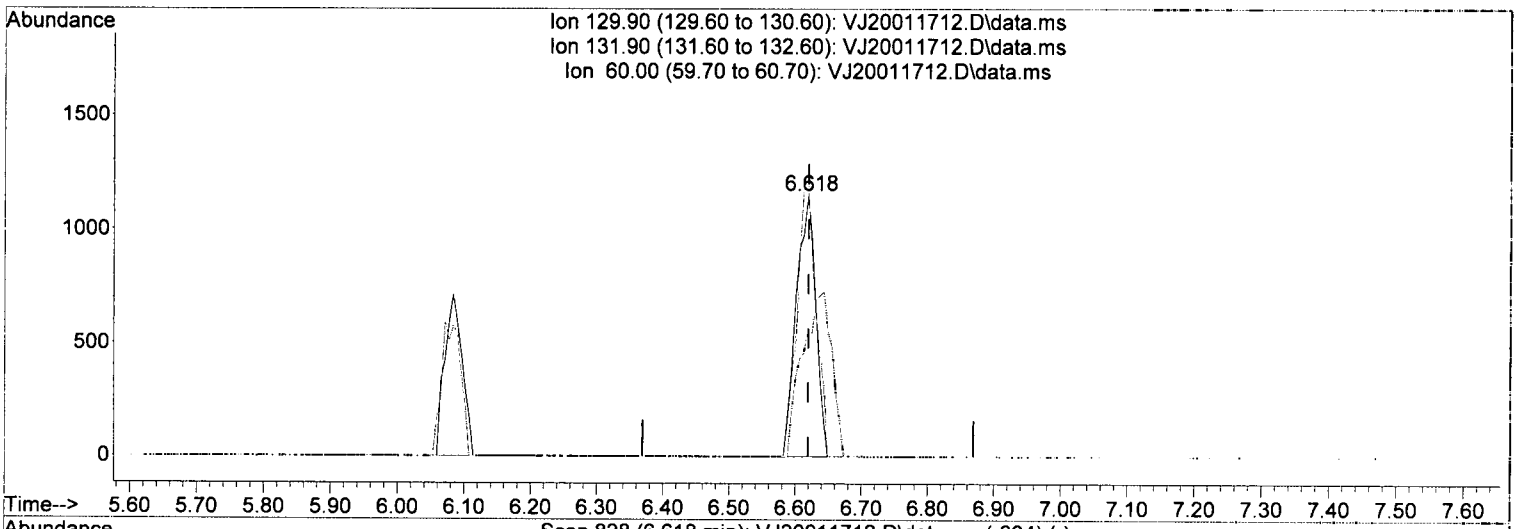
response 998

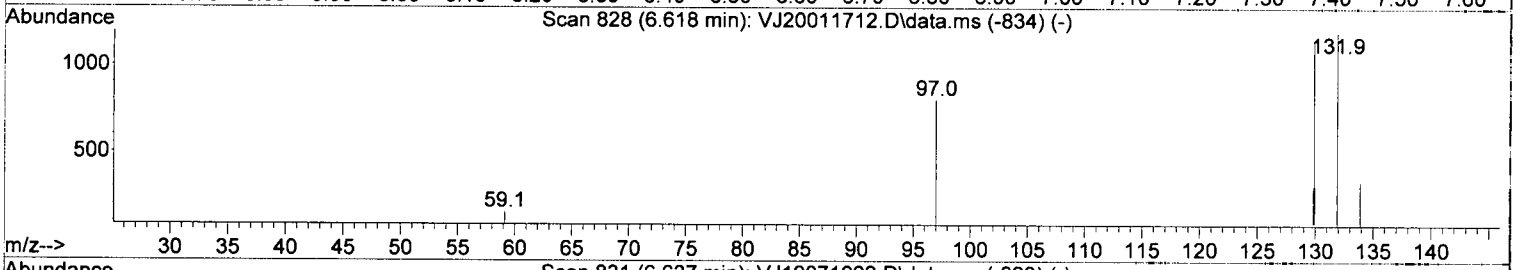
Ion	Exp%	Act%
78.00	100.00	100.00
77.00	23.60	0.00
51.00	16.20	0.00
0.00	0.00	0.00

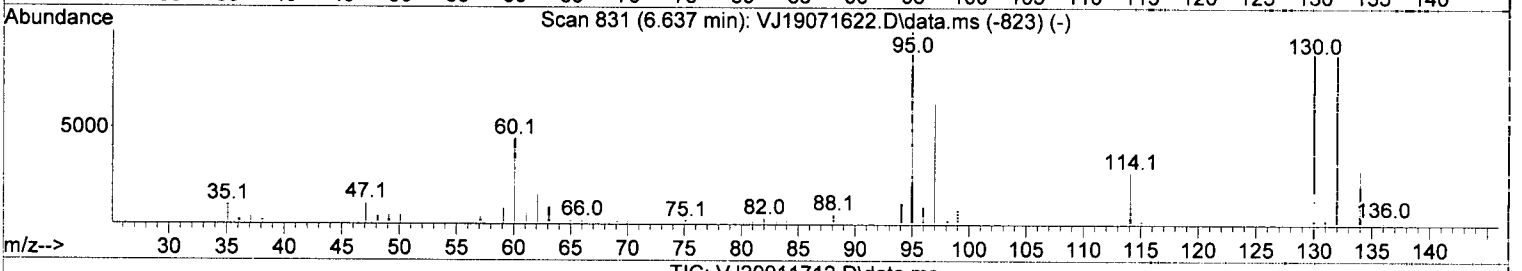
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(38) Trichloroethene (TCE)

6.618min (-0.000) 1.04 ug/L

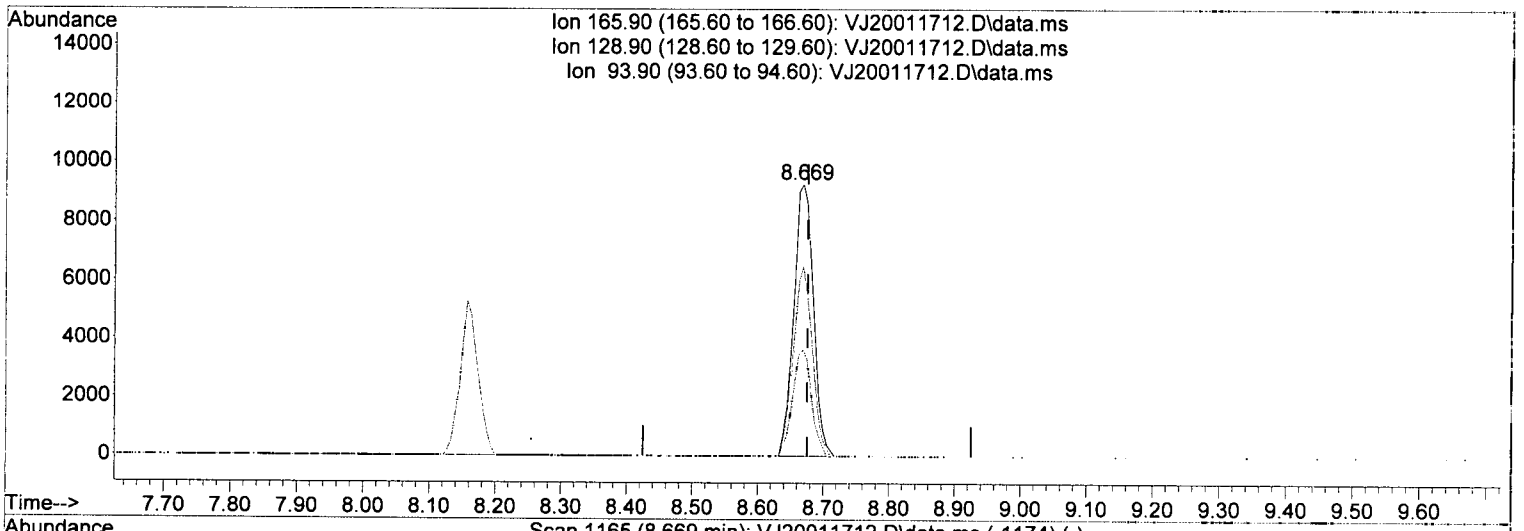
response 2354

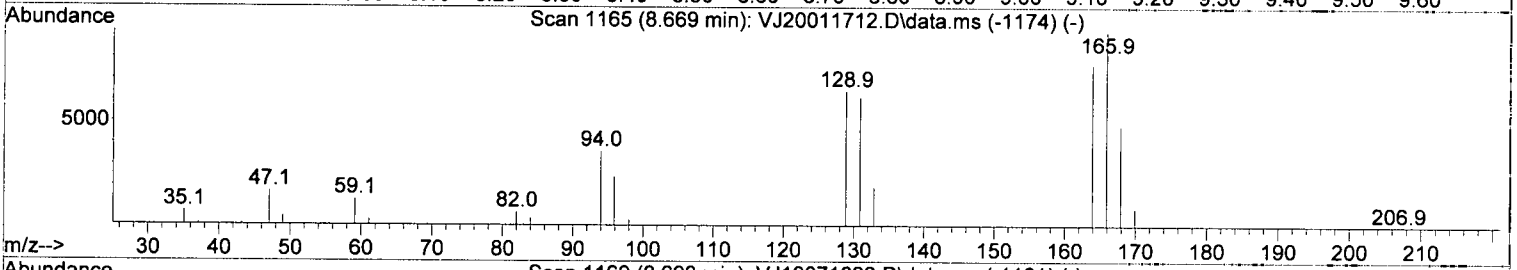
Ion	Exp%	Act%
129.90	100.00	100.00
131.90	94.60	104.08
60.00	38.70	49.52
0.00	0.00	0.00

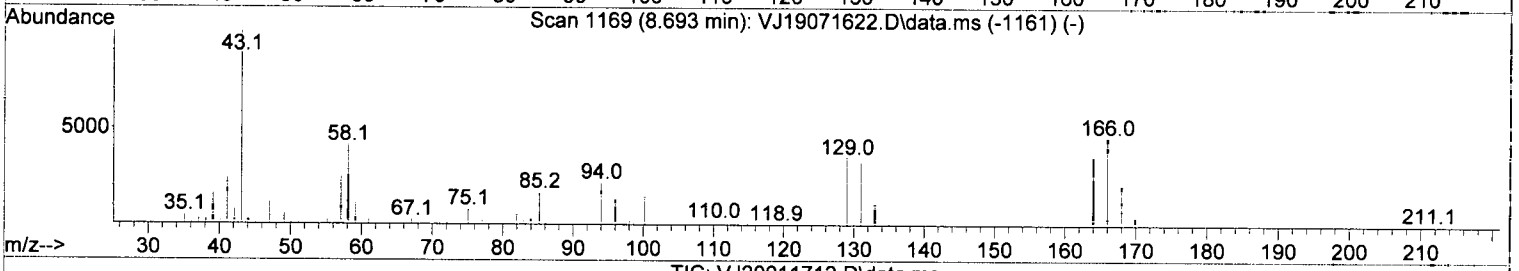
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(47) Tetrachloroethene (PCE)

8.669min (-0.006) 7.51 ug/L

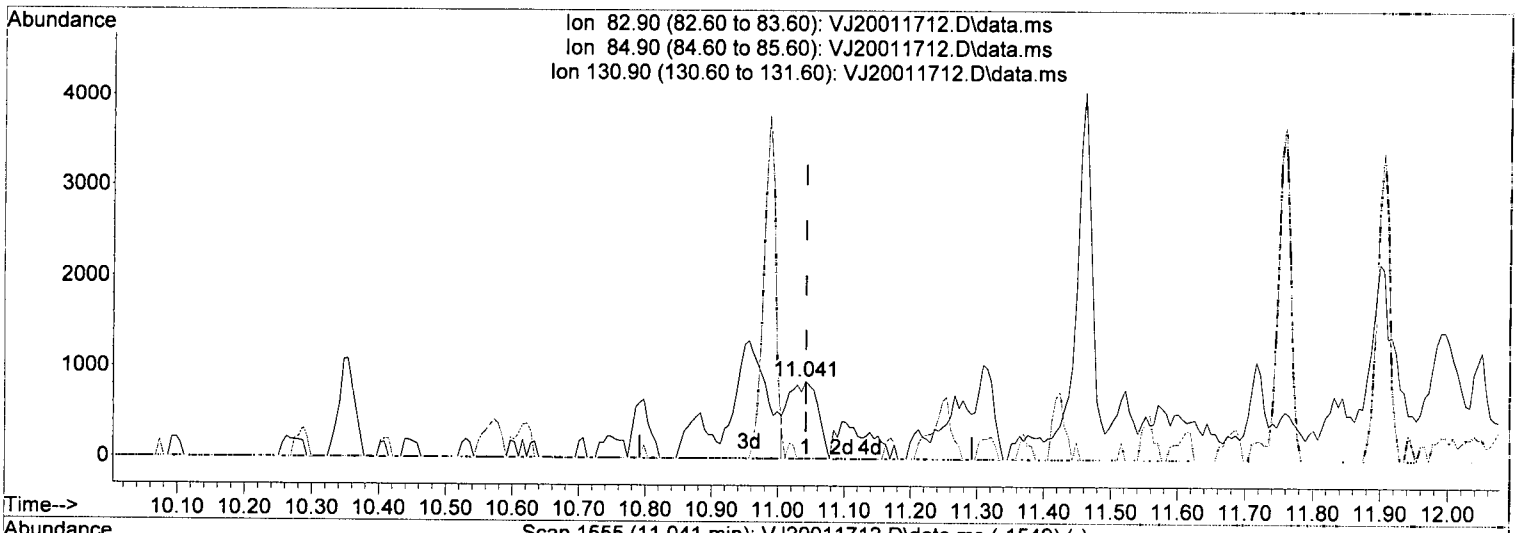
response 19338

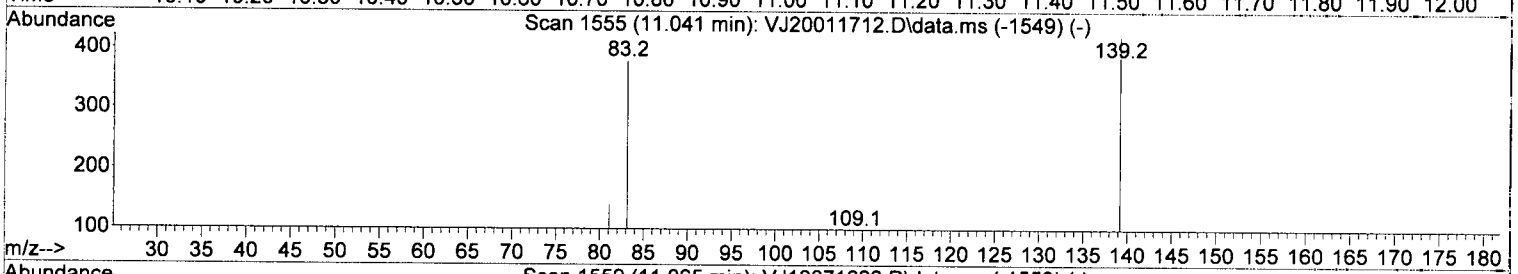
Ion	Exp%	Act%
165.90	100.00	100.00
128.90	68.30	69.99
93.90	36.00	39.13
0.00	0.00	0.00

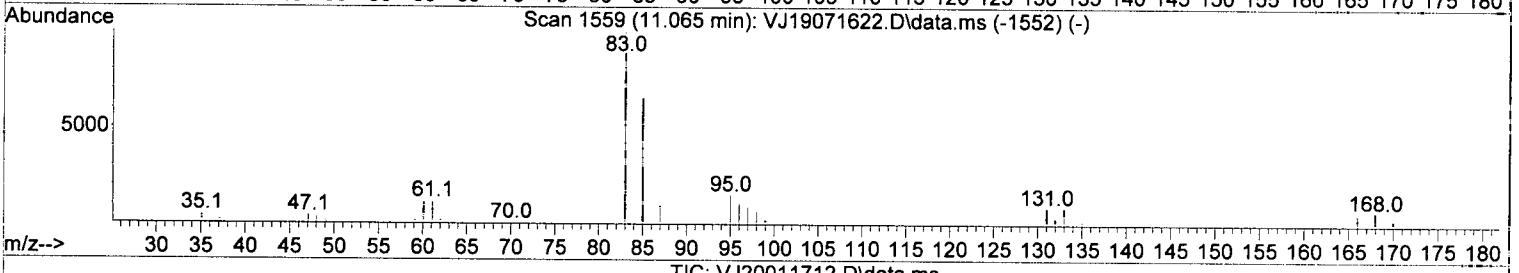
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

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

11.041min (-0.000) 0.86 ug/L

response 2628

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

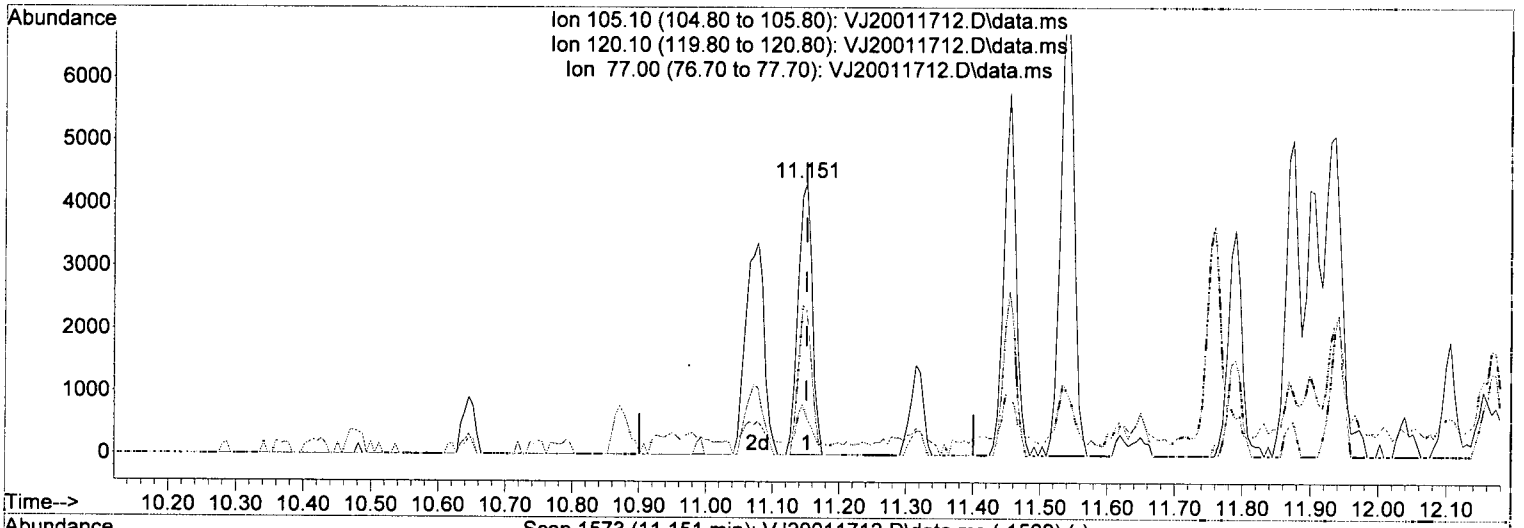
~~A.I.~~ IMA 1/20/20

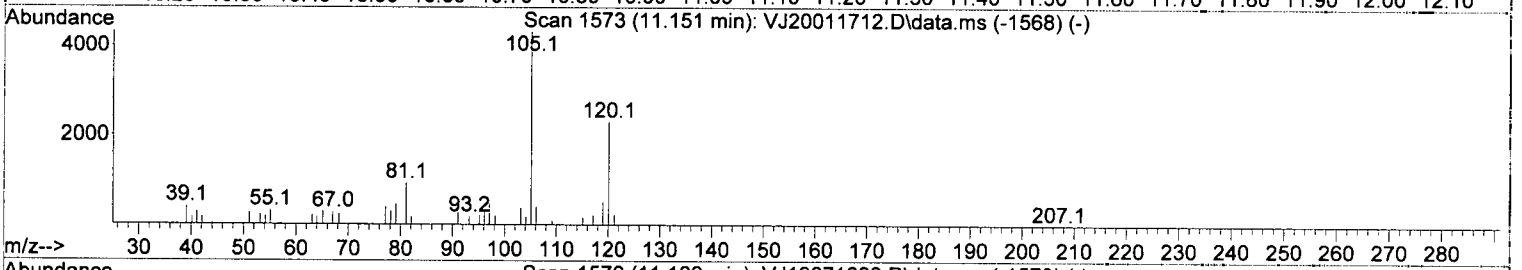
QDEL

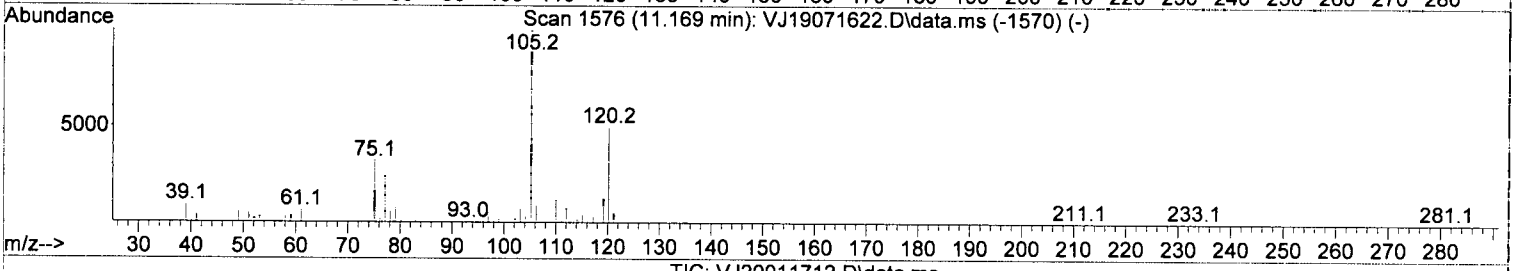
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(69) 1,3,5-Trimethylbenzene

11.151min (+ 0.001) 0.78 ug/L

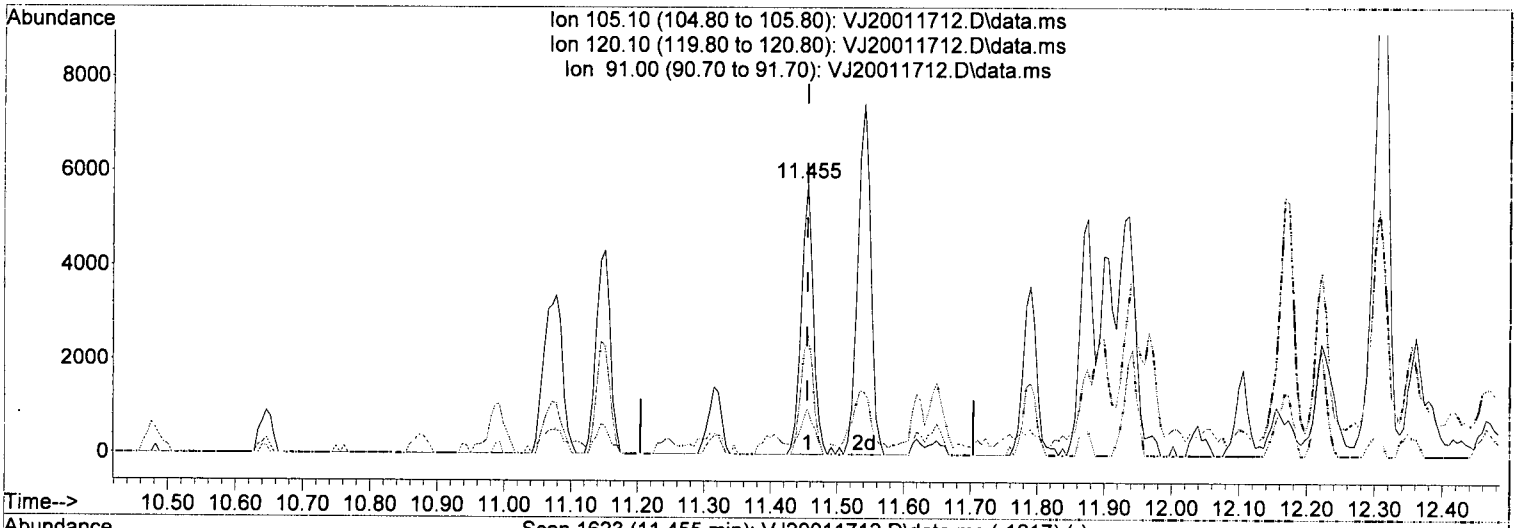
response 6388

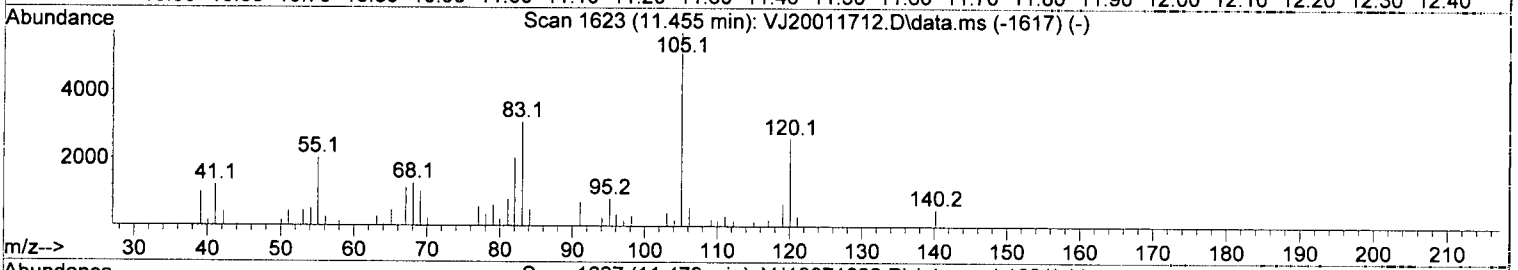
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	52.80	53.20
77.00	19.20	10.16
0.00	0.00	0.00

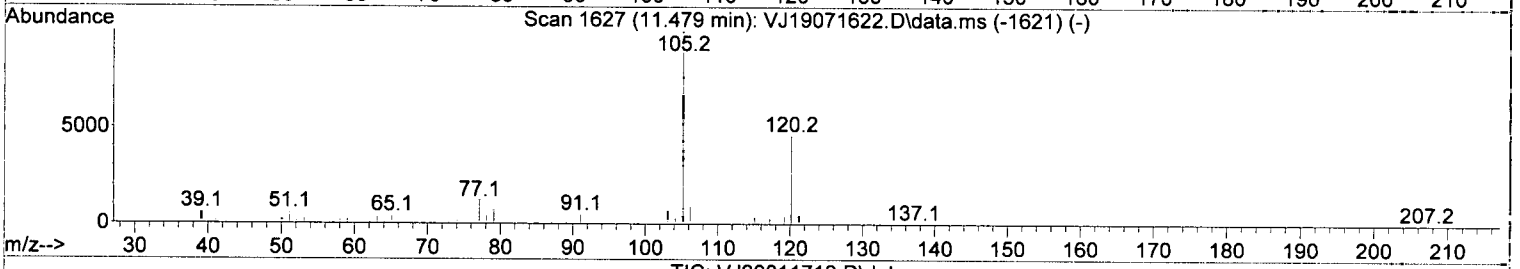
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(74) 1,2,4-Trimethylbenzene

11.455min (+ 0.001) 0.89 ug/L

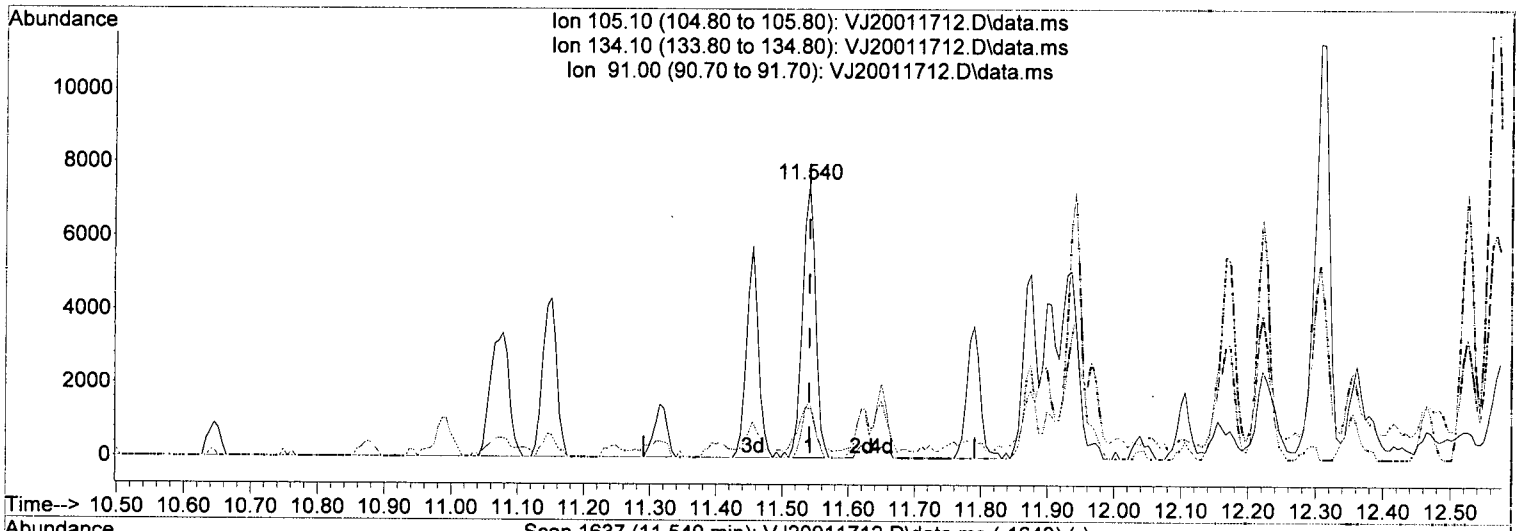
response 7194

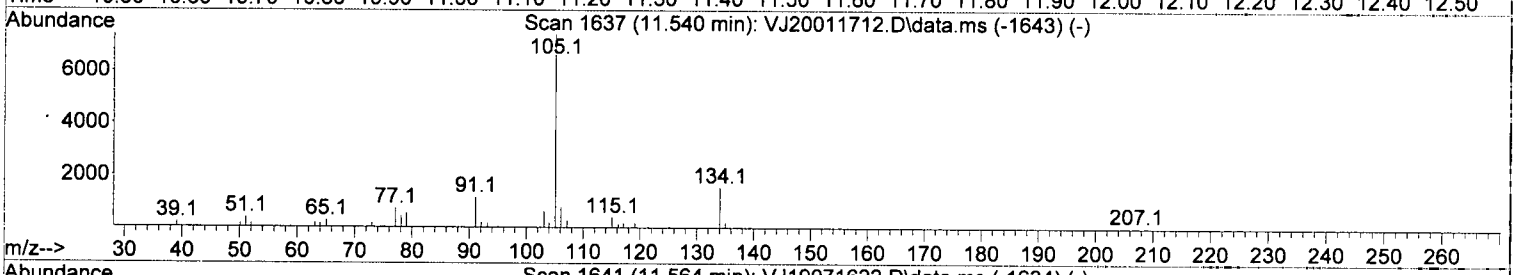
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	48.60	45.52
91.00	9.80	17.04
0.00	0.00	0.00

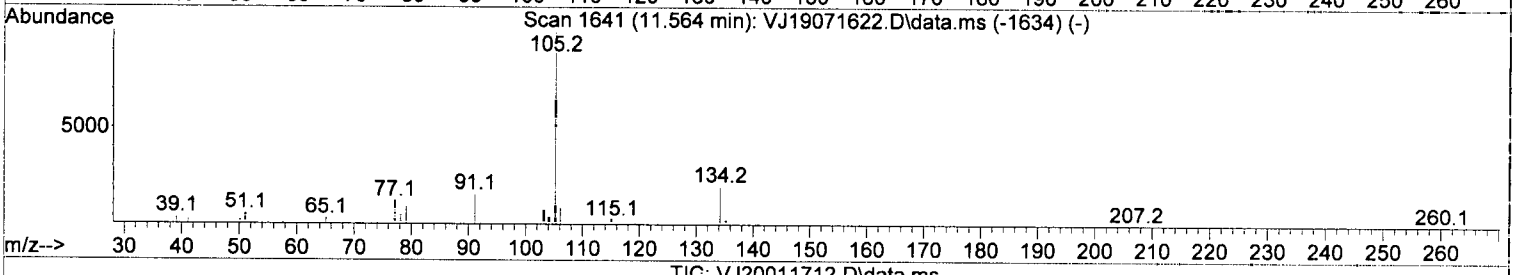
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20011712.D\data.ms

(75) sec-Butylbenzene

11.540min (+ 0.000) 1.04 ug/L

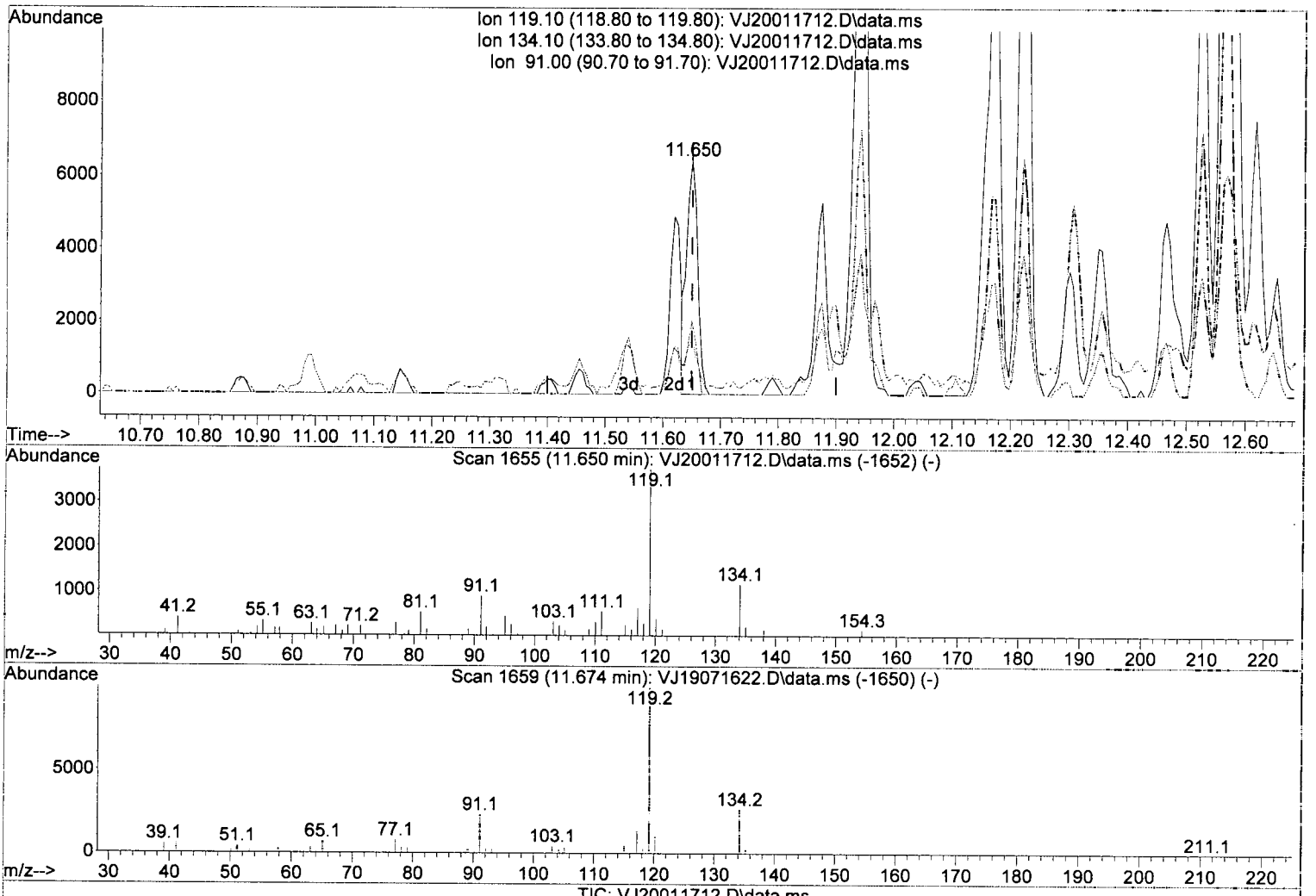
response 10176

Ion	Exp%	Act%
105.10	100.00	100.00
134.10	21.70	21.15
91.00	14.90	15.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20011712.D\data.ms

(76) 4-Isopropyltoluene

11.650min (+ 0.001) 1.07 ug/L

response 8575

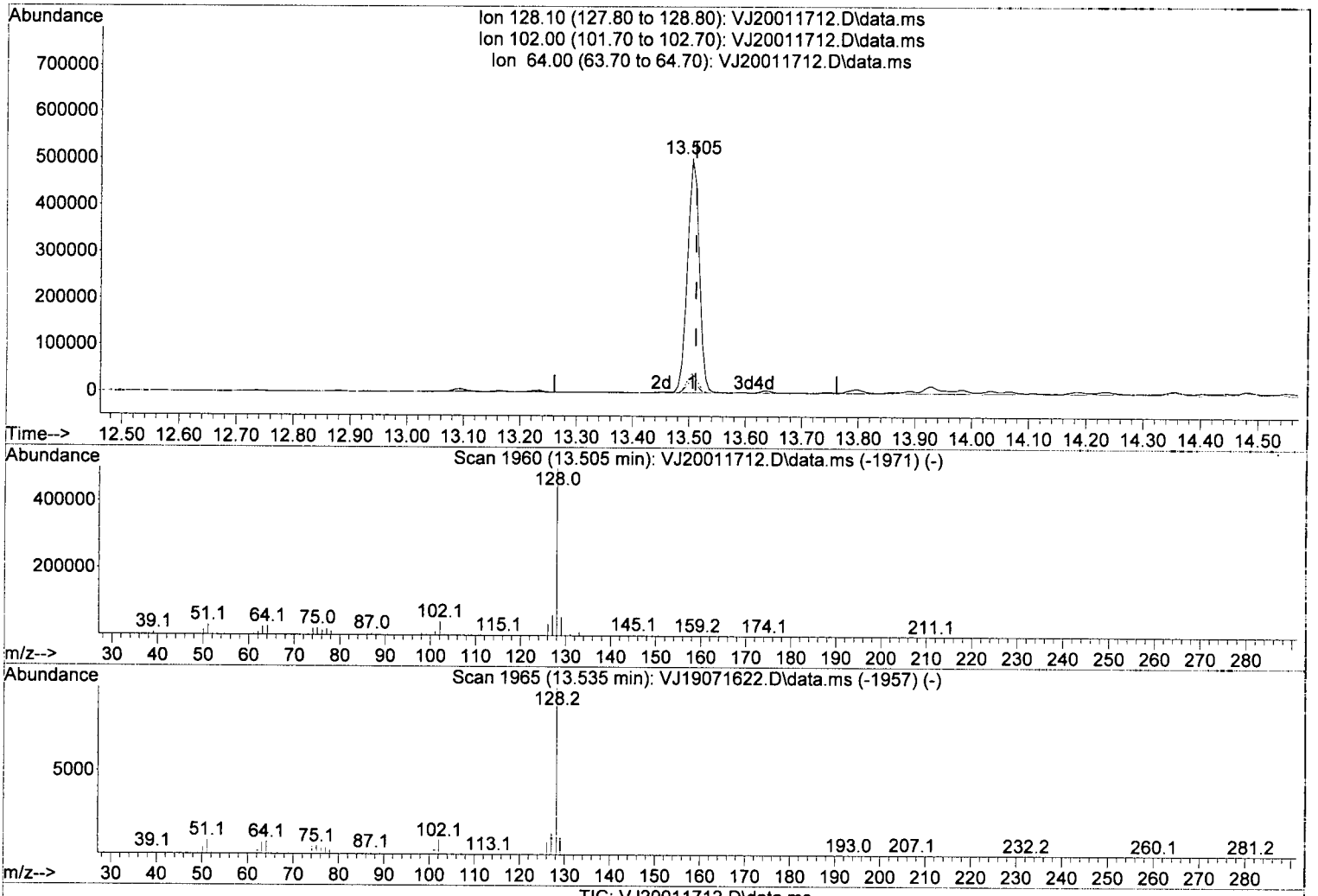
Ion	Exp%	Act%
119.10	100.00	100.00
134.10	26.60	31.27
91.00	21.70	20.05
0.00	0.00	0.00

MO2

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



TIC: VJ20011712.D\data.ms

(84) Naphthalene

13.505min (-0.006) 70.25 ug/L

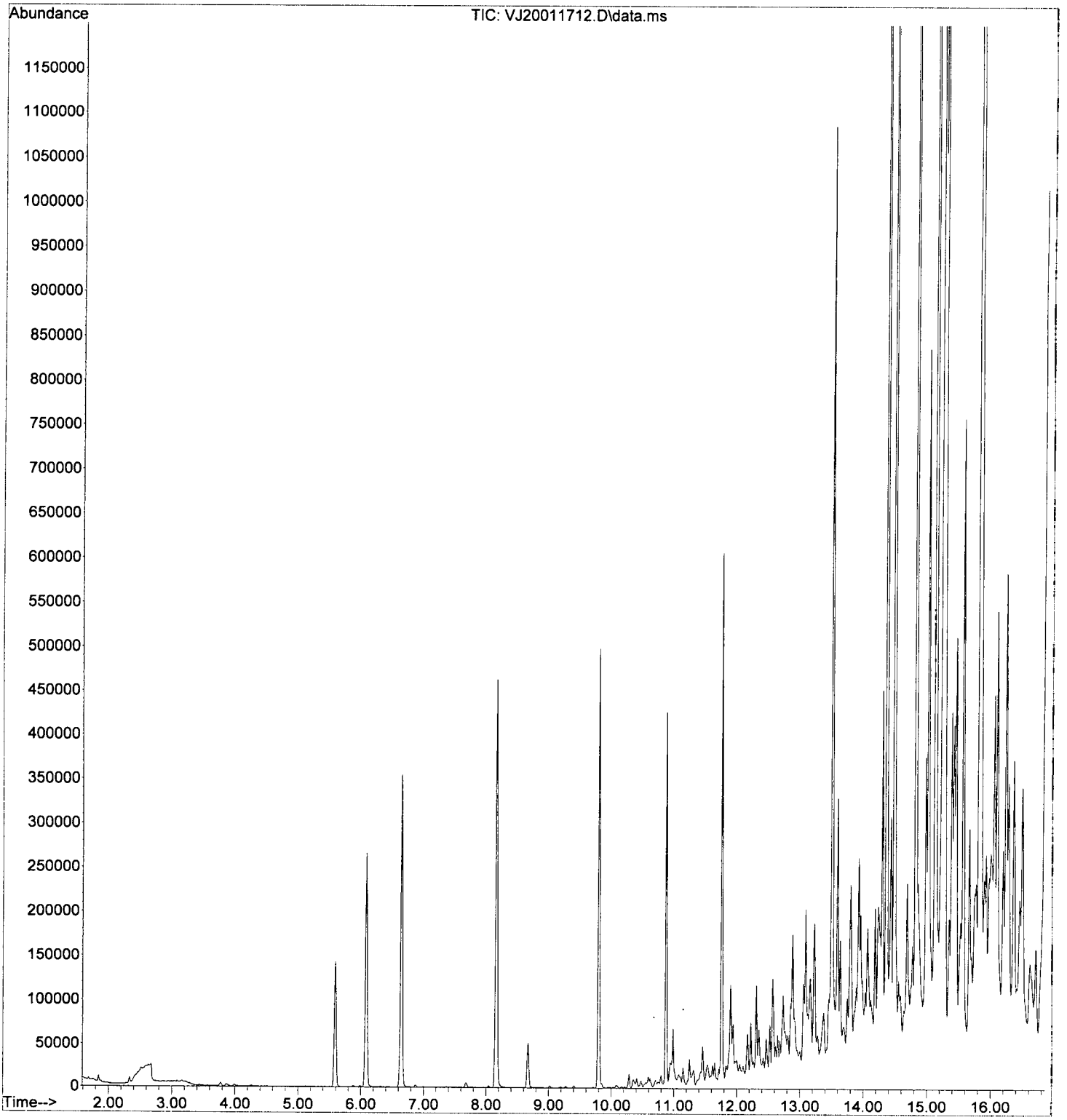
response 729717

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	8.18
64.00	6.30	5.16
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011712.D
Acq On : 17 Jan 2020 2:26 pm
Operator : IMA
Sample : A0A0539-02
Misc : 50X 5g/5mL 1000uL/50mL GX/8260
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 15:15:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**0A17017**	Instrument:	**VOA-GCMS10**
Date:	**01/17/20 09:11**	Calibration:	**A0A0801**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A17017-IBL1	Soil	QC	QC			A19L200	
2	0A17017-TUN1	Soil	QC	QC			A19L200	
3	0A17017-CCV1	Soil	QC	QC			A19L200	
4	0010530-BS1	Soil	QC	QC		0010530	A19L200	
5	0A17017-CCV2	Soil	QC	QC			A19L200	
6	0010530-BS2	Soil	QC	QC		0010530	A19L200	
7	0010530-BLK1	Soil	QC	QC		0010530	A19L200	
8	A0A0547-01	Soil	8260C Full List		01/17/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/17/20	0010530	A19L200	
9	A0A0539-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
10	0010530-DUP1	Soil	QC	QC		0010530	A19L200	
11	A0A0538-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
12	0010530-MS1	Soil	QC	QC		0010530	A19L200	
13	0A17017-IBL2	Soil	QC	QC			A19L200	
14	A0A0539-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
15	A0A0507-03	Soil	8260C BTEX+N		01/20/20	0010530	A19L200	
16	A0A0538-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
17	0A17017-IBL3	Soil	QC	QC			A19L200	
18	0A17017-IBL4	Soil	QC	QC			A19L200	
19	A0A0436-03	Soil	8260C BTEX		01/20/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/20/20	0010530	A19L200	
20	0A17017-IBL5	Soil	QC	QC			A19L200	
21	0010544-BLK1	Soil	QC	QC		0010544	A19L200	
22	0010544-BS1	Soil	QC	QC		0010544	A19L200	
23	0010544-BS2	Soil	QC	QC		0010544	A19L200	
24	0010544-BS3	Soil	QC	QC		0010544	A19L200	
25	0010544-BS4	Soil	QC	QC		0010544	A19L200	
26	0010545-BLK1	Soil	QC	QC		0010545	A19L200	
27	0010545-BS1	Soil	QC	QC		0010545	A19L200	
28	0010545-BS2	Soil	QC	QC		0010545	A19L200	
29	0010545-BS3	Soil	QC	QC		0010545	A19L200	
30	0010545-BS4	Soil	QC	QC		0010545	A19L200	
31	0A17017-IBL6	Soil	QC	QC			A19L200	

Data Entered By: IMA 1/22/20

Data Reviewed By: [signature] 1/27/20

Comments:

T1,2 DCPA to 1/2 ppb

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011719.D
Acq On : 17 Jan 2020 5:34 pm
Operator : IMA 4 IMA
Sample : 0010545-BLK1 1/22/20
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

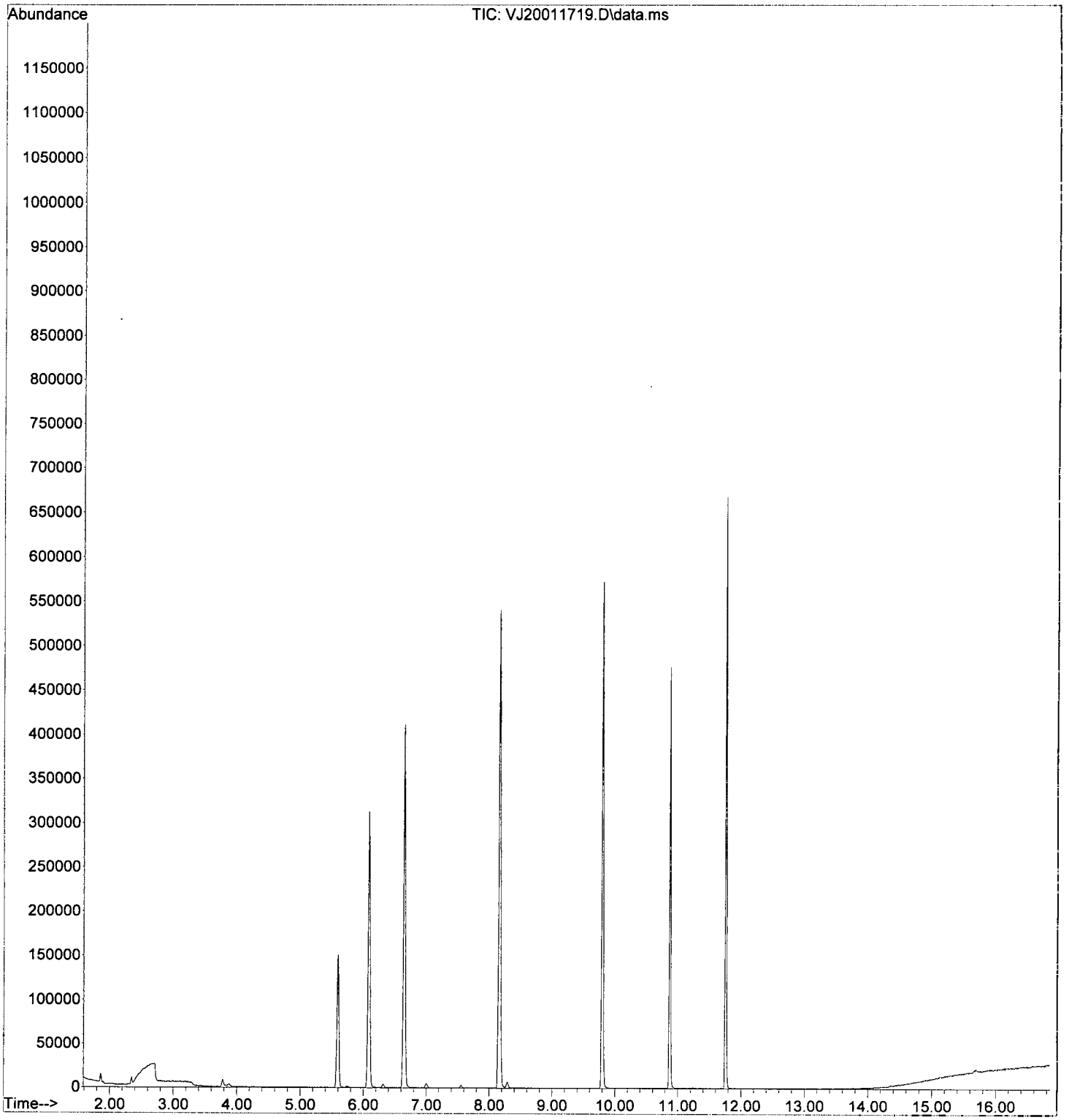
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	121682	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	327711	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	155987	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	102286	52.04	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	386387	54.43	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	434783	47.86	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	125755	52.23	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.898	50	1203	0.34	ug/L	<MDL	97
5) Bromomethane	2.348	96	3294	Below Cal			99
6) Chloroethane	2.457	64	59	0.09	ug/L	#	1
8) Ethanol	3.285	45	3485	Below Cal			84
12) Iodomethane	3.303	142	769	1.78	ug/L	#	47
13) Methylene Chloride	3.777	84	4076	0.69	ug/L		88
14) Acetone	3.869	43	2988	1.94	ug/L		88
18) tert-Butanol (TBA)	4.252	59	215	0.31	ug/L	#	46
32) 2-Butanone (MEK)	5.742	43	2746	1.14	ug/L		92
36) iso-Butyl Alcohol	6.320	43	1640	6.29	ug/L		93
84) Naphthalene	13.505	128	400	0.14	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011719.D
Acq On : 17 Jan 2020 5:34 pm
Operator : IMA IMA 1/22/20
Sample : 0010545-BLK1
Misc : 50X 7.5g/5mL 1000uL/50mL DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 20 10:32:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011720.D
Acq On : 17 Jan 2020 6:01 pm
Operator : IMA
Sample : 0010544-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 20 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	116	0.00	
2		Dichlorodifluoromethane	20.000	15.561	22.2#	99	-0.01	Q55
3	P	Chloromethane	20.000	15.993	20.0#	100	-0.01	
4	C	Vinyl Chloride	20.000	16.098	19.5	95	-0.02	
5		Bromomethane	20.000	20.054	-0.3	119	0.00	
6		Chloroethane	20.000	17.854	10.7	115	0.00	
7		Trichlorofluoromethane	20.000	19.376	3.1	116	0.00	
8		Ethanol	1250.000	949.154	24.1#	93	0.06	Q55
9	C	1,1-Dichloroethene	20.000	18.216	8.9	110	0.00	
10		Carbon Disulfide	20.000	18.323	8.4	114	0.00	
11		Freon 113	20.000	19.613	1.9	113	0.00	
12		Iodomethane	20.000	21.158	-5.8	134	-0.01	
13		Methylene Chloride	20.000	20.354	-1.8	122	-0.01	
14		Acetone	40.000	33.314	16.7	106	-0.01	
15		t-1,2-Dichloroethene	20.000	19.338	3.3	114	0.00	
16		n-Hexane	20.000	20.600	-3.0	116	0.00	
17		Methyl-tert-butyl-ether	20.000	20.295	-1.5	119	-0.01	
18		tert-Butanol (TBA)	1250.000	1157.014	7.4	102	0.04	
19		Diisopropyl ether (DIPE)	5.000	4.812	3.8	106	-0.01	
20	P	1,1-Dichloroethane	20.000	19.730	1.3	115	0.00	
21		Acrylonitrile	20.000	18.340	8.3	103	-0.01	
22		Ethyl-tert-butyl ether (ETB	5.000	4.891	2.2	104	0.00	
23		c-1,2-Dichloroethene	20.000	20.429	-2.1	115	0.00	
24		2,2-Dichloropropane	20.000	19.309	3.5	112	0.00	
25		Bromochloromethane	20.000	19.056	4.7	110	-0.01	
26	C	Chloroform	20.000	20.159	-0.8	117	0.00	
27		Carbon Tetrachloride	20.000	20.732	-3.7	120	0.00	
28		Tetrahydrofuran	20.000	17.475	12.6	101	0.00	
29		1,1,1-Trichloroethane	20.000	20.270	-1.3	114	-0.01	
30	S	Dibromofluoromethane (S)	50.000	51.001	-2.0	122	0.00	
31		1,1-Dichloropropene	20.000	20.791	-4.0	116	0.00	
32		2-Butanone (MEK)	40.000	33.190	17.0	104	0.00	
33		Benzene	20.000	20.984	-4.9	122	0.00	
34		tert-Amyl methyl ether (TAM	5.000	5.108	-2.2	123	-0.01	
35		1,2-Dichloroethane (EDC)	20.000	19.301	3.5	111	0.00	
36		iso-Butyl Alcohol	500.000	415.309	16.9	101	0.02	
37	S	1,4-Difluorobenzene (S)	50.000	54.487	-9.0	129	0.00	
38		Trichloroethene (TCE)	20.000	23.668	-18.3	133	0.00	
39		tert-Amyl ethyl ether (TAEE	5.000	5.324	-6.5	121	0.00	
40		Dibromomethane	20.000	21.647	-8.2	123	0.00	
41	C	1,2-Dichloropropane	20.000	21.038	-5.2	123	0.00	
42		Bromodichloromethane	20.000	21.578	-7.9	122	0.00	
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	134	0.00	
44		c-1,3-Dichloropropene	20.000	18.862	5.7	117	0.00	
45	S	Toluene-d8 (S)	50.000	46.586	6.8	123	0.00	
46	C	Toluene	20.000	18.799	6.0	126	0.00	
47		Tetrachloroethene (PCE)	20.000	21.078	-5.4	134	0.00	
48		4-Methyl-2-Pentanone (MIBK)	40.000	31.740	20.7#	107	0.00	Q55
49		t-1,3-Dichloropropene	20.000	20.282	-1.4	123	0.00	
50		1,1,2-Trichloroethane	20.000	20.076	-0.4	133	0.00	

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011720.D
Acq On : 17 Jan 2020 6:01 pm
Operator : IMA
Sample : 0010544-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 20 10:32:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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)	
51		Dibromochloromethane	20.000	20.340	-1.7	136	0.00	
52		1,3-Dichloropropane	20.000	19.779	1.1	128	0.00	
53		1,2-Dibromoethane (EDB)	20.000	20.362	-1.8	134	0.00	
54		2-Hexanone	40.000	29.412	-26.5#	105	0.00	QSS
55	P	Chlorobenzene	20.000	20.082	-0.4	134	0.00	
56	C	Ethylbenzene	20.000	19.568	2.2	126	0.00	
57		1,1,1,2-Tetrachloroethane	20.000	20.951	-4.8	139	0.00	
58		m,p-Xylenes (2)	40.000	40.895	-2.2	124	0.00	
59		o-Xylene	20.000	21.095	-5.5	127	0.00	
60		Styrene	20.000	19.263	3.7	137	0.00	
61	P	Bromoform	20.000	21.409	-7.0	140	0.00	
62		Isopropylbenzene	20.000	20.729	-3.6	130	0.00	
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	138	0.00	
64	S	4-Bromofluorobenzene (S)	50.000	52.728	-5.5	145	0.00	
65		Bromobenzene	20.000	21.425	-7.1	143	0.00	
66		n-Propylbenzene	20.000	19.250	3.8	124	0.00	
67	P	1,1,2,2-Tetrachloroethane	20.000	18.775	6.1	120	0.00	
68		2-Chlorotoluene	20.000	21.260	-6.3	135	0.00	
69		1,3,5-Trimethylbenzene	20.000	21.352	-6.8	129	0.00	
70		1,2,3-Trichloropropane	20.000	18.927	5.4	124	0.00	
71		t-1,4-Dichloro-2-butene	20.000	16.428	17.9	113	0.00	
72		4-Chlorotoluene	20.000	20.584	-2.9	130	0.00	
73		tert-Butylbenzene	20.000	19.468	2.7	123	0.00	
74		1,2,4-Trimethylbenzene	20.000	22.115	-10.6	133	0.00	
75		sec-Butylbenzene	20.000	20.509	-2.5	125	0.00	
76		4-Isopropyltoluene	20.000	21.814	-9.1	131	0.00	
77		1,3-Dichlorobenzene	20.000	21.286	-6.4	136	0.00	
78		1,4-Dichlorobenzene	20.000	19.568	2.2	137	0.00	
79		n-Butylbenzene	20.000	19.468	2.7	127	0.00	
80		1,2-Dichlorobenzene	20.000	21.081	-5.4	135	0.00	
81		1,2-Dibromo-3-Chloropropane	20.000	16.765	16.2	119	0.00	
82		Hexachlorobutadiene	20.000	21.558	-7.8	139	0.00	
83		1,2,4-Trichlorobenzene	20.000	20.591	-3.0	134	0.00	
84		Naphthalene	20.000	17.025	14.9	120	0.00	
85		1,2,3-Trichlorobenzene	20.000	20.289	-1.4	127	0.00	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011720.D
Acq On : 17 Jan 2020 6:01 pm
Operator : IMA
Sample : 0010544-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 20 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	126374	50.00	ug/L	#	0.00
43) Chlorobenzene-d5 (I)	9.800	117	346171	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	166057	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	104119	51.00	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	401680	54.49	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	447057	46.59	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	135161	52.73	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	38275	15.56	ug/L		99
3) Chloromethane	1.886	50	57985	15.99	ug/L		100
4) Vinyl Chloride	1.983	62	44026	16.10	ug/L		95
5) Bromomethane	2.336	96	29246	20.05	ug/L		97
6) Chloroethane	2.470	64	11727	17.85	ug/L		90
7) Trichlorofluoromethane	2.597	101	18796	19.38	ug/L		99
8) Ethanol	3.321	45	76727	949.15	ug/L		88
9) 1,1-Dichloroethene	3.145	61	55925	18.22	ug/L		93
10) Carbon Disulfide	3.157	76	101062	18.32	ug/L		97
11) Freon 113	3.200	101	44740	19.61	ug/L		91
12) Iodomethane	3.291	142	10714	21.16	ug/L		98
13) Methylene Chloride	3.771	84	52820	20.35	ug/L		96
14) Acetone	3.857	43	53239	33.31	ug/L		96
15) t-1,2-Dichloroethene	3.942	61	72719	19.34	ug/L		93
16) n-Hexane	4.039	86	11858	20.60	ug/L		93
17) Methyl-tert-butyl-ether	4.094	73	187955	20.29	ug/L		78
18) tert-Butanol (TBA)	4.301	59	827355	1157.01	ug/L	#	86
19) Diisopropyl ether (DIPE)	4.489	45	39694	4.81	ug/L		95
20) 1,1-Dichloroethane	4.574	63	85535	19.73	ug/L		99
21) Acrylonitrile	4.623	53	29858	18.34	ug/L		99
22) Ethyl-tert-butyl ether...	4.860	59	38375	4.89	ug/L		96
23) c-1,2-Dichloroethene	5.122	61	71491	20.43	ug/L		93
24) 2,2-Dichloropropane	5.232	77	77127	19.31	ug/L		93
25) Bromochloromethane	5.317	49	41240	19.06	ug/L		93
26) Chloroform	5.408	83	96027	20.16	ug/L		97
27) Carbon Tetrachloride	5.548	117	70970	20.73	ug/L		96
28) Tetrahydrofuran	5.584	42	27071	17.47	ug/L		92
29) 1,1,1-Trichloroethane	5.609	97	88949	20.27	ug/L		98
31) 1,1-Dichloropropene	5.743	75	75244	20.79	ug/L		97
32) 2-Butanone (MEK)	5.724	43	83221	33.19	ug/L		97
33) Benzene	5.992	78	242921	20.98	ug/L		99
34) tert-Amyl methyl ether...	6.138	73	38414	5.11	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.199	62	79183	19.30	ug/L		98
36) iso-Butyl Alcohol	6.296	43	112409	415.31	ug/L		96
38) Trichloroethene (TCE)	6.612	130	64434	23.67	ug/L		100
39) tert-Amyl ethyl ether ...	6.898	59	27725	5.32	ug/L		95
40) Dibromomethane	7.051	93	35210	21.65	ug/L		98
41) 1,2-Dichloropropane	7.160	63	57289	21.04	ug/L		96
42) Bromodichloromethane	7.239	83	69547	21.58	ug/L		99
44) c-1,3-Dichloropropene	7.945	75	81554	18.86	ug/L		94
46) Toluene	8.219	91	254941	18.80	ug/L		96
47) Tetrachloroethene (PCE)	8.669	166	66277	21.08	ug/L		98
48) 4-Methyl-2-Pentanone (...	8.657	43	128556	31.74	ug/L		93

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011720.D
Acq On : 17 Jan 2020 6:01 pm
Operator : IMA
Sample : 0010544-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 20 10:32:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

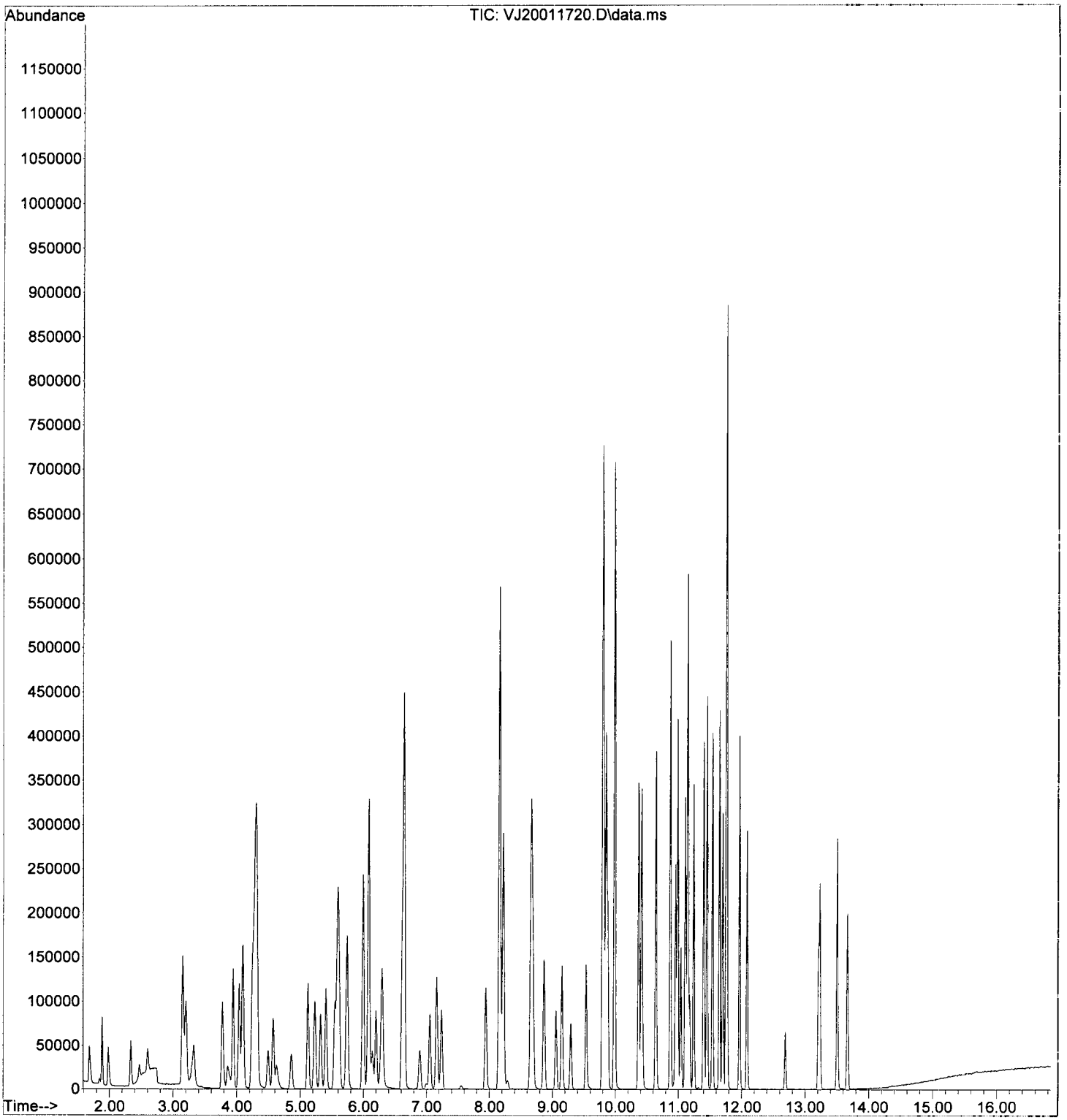
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	83657	20.28	ug/L		96
50) 1,1,2-Trichloroethane	8.870	97	56110	20.08	ug/L		95
51) Dibromochloromethane	9.058	129	52633	20.34	ug/L		99
52) 1,3-Dichloropropane	9.155	76	94516	19.78	ug/L		94
53) 1,2-Dibromoethane (EDB)	9.295	107	56704	20.36	ug/L		98
54) 2-Hexanone	9.533	43	90727	29.41	ug/L		98
55) Chlorobenzene	9.812	112	164938	20.08	ug/L		98
56) Ethylbenzene	9.849	91	268128	19.57	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.879	131	57608	20.95	ug/L		98
58) m,p-Xylenes (2)	9.989	91	393544	40.90	ug/L		99
59) o-Xylene	10.366	91	188547	21.09	ug/L		97
60) Styrene	10.415	104	144994	19.26	ug/L		94
61) Bromoform	10.427	173	38604	21.41	ug/L		97
62) Isopropylbenzene	10.646	105	244009	20.73	ug/L		99
65) Bromobenzene	10.956	156	67080	21.42	ug/L		96
66) n-Propylbenzene	10.987	91	278912	19.25	ug/L		99
67) 1,1,2,2-Tetrachloroethane	11.041	83	68951	18.77	ug/L		96
68) 2-Chlorotoluene	11.108	126	57831	21.26	ug/L		98
69) 1,3,5-Trimethylbenzene	11.145	105	208067	21.35	ug/L		98
70) 1,2,3-Trichloropropane	11.145	110	26249	18.93	ug/L	#	78
71) t-1,4-Dichloro-2-butene	11.181	88	9809	16.43	ug/L		93
72) 4-Chlorotoluene	11.242	91	171527	20.58	ug/L		97
73) tert-Butylbenzene	11.400	91	105340	19.47	ug/L		99
74) 1,2,4-Trimethylbenzene	11.455	105	214460	22.12	ug/L		99
75) sec-Butylbenzene	11.540	105	239622	20.51	ug/L		100
76) 4-Isopropyltoluene	11.650	119	208527	21.81	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	119151	21.29	ug/L		100
78) 1,4-Dichlorobenzene	11.771	146	118530	19.57	ug/L		97
79) n-Butylbenzene	11.966	91	173882	19.47	ug/L		97
80) 1,2-Dichlorobenzene	12.088	146	107659	21.08	ug/L		96
81) 1,2-Dibromo-3-Chloropr...	12.690	157	16957	16.76	ug/L		93
82) Hexachlorobutadiene	13.213	223	17824	21.56	ug/L		94
83) 1,2,4-Trichlorobenzene	13.231	180	65003	20.59	ug/L		98
84) Naphthalene	13.505	128	203694	17.02	ug/L		99
85) 1,2,3-Trichlorobenzene	13.669	180	64984	20.29	ug/L		99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011720.D
Acq On : 17 Jan 2020 6:01 pm
Operator : IMA
Sample : 0010544-BS1
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 20 10:32:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011721.D
Acq On : 17 Jan 2020 6:28 pm
Operator : IMA
Sample : 0010544-BS2
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 21 Sample Multiplier: 1

IMA 1/20/20

Quant Time: Jan 20 10:32:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	117	0.00
2		Dichlorodifluoromethane	20.000	14.897	25.5#	95	0.00
3	P	Chloromethane	20.000	15.334	23.3#	96	0.00
4	C	Vinyl Chloride	20.000	15.245	23.8#	90	-0.02
5		Bromomethane	20.000	18.663	6.7	112	0.00
6		Chloroethane	20.000	18.084	9.6	117	0.00
7		Trichlorofluoromethane	20.000	17.852	10.7	107	0.00
8		Ethanol	1250.000	1012.513	19.0	99	0.05
9	C	1,1-Dichloroethene	20.000	17.431	12.8	106	0.00
10		Carbon Disulfide	20.000	17.677	11.6	110	0.00
11		Freon 113	20.000	18.591	7.0	107	0.00
12		Iodomethane	20.000	22.312	-11.6	143	0.00
13		Methylene Chloride	20.000	19.769	1.2	119	0.00
14		Acetone	40.000	33.383	16.5	106	0.00
15		t-1,2-Dichloroethene	20.000	18.324	8.4	109	0.00
16		n-Hexane	20.000	20.086	-0.4	113	0.00
17		Methyl-tert-butyl-ether	20.000	19.670	1.6	116	-0.01
18		tert-Butanol (TBA)	1250.000	1139.211	8.9	101	0.03
19		Diisopropyl ether (DIPE)	5.000	4.647	7.1	102	0.00
20	P	1,1-Dichloroethane	20.000	19.031	4.8	111	0.00
21		Acrylonitrile	20.000	19.411	2.9	109	-0.01
22		Ethyl-tert-butyl ether (ETB	5.000	4.826	3.5	103	0.00
23		c-1,2-Dichloroethene	20.000	19.485	2.6	110	0.00
24		2,2-Dichloropropane	20.000	18.115	9.4	105	0.00
25		Bromochloromethane	20.000	18.283	8.6	106	0.00
26	C	Chloroform	20.000	19.487	2.6	114	0.00
27		Carbon Tetrachloride	20.000	19.684	1.6	114	0.00
28		Tetrahydrofuran	20.000	18.033	9.8	105	0.00
29		1,1,1-Trichloroethane	20.000	19.265	3.7	109	0.00
30	S	Dibromofluoromethane (S)	50.000	50.889	-1.8	122	0.00
31		1,1-Dichloropropene	20.000	19.464	2.7	109	0.00
32		2-Butanone (MEK)	40.000	33.804	15.5	106	0.00
33		Benzene	20.000	19.838	0.8	115	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.887	2.3	118	0.00
35		1,2-Dichloroethane (EDC)	20.000	18.826	5.9	109	0.00
36		iso-Butyl Alcohol	500.000	406.060	18.8	99	0.02
37	S	1,4-Difluorobenzene (S)	50.000	54.102	-8.2	128	0.00
38		Trichloroethene (TCE)	20.000	22.231	-11.2	125	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	5.104	-2.1	117	0.00
40		Dibromomethane	20.000	21.456	-7.3	122	0.00
41	C	1,2-Dichloropropane	20.000	20.075	-0.4	118	0.00
42		Bromodichloromethane	20.000	20.848	-4.2	118	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	134	0.00
44		c-1,3-Dichloropropene	20.000	18.058	9.7	112	0.00
45	S	Toluene-d8 (S)	50.000	46.420	7.2	123	0.00
46	C	Toluene	20.000	17.927	10.4	120	0.00
47		Tetrachloroethene (PCE)	20.000	19.977	0.1	127	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	31.912	20.2#	107	0.00
49		t-1,3-Dichloropropene	20.000	19.827	0.9	120	0.00
50		1,1,2-Trichloroethane	20.000	19.660	1.7	130	0.00

L Q56 Q55 IMA 1/22/20 OK

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011721.D
Acq On : 17 Jan 2020 6:28 pm
Operator : IMA
Sample : 0010544-BS2
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 20 10:32:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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)
51		Dibromochloromethane	20.000	20.255	-1.3	136	0.00
52		1,3-Dichloropropane	20.000	19.605	2.0	127	0.00
53		1,2-Dibromoethane (EDB)	20.000	20.055	-0.3	132	0.00
54		2-Hexanone	40.000	29.449	L 26.4#	105	0.00 QSS
55	P	Chlorobenzene	20.000	19.032	4.8	127	0.00
56	C	Ethylbenzene	20.000	18.804	6.0	121	0.00
57		1,1,1,2-Tetrachloroethane	20.000	20.229	-1.1	135	0.00
58		m,p-Xylenes (2)	40.000	39.338	1.7	120	0.00
59		o-Xylene	20.000	20.237	-1.2	122	0.00
60		Styrene	20.000	18.382	8.1	131	0.00
61	P	Bromoform	20.000	21.073	-5.4	137	0.00
62		Isopropylbenzene	20.000	19.896	0.5	125	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	138	0.00
64	S	4-Bromofluorobenzene (S)	50.000	52.541	-5.1	145	0.00
65		Bromobenzene	20.000	20.805	-4.0	139	0.00
66		n-Propylbenzene	20.000	18.442	7.8	119	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	18.234	8.8	117	0.00
68		2-Chlorotoluene	20.000	20.450	-2.2	130	0.00
69		1,3,5-Trimethylbenzene	20.000	20.584	-2.9	125	0.00
70		1,2,3-Trichloropropane	20.000	18.519	7.4	121	0.00
71		t-1,4-Dichloro-2-butene	20.000	16.645	16.8	114	0.00
72		4-Chlorotoluene	20.000	19.864	0.7	125	0.00
73		tert-Butylbenzene	20.000	18.651	6.7	118	0.00
74		1,2,4-Trimethylbenzene	20.000	21.115	-5.6	127	0.00
75		sec-Butylbenzene	20.000	19.648	1.8	120	0.00
76		4-Isopropyltoluene	20.000	21.034	-5.2	126	0.00
77		1,3-Dichlorobenzene	20.000	20.363	-1.8	131	0.00
78		1,4-Dichlorobenzene	20.000	19.041	4.8	134	0.00
79		n-Butylbenzene	20.000	18.466	7.7	120	0.00
80		1,2-Dichlorobenzene	20.000	19.947	0.3	128	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	16.828	15.9	119	0.00
82		Hexachlorobutadiene	20.000	20.408	-2.0	132	0.00
83		1,2,4-Trichlorobenzene	20.000	20.127	-0.6	131	0.00
84		Naphthalene	20.000	16.863	15.7	119	0.00
85		1,2,3-Trichlorobenzene	20.000	19.662	1.7	123	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011721.D
Acq On : 17 Jan 2020 6:28 pm
Operator : IMA
Sample : 0010544-BS2
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 21 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	126670	50.00	ug/L	#	0.00
43) Chlorobenzene-d5 (I)	9.800	117	346247	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	166380	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	104134	50.89	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	399773	54.10	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	445555	46.42	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	134943	52.54	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	36728	14.90	ug/L		98
3) Chloromethane	1.891	50	55726	15.33	ug/L		98
4) Vinyl Chloride	1.983	62	41791	15.25	ug/L		94
5) Bromomethane	2.342	96	27597	18.66	ug/L		97
6) Chloroethane	2.469	64	11906	18.08	ug/L		97
7) Trichlorofluoromethane	2.603	101	17358	17.85	ug/L		95
8) Ethanol	3.315	45	81610	1012.51	ug/L		87
9) 1,1-Dichloroethene	3.145	61	53639	17.43	ug/L		92
10) Carbon Disulfide	3.157	76	97729	17.68	ug/L		97
11) Freon 113	3.199	101	42509	18.59	ug/L		94
12) Iodomethane	3.297	142	11438	22.31	ug/L		95
13) Methylene Chloride	3.777	84	51502	19.77	ug/L		92
14) Acetone	3.863	43	53475	33.38	ug/L		99
15) t-1,2-Dichloroethene	3.942	61	69068	18.32	ug/L		92
16) n-Hexane	4.039	86	11589	20.09	ug/L		96
17) Methyl-tert-butyl-ether	4.094	73	182594	19.67	ug/L		95
18) tert-Butanol (TBA)	4.288	59	816532	1139.21	ug/L	#	87
19) Diisopropyl ether (DIPE)	4.495	45	38423	4.65	ug/L		96
20) 1,1-Dichloroethane	4.574	63	82694	19.03	ug/L		99
21) Acrylonitrile	4.623	53	31676	19.41	ug/L		96
22) Ethyl-tert-butyl ether...	4.860	59	37955	4.83	ug/L		98
23) c-1,2-Dichloroethene	5.122	61	68347	19.48	ug/L		94
24) 2,2-Dichloropropane	5.231	77	72527	18.11	ug/L		93
25) Bromochloromethane	5.323	49	39659	18.28	ug/L		90
26) Chloroform	5.408	83	93043	19.49	ug/L		97
27) Carbon Tetrachloride	5.548	117	67541	19.68	ug/L		96
28) Tetrahydrofuran	5.584	42	28002	18.03	ug/L		93
29) 1,1,1-Trichloroethane	5.615	97	84739	19.27	ug/L		97
31) 1,1-Dichloropropene	5.742	75	70607	19.46	ug/L		98
32) 2-Butanone (MEK)	5.724	43	84960	33.80	ug/L		98
33) Benzene	5.998	78	230197	19.84	ug/L		98
34) tert-Amyl methyl ether...	6.144	73	36834	4.89	ug/L		99
35) 1,2-Dichloroethane (EDC)	6.199	62	77417	18.83	ug/L		99
36) iso-Butyl Alcohol	6.290	43	110163	406.06	ug/L		96
38) Trichloroethene (TCE)	6.612	130	60663	22.23	ug/L		99
39) tert-Amyl ethyl ether ...	6.892	59	26638	5.10	ug/L		96
40) Dibromomethane	7.056	93	34981	21.46	ug/L		95
41) 1,2-Dichloropropane	7.166	63	54794	20.07	ug/L		92
42) Bromodichloromethane	7.239	83	67351	20.85	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	78095	18.06	ug/L		94
46) Toluene	8.218	91	243169	17.93	ug/L		98
47) Tetrachloroethene (PCE)	8.669	166	62829	19.98	ug/L		99
48) 4-Methyl-2-Pentanone (...	8.656	43	129282	31.91	ug/L		94

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011721.D
Acq On : 17 Jan 2020 6:28 pm
Operator : IMA
Sample : 0010544-BS2
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 20 10:32:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

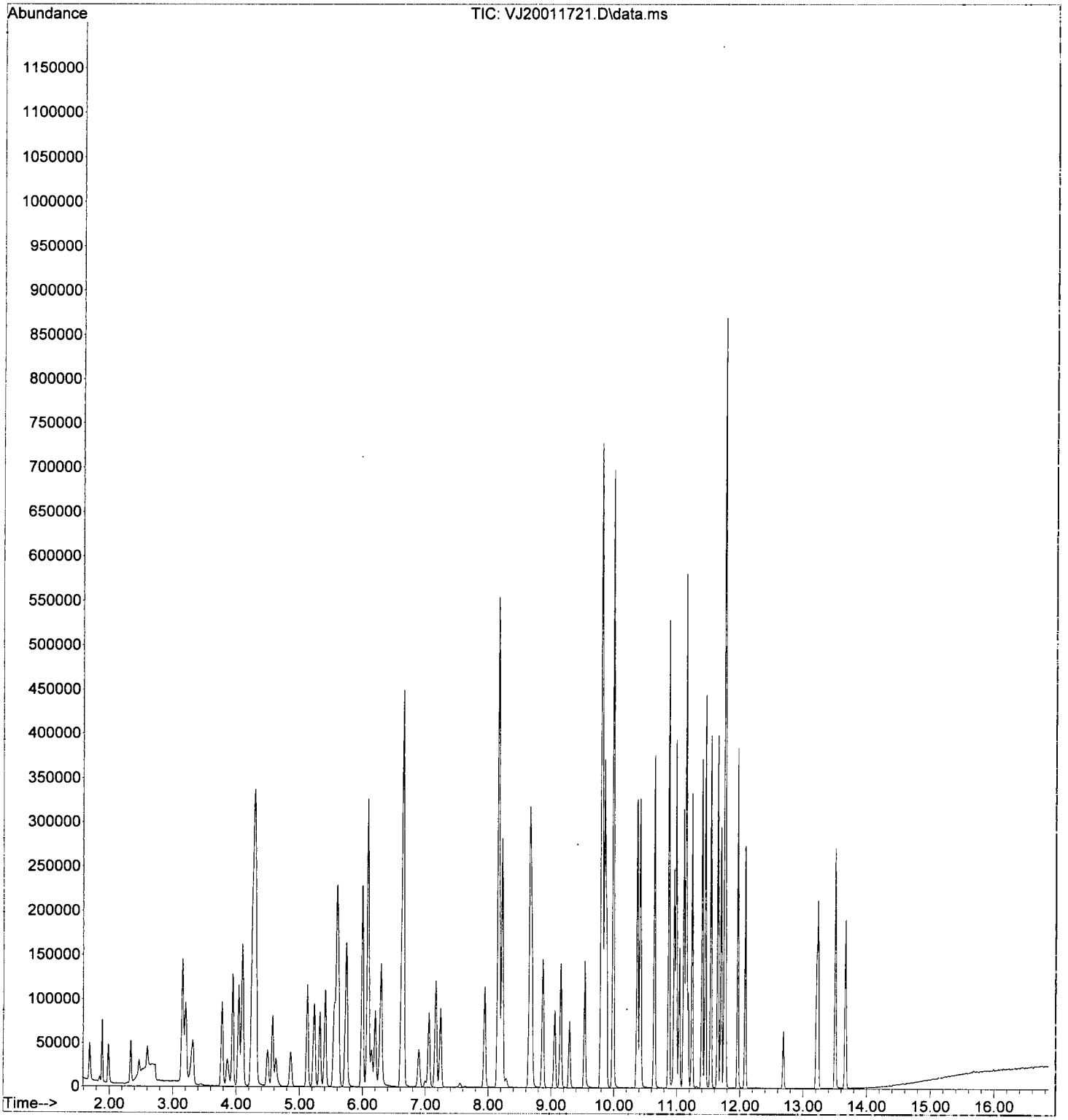
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	81797	19.83	ug/L		97
50) 1,1,2-Trichloroethane	8.863	97	54957	19.66	ug/L		97
51) Dibromochloromethane	9.058	129	52425	20.25	ug/L		100
52) 1,3-Dichloropropane	9.155	76	93706	19.61	ug/L		95
53) 1,2-Dibromoethane (EDB)	9.295	107	55863	20.06	ug/L		98
54) 2-Hexanone	9.532	43	90865	29.45	ug/L		98
55) Chlorobenzene	9.812	112	156341	19.03	ug/L		99
56) Ethylbenzene	9.849	91	257705	18.80	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	55635	20.23	ug/L		97
58) m,p-Xylenes (2)	9.989	91	378638	39.34	ug/L		99
59) o-Xylene	10.372	91	180919	20.24	ug/L		99
60) Styrene	10.415	104	138231	18.38	ug/L		95
61) Bromoform	10.427	173	37979	21.07	ug/L		98
62) Isopropylbenzene	10.646	105	234263	19.90	ug/L		99
65) Bromobenzene	10.956	156	65267	20.81	ug/L		98
66) n-Propylbenzene	10.986	91	267726	18.44	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	67093	18.23	ug/L		97
68) 2-Chlorotoluene	11.108	126	55735	20.45	ug/L		98
69) 1,3,5-Trimethylbenzene	11.145	105	200971	20.58	ug/L		96
70) 1,2,3-Trichloropropane	11.145	110	25734	18.52	ug/L		85
71) t-1,4-Dichloro-2-butene	11.181	88	9958	16.65	ug/L	#	86
72) 4-Chlorotoluene	11.242	91	165848	19.86	ug/L		97
73) tert-Butylbenzene	11.400	91	101116	18.65	ug/L		95
74) 1,2,4-Trimethylbenzene	11.455	105	205159	21.11	ug/L		100
75) sec-Butylbenzene	11.540	105	230008	19.65	ug/L		99
76) 4-Isopropyltoluene	11.650	119	201464	21.03	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	114205	20.36	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	115563	19.04	ug/L		98
79) n-Butylbenzene	11.966	91	165249	18.47	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	102065	19.95	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	17057	16.83	ug/L		95
82) Hexachlorobutadiene	13.213	223	16906	20.41	ug/L		97
83) 1,2,4-Trichlorobenzene	13.231	180	63662	20.13	ug/L		94
84) Naphthalene	13.505	128	202120	16.86	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	63097	19.66	ug/L		99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011721.D
Acq On : 17 Jan 2020 6:28 pm
Operator : IMA
Sample : 0010544-BS2
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 20 10:32:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011722.D
Acq On : 17 Jan 2020 6:55 pm
Operator : IMA
Sample : 0010544-BS3
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 22 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	109	0.00	
2		Dichlorodifluoromethane	20.000	15.772	21.1#	94	0.00	Q55
3	P	Chloromethane	20.000	16.783	16.1	98	0.00	
4	C	Vinyl Chloride	20.000	18.908	5.5	104	0.00	
5		Bromomethane	20.000	18.894	5.5	105	0.00	
6		Chloroethane	20.000	18.712	6.4	113	0.00	
7		Trichlorofluoromethane	20.000	17.328	13.4	97	0.00	
8		Ethanol	1250.000	1127.493	9.8	102	0.02	
9	C	1,1-Dichloroethene	20.000	18.290	8.6	103	0.00	
10		Carbon Disulfide	20.000	18.725	6.4	109	0.00	
11		Freon 113	20.000	19.809	1.0	107	0.00	
12		Iodomethane	20.000	25.247	-26.2#	155	0.00	Q56
13		Methylene Chloride	20.000	20.112	-0.6	112	0.00	
14		Acetone	40.000	37.983	5.0	113	0.00	
15		t-1,2-Dichloroethene	20.000	19.137	4.3	106	0.00	
16		n-Hexane	20.000	20.481	-2.4	107	0.00	
17		Methyl-tert-butyl-ether	20.000	20.143	-0.7	110	0.00	
18		tert-Butanol (TBA)	1250.000	1273.567	-1.9	105	0.01	
19		Diisopropyl ether (DIPE)	5.000	4.799	4.0	99	0.00	
20	P	1,1-Dichloroethane	20.000	20.210	-1.1	110	0.00	
21		Acrylonitrile	20.000	20.195	-1.0	106	0.00	
22		Ethyl-tert-butyl ether (ETB	5.000	4.967	0.7	99	0.00	
23		c-1,2-Dichloroethene	20.000	20.345	-1.7	107	0.00	
24		2,2-Dichloropropane	20.000	18.801	6.0	102	0.00	
25		Bromochloromethane	20.000	19.000	5.0	103	0.00	
26	C	Chloroform	20.000	20.195	-1.0	110	0.00	
27		Carbon Tetrachloride	20.000	20.182	-0.9	109	0.00	
28		Tetrahydrofuran	20.000	18.643	6.8	101	0.00	
29		1,1,1-Trichloroethane	20.000	20.145	-0.7	106	0.00	
30	S	Dibromofluoromethane (S)	50.000	51.476	-3.0	115	0.00	
31		1,1-Dichloropropene	20.000	20.486	-2.4	107	0.00	
32		2-Butanone (MEK)	40.000	35.243	11.9	103	0.00	
33		Benzene	20.000	20.519	-2.6	111	0.00	
34		tert-Amyl methyl ether (TAM	5.000	5.075	-1.5	115	0.00	
35		1,2-Dichloroethane (EDC)	20.000	19.128	4.4	103	0.00	
36		iso-Butyl Alcohol	500.000	448.309	10.3	102	0.00	
37	S	1,4-Difluorobenzene (S)	50.000	53.814	-7.6	119	0.00	
38		Trichloroethene (TCE)	20.000	22.955	-14.8	121	0.00	
39		tert-Amyl ethyl ether (TAEE	5.000	5.082	-1.6	108	0.00	
40		Dibromomethane	20.000	21.732	-8.7	116	0.00	
41	C	1,2-Dichloropropane	20.000	20.292	-1.5	111	0.00	
42		Bromodichloromethane	20.000	20.900	-4.5	110	0.00	
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	120	0.00	
44		c-1,3-Dichloropropene	20.000	18.840	5.8	105	0.00	
45	S	Toluene-d8 (S)	50.000	48.102	3.8	113	0.00	
46	C	Toluene	20.000	19.319	3.4	115	0.00	
47		Tetrachloroethene (PCE)	20.000	21.768	-8.8	124	0.00	
48		4-Methyl-2-Pentanone (MIBK)	40.000	33.941	15.1	102	0.00	
49		t-1,3-Dichloropropene	20.000	20.405	-2.0	111	0.00	
50		1,1,2-Trichloroethane	20.000	20.255	-1.3	120	0.00	

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011722.D
Acq On : 17 Jan 2020 6:55 pm
Operator : IMA
Sample : 0010544-BS3
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 20 10:32:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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)
51		Dibromochloromethane	20.000	20.105	-0.5	120	0.00
52		1,3-Dichloropropane	20.000	19.907	0.5	115	0.00
53		1,2-Dibromoethane (EDB)	20.000	20.936	-4.7	123	0.00
54		2-Hexanone	40.000	32.410	19.0	103	0.00
55	P	Chlorobenzene	20.000	20.165	-0.8	120	0.00
56	C	Ethylbenzene	20.000	19.869	0.7	114	0.00
57		1,1,1,2-Tetrachloroethane	20.000	20.887	-4.4	124	0.00
58		m,p-Xylenes (2)	40.000	42.507	-6.3	115	0.00
59		o-Xylene	20.000	21.623	-8.1	116	0.00
60		Styrene	20.000	19.225	3.9	122	0.00
61	P	Bromoform	20.000	21.591	-8.0	126	0.00
62		Isopropylbenzene	20.000	21.116	-5.6	118	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	127	0.00
64	S	4-Bromofluorobenzene (S)	50.000	51.242	-2.5	130	0.00
65		Bromobenzene	20.000	21.205	-6.0	130	0.00
66		n-Propylbenzene	20.000	19.187	4.1	114	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	19.004	5.0	112	0.00
68		2-Chlorotoluene	20.000	20.809	-4.0	121	0.00
69		1,3,5-Trimethylbenzene	20.000	21.136	-5.7	117	0.00
70		1,2,3-Trichloropropane	20.000	18.868	5.7	113	0.00
71		t-1,4-Dichloro-2-butene	20.000	17.510	12.4	110	0.00
72		4-Chlorotoluene	20.000	20.090	-0.4	116	0.00
73		tert-Butylbenzene	20.000	19.399	3.0	112	0.00
74		1,2,4-Trimethylbenzene	20.000	21.543	-7.7	119	0.00
75		sec-Butylbenzene	20.000	20.734	-3.7	116	0.00
76		4-Isopropyltoluene	20.000	21.638	-8.2	119	0.00
77		1,3-Dichlorobenzene	20.000	21.057	-5.3	124	0.00
78		1,4-Dichlorobenzene	20.000	19.443	2.8	126	0.00
79		n-Butylbenzene	20.000	19.059	4.7	114	0.00
80		1,2-Dichlorobenzene	20.000	20.735	-3.7	122	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	18.114	9.4	118	0.00
82		Hexachlorobutadiene	20.000	20.412	-2.1	121	0.00
83		1,2,4-Trichlorobenzene	20.000	21.054	-5.3	126	0.00
84		Naphthalene	20.000	18.308	8.5	119	0.00
85		1,2,3-Trichlorobenzene	20.000	21.294	-6.5	122	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011722.D
Acq On : 17 Jan 2020 6:55 pm
Operator : IMA
Sample : 0010544-BS3
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 22 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	118190	50.00	ug/L	#	0.00
43) Chlorobenzene-d5 (I)	9.800	117	309013	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	152673	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	98283	51.48	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	371028	53.81	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	412055	48.10	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	120766	51.24	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.703	85	36281	15.77	ug/L		100
3) Chloromethane	1.898	50	56906	16.78	ug/L		99
4) Vinyl Chloride	2.001	62	48362	18.91	ug/L		94
5) Bromomethane	2.348	96	26016	18.89	ug/L		94
6) Chloroethane	2.469	64	11495	18.71	ug/L		98
7) Trichlorofluoromethane	2.597	101	15721	17.33	ug/L		97
8) Ethanol	3.291	45	84060	1127.49	ug/L		90
9) 1,1-Dichloroethene	3.145	61	52515	18.29	ug/L		93
10) Carbon Disulfide	3.157	76	96593	18.73	ug/L		98
11) Freon 113	3.200	101	42260	19.81	ug/L		94
12) Iodomethane	3.297	142	12380	25.25	ug/L		98
13) Methylene Chloride	3.784	84	48842	20.11	ug/L		93
14) Acetone	3.869	43	56771	37.98	ug/L		98
15) t-1,2-Dichloroethene	3.948	61	67302	19.14	ug/L		92
16) n-Hexane	4.045	86	11026	20.48	ug/L	#	84
17) Methyl-tert-butyl-ether	4.106	73	174470	20.14	ug/L		69
18) tert-Butanol (TBA)	4.270	59	851722	1273.57	ug/L	#	86
19) Diisopropyl ether (DIPE)	4.501	45	37019	4.80	ug/L		93
20) 1,1-Dichloroethane	4.580	63	81941	20.21	ug/L		98
21) Acrylonitrile	4.635	53	30748	20.19	ug/L		100
22) Ethyl-tert-butyl ether...	4.866	59	36451	4.97	ug/L		100
23) c-1,2-Dichloroethene	5.128	61	66586	20.34	ug/L		93
24) 2,2-Dichloropropane	5.237	77	70234	18.80	ug/L		95
25) Bromochloromethane	5.329	49	38455	19.00	ug/L		88
26) Chloroform	5.414	83	89966	20.19	ug/L		97
27) Carbon Tetrachloride	5.554	117	64614	20.18	ug/L		95
28) Tetrahydrofuran	5.584	42	27011	18.64	ug/L		91
29) 1,1,1-Trichloroethane	5.615	97	82675	20.14	ug/L		98
31) 1,1-Dichloropropene	5.749	75	69337	20.49	ug/L		98
32) 2-Butanone (MEK)	5.730	43	82645	35.24	ug/L		96
33) Benzene	5.998	78	222160	20.52	ug/L		98
34) tert-Amyl methyl ether...	6.144	73	35693	5.07	ug/L		97
35) 1,2-Dichloroethane (EDC)	6.205	62	73392	19.13	ug/L		97
36) iso-Butyl Alcohol	6.278	43	113483	448.31	ug/L		94
38) Trichloroethene (TCE)	6.618	130	58446	22.96	ug/L		98
39) tert-Amyl ethyl ether ...	6.898	59	24751	5.08	ug/L		99
40) Dibromomethane	7.056	93	33060	21.73	ug/L		98
41) 1,2-Dichloropropane	7.166	63	51679	20.29	ug/L		90
42) Bromodichloromethane	7.245	83	62998	20.90	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	72716	18.84	ug/L		97
46) Toluene	8.218	91	233869	19.32	ug/L		98
47) Tetrachloroethene (PCE)	8.669	166	61102	21.77	ug/L		98
48) 4-Methyl-2-Pentanone (...	8.656	43	122716	33.94	ug/L		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011722.D
Acq On : 17 Jan 2020 6:55 pm
Operator : IMA
Sample : 0010544-BS3
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 20 10:32:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

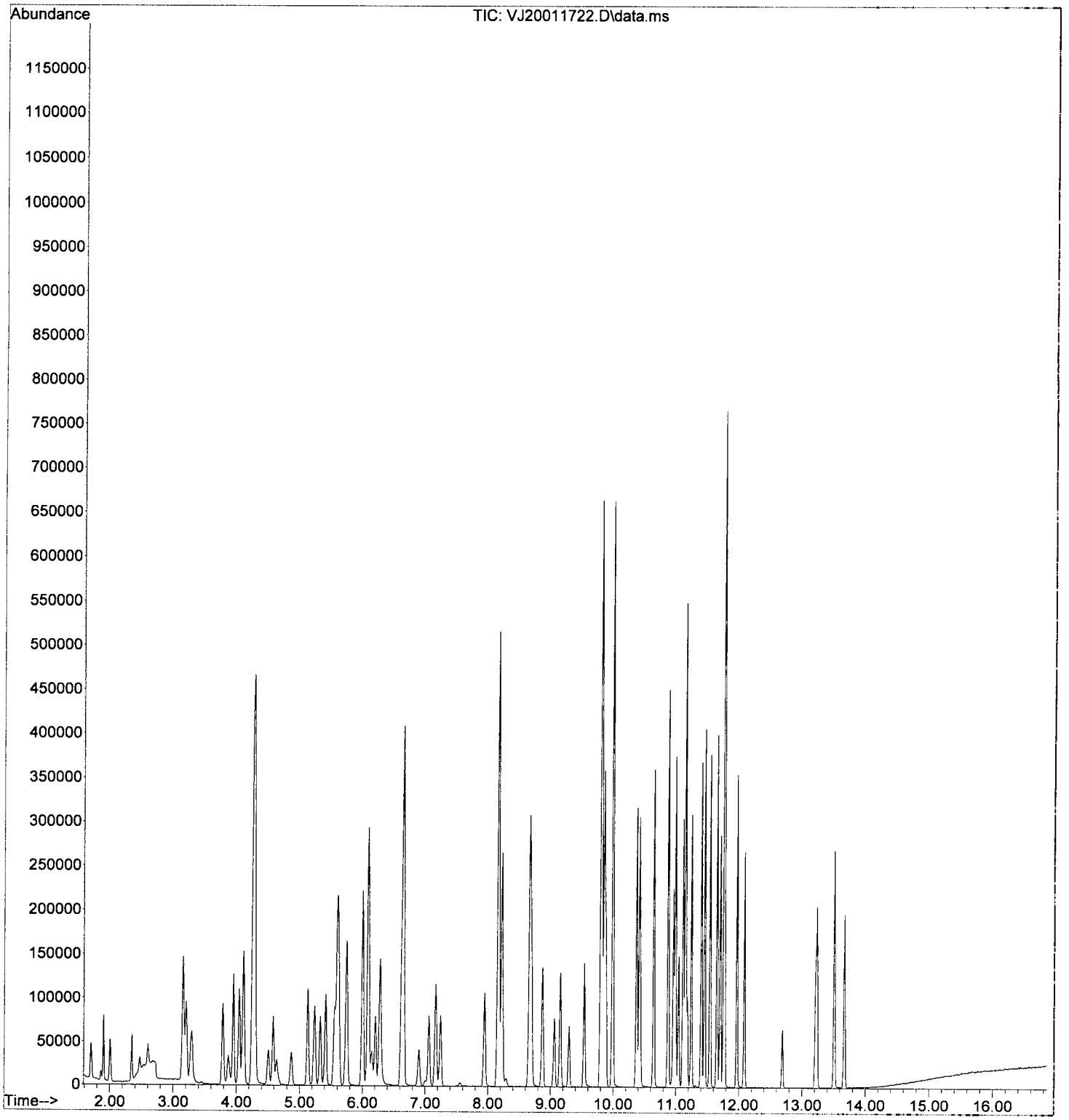
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	75128	20.40	ug/L		97
50) 1,1,2-Trichloroethane	8.869	97	50533	20.26	ug/L		95
51) Dibromochloromethane	9.058	129	46442	20.11	ug/L		99
52) 1,3-Dichloropropane	9.155	76	84915	19.91	ug/L		95
53) 1,2-Dibromoethane (EDB)	9.295	107	52044	20.94	ug/L		100
54) 2-Hexanone	9.533	43	89595	32.41	ug/L		99
55) Chlorobenzene	9.812	112	147839	20.17	ug/L		100
56) Ethylbenzene	9.849	91	243020	19.87	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.879	131	51268	20.89	ug/L		98
58) m,p-Xylenes (2)	9.989	91	365148	42.51	ug/L		99
59) o-Xylene	10.372	91	172526	21.62	ug/L		99
60) Styrene	10.415	104	129170	19.23	ug/L		94
61) Bromoform	10.433	173	34767	21.59	ug/L		95
62) Isopropylbenzene	10.646	105	221888	21.12	ug/L		99
65) Bromobenzene	10.956	156	61040	21.20	ug/L		95
66) n-Propylbenzene	10.986	91	255601	19.19	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	64166	19.00	ug/L		98
68) 2-Chlorotoluene	11.108	126	52041	20.81	ug/L		99
69) 1,3,5-Trimethylbenzene	11.145	105	189356	21.14	ug/L		97
70) 1,2,3-Trichloropropane	11.145	110	24058	18.87	ug/L	#	84
71) t-1,4-Dichloro-2-butene	11.181	88	9612	17.51	ug/L	#	87
72) 4-Chlorotoluene	11.242	91	153916	20.09	ug/L		98
73) tert-Butylbenzene	11.400	91	96506	19.40	ug/L		99
74) 1,2,4-Trimethylbenzene	11.455	105	192075	21.54	ug/L		99
75) sec-Butylbenzene	11.540	105	222730	20.73	ug/L		99
76) 4-Isopropyltoluene	11.650	119	190173	21.64	ug/L		100
77) 1,3-Dichlorobenzene	11.704	146	108371	21.06	ug/L		99
78) 1,4-Dichlorobenzene	11.771	146	108283	19.44	ug/L		98
79) n-Butylbenzene	11.966	91	156506	19.06	ug/L		97
80) 1,2-Dichlorobenzene	12.088	146	97358	20.74	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	16902	18.11	ug/L		94
82) Hexachlorobutadiene	13.213	223	15516	20.41	ug/L		97
83) 1,2,4-Trichlorobenzene	13.237	180	61107	21.05	ug/L		98
84) Naphthalene	13.505	128	201646	18.31	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	62704	21.29	ug/L		98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011722.D
Acq On : 17 Jan 2020 6:55 pm
Operator : IMA
Sample : 0010544-BS3
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 20 10:32:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011723.D
Acq On : 17 Jan 2020 7:22 pm
Operator : IMA
Sample : 0010544-BS4
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 23 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	109	0.00
2		Dichlorodifluoromethane	20.000	16.180	19.1	96	-0.01
3	P	Chloromethane	20.000	18.043	9.8	105	-0.01
4	C	Vinyl Chloride	20.000	19.077	4.6	105	-0.01
5		Bromomethane	20.000	20.283	-1.4	112	0.00
6		Chloroethane	20.000	19.123	4.4	115	0.00
7		Trichlorofluoromethane	20.000	18.383	8.1	103	-0.01
8		Ethanol	1250.000	1075.782	13.9	97	0.02
9	C	1,1-Dichloroethene	20.000	18.952	5.2	107	-0.01
10		Carbon Disulfide	20.000	19.278	3.6	112	-0.02
11		Freon 113	20.000	19.851	0.7	107	-0.02
12		Iodomethane	20.000	27.108	# -35.5#	169	-0.02 Q56
13		Methylene Chloride	20.000	20.447	-2.2	114	-0.01
14		Acetone	40.000	37.566	6.1	111	0.00
15		t-1,2-Dichloroethene	20.000	19.664	1.7	109	-0.01
16		n-Hexane	20.000	20.957	-4.8	110	-0.01
17		Methyl-tert-butyl-ether	20.000	20.057	-0.3	110	0.00
18		tert-Butanol (TBA)	1250.000	1272.797	-1.8	105	0.00
19		Diisopropyl ether (DIPE)	5.000	4.786	4.3	98	0.00
20	P	1,1-Dichloroethane	20.000	19.992	0.0	108	-0.01
21		Acrylonitrile	20.000	20.223	-1.1	106	0.00
22		Ethyl-tert-butyl ether (ETB	5.000	4.853	2.9	96	0.00
23		c-1,2-Dichloroethene	20.000	20.667	-3.3	108	0.00
24		2,2-Dichloropropane	20.000	19.291	3.5	104	0.00
25		Bromochloromethane	20.000	19.176	4.1	103	0.00
26	C	Chloroform	20.000	20.560	-2.8	112	0.00
27		Carbon Tetrachloride	20.000	20.779	-3.9	112	0.00
28		Tetrahydrofuran	20.000	19.417	2.9	105	0.00
29		1,1,1-Trichloroethane	20.000	20.824	-4.1	109	0.00
30	S	Dibromofluoromethane (S)	50.000	51.600	-3.2	115	0.00
31		1,1-Dichloropropene	20.000	21.116	-5.6	110	0.00
32		2-Butanone (MEK)	40.000	35.315	11.7	103	0.00
33		Benzene	20.000	21.069	-5.3	114	0.00
34		tert-Amyl methyl ether (TAM	5.000	5.121	-2.4	115	-0.01
35		1,2-Dichloroethane (EDC)	20.000	19.460	2.7	105	0.00
36		iso-Butyl Alcohol	500.000	450.604	9.9	103	0.00
37	S	1,4-Difluorobenzene (S)	50.000	53.559	-7.1	118	0.00
38		Trichloroethene (TCE)	20.000	23.658	-18.3	124	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	5.187	-3.7	110	0.00
40		Dibromomethane	20.000	21.778	-8.9	115	0.00
41	C	1,2-Dichloropropane	20.000	20.619	-3.1	112	0.00
42		Bromodichloromethane	20.000	21.111	-5.6	111	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	120	0.00
44		c-1,3-Dichloropropene	20.000	19.108	4.5	106	0.00
45	S	Toluene-d8 (S)	50.000	47.481	5.0	112	0.00
46	C	Toluene	20.000	19.489	2.6	117	0.00
47		Tetrachloroethene (PCE)	20.000	22.243	-11.2	127	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	33.946	15.1	102	0.00
49		t-1,3-Dichloropropene	20.000	20.555	-2.8	112	0.00
50		1,1,2-Trichloroethane	20.000	19.962	0.2	118	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011723.D
Acq On : 17 Jan 2020 7:22 pm
Operator : IMA
Sample : 0010544-BS4
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 20 10:32:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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)
51		Dibromochloromethane	20.000	20.189	-0.9	121	0.00
52		1,3-Dichloropropane	20.000	19.770	1.2	115	0.00
53		1,2-Dibromoethane (EDB)	20.000	20.917	-4.6	123	0.00
54		2-Hexanone	40.000	31.850	OK 20.4#	102	0.00
55	P	Chlorobenzene	20.000	20.519	-2.6	123	0.00
56	C	Ethylbenzene	20.000	20.288	-1.4	117	0.00
57		1,1,1,2-Tetrachloroethane	20.000	20.710	-3.6	123	0.00
58		m,p-Xylenes (2)	40.000	43.315	-8.3	118	0.00
59		o-Xylene	20.000	21.929	-9.6	118	0.00
60		Styrene	20.000	19.441	2.8	124	0.00
61	P	Bromoform	20.000	21.703	-8.5	127	0.00
62		Isopropylbenzene	20.000	21.669	-8.3	122	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	123	0.00
64	S	4-Bromofluorobenzene (S)	50.000	52.147	-4.3	128	0.00
65		Bromobenzene	20.000	22.046	-10.2	131	0.00
66		n-Propylbenzene	20.000	20.304	-1.5	117	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	19.453	2.7	111	0.00
68		2-Chlorotoluene	20.000	21.936	-9.7	124	0.00
69		1,3,5-Trimethylbenzene	20.000	22.409	-12.0	121	0.00
70		1,2,3-Trichloropropane	20.000	19.987	0.1	116	0.00
71		t-1,4-Dichloro-2-butene	20.000	17.962	10.2	110	0.00
72		4-Chlorotoluene	20.000	21.088	-5.4	118	0.00
73		tert-Butylbenzene	20.000	20.497	-2.5	115	0.00
74		1,2,4-Trimethylbenzene	20.000	22.653	-13.3	121	0.00
75		sec-Butylbenzene	20.000	22.048	-10.2	120	0.00
76		4-Isopropyltoluene	20.000	22.843	-14.2	122	0.00
77		1,3-Dichlorobenzene	20.000	21.995	-10.0	126	0.00
78		1,4-Dichlorobenzene	20.000	20.213	-1.1	127	0.00
79		n-Butylbenzene	20.000	20.021	-0.1	116	0.00
80		1,2-Dichlorobenzene	20.000	21.603	-8.0	123	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	18.641	6.8	118	0.00
82		Hexachlorobutadiene	20.000	22.434	-12.2	129	0.00
83		1,2,4-Trichlorobenzene	20.000	21.991	-10.0	127	0.00
84		Naphthalene	20.000	19.019	4.9	120	0.00
85		1,2,3-Trichlorobenzene	20.000	22.316	-11.6	124	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011723.D
Acq On : 17 Jan 2020 7:22 pm
Operator : IMA
Sample : 0010544-BS4
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 23 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 10:32:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	117842	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	310075	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	148086	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	98229	51.60	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	368182	53.56	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	408135	47.48	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	119205	52.15	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	37112	16.18	ug/L		97
3) Chloromethane	1.886	50	60998	18.04	ug/L		98
4) Vinyl Chloride	1.989	62	48651	19.08	ug/L		95
5) Bromomethane	2.336	96	27534	20.28	ug/L		97
6) Chloroethane	2.457	64	11713	19.12	ug/L		98
7) Trichlorofluoromethane	2.585	101	16629	18.38	ug/L		99
8) Ethanol	3.285	45	80272	1075.78	ug/L		87
9) 1,1-Dichloroethene	3.139	61	54256	18.95	ug/L		91
10) Carbon Disulfide	3.145	76	99149	19.28	ug/L		97
11) Freon 113	3.187	101	42225	19.85	ug/L		97
12) Iodomethane	3.285	142	13461	27.11	ug/L		98
13) Methylene Chloride	3.771	84	49466	20.45	ug/L		95
14) Acetone	3.863	43	55982	37.57	ug/L		99
15) t-1,2-Dichloroethene	3.936	61	68953	19.66	ug/L		94
16) n-Hexane	4.033	86	11249	20.96	ug/L		98
17) Methyl-tert-butyl-ether	4.100	73	173214	20.06	ug/L		93
18) tert-Butanol (TBA)	4.264	59	848701	1272.80	ug/L	#	86
19) Diisopropyl ether (DIPE)	4.495	45	36810	4.79	ug/L		99
20) 1,1-Dichloroethane	4.568	63	80816	19.99	ug/L		99
21) Acrylonitrile	4.629	53	30700	20.22	ug/L		98
22) Ethyl-tert-butyl ether...	4.860	59	35505	4.85	ug/L		93
23) c-1,2-Dichloroethene	5.122	61	67443	20.67	ug/L		94
24) 2,2-Dichloropropane	5.232	77	71853	19.29	ug/L		93
25) Bromochloromethane	5.323	49	38698	19.18	ug/L		86
26) Chloroform	5.408	83	91324	20.56	ug/L		98
27) Carbon Tetrachloride	5.548	117	66331	20.78	ug/L		98
28) Tetrahydrofuran	5.584	42	28049	19.42	ug/L		93
29) 1,1,1-Trichloroethane	5.615	97	85210	20.82	ug/L		96
31) 1,1-Dichloropropene	5.743	75	71260	21.12	ug/L		99
32) 2-Butanone (MEK)	5.724	43	82572	35.32	ug/L		98
33) Benzene	5.992	78	227444	21.07	ug/L		99
34) tert-Amyl methyl ether...	6.138	73	35913	5.12	ug/L		97
35) 1,2-Dichloroethane (EDC)	6.199	62	74445	19.46	ug/L		98
36) iso-Butyl Alcohol	6.278	43	113728	450.60	ug/L		98
38) Trichloroethene (TCE)	6.613	130	60058	23.66	ug/L		99
39) tert-Amyl ethyl ether ...	6.892	59	25188	5.19	ug/L		94
40) Dibromomethane	7.051	93	33032	21.78	ug/L		100
41) 1,2-Dichloropropane	7.166	63	52358	20.62	ug/L		92
42) Bromodichloromethane	7.239	83	63449	21.11	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	74002	19.11	ug/L		95
46) Toluene	8.219	91	236740	19.49	ug/L		96
47) Tetrachloroethene (PCE)	8.669	166	62648	22.24	ug/L		98
48) 4-Methyl-2-Pentanone (...	8.657	43	123155	33.95	ug/L		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011723.D
Acq On : 17 Jan 2020 7:22 pm
Operator : IMA
Sample : 0010544-BS4
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 20 10:32:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

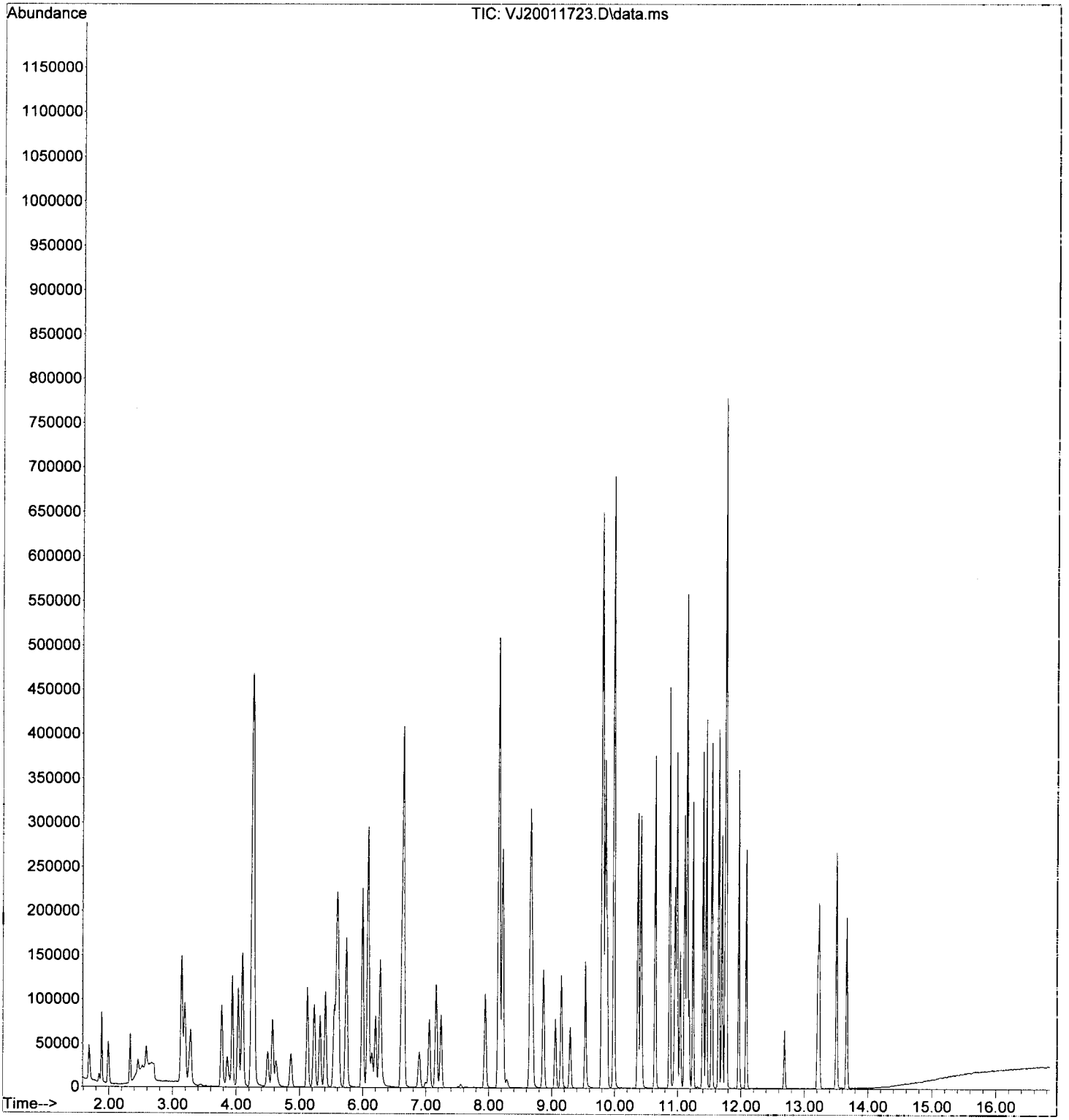
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	75943	20.56	ug/L		98
50) 1,1,2-Trichloroethane	8.870	97	49974	19.96	ug/L		97
51) Dibromochloromethane	9.058	129	46796	20.19	ug/L		100
52) 1,3-Dichloropropane	9.155	76	84619	19.77	ug/L		95
53) 1,2-Dibromoethane (EDB)	9.289	107	52176	20.92	ug/L		99
54) 2-Hexanone	9.533	43	88289	31.85	ug/L		97
55) Chlorobenzene	9.812	112	150952	20.52	ug/L		99
56) Ethylbenzene	9.849	91	249004	20.29	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.879	131	51006	20.71	ug/L		96
58) m,p-Xylenes (2)	9.989	91	373366	43.32	ug/L		99
59) o-Xylene	10.372	91	175569	21.93	ug/L		98
60) Styrene	10.415	104	131104	19.44	ug/L		93
61) Bromoform	10.427	173	35076	21.70	ug/L		95
62) Isopropylbenzene	10.646	105	228485	21.67	ug/L		99
65) Bromobenzene	10.956	156	61556	22.05	ug/L		96
66) n-Propylbenzene	10.987	91	262345	20.30	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	63709	19.45	ug/L		98
68) 2-Chlorotoluene	11.108	126	53212	21.94	ug/L		98
69) 1,3,5-Trimethylbenzene	11.145	105	194728	22.41	ug/L		96
70) 1,2,3-Trichloropropane	11.145	110	24719	19.99	ug/L		85
71) t-1,4-Dichloro-2-butene	11.181	88	9564	17.96	ug/L	#	86
72) 4-Chlorotoluene	11.242	91	156708	21.09	ug/L		97
73) tert-Butylbenzene	11.400	91	98902	20.50	ug/L		99
74) 1,2,4-Trimethylbenzene	11.455	105	195906	22.65	ug/L		99
75) sec-Butylbenzene	11.540	105	229735	22.05	ug/L		98
76) 4-Isopropyltoluene	11.650	119	194728	22.84	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	109797	22.00	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	109189	20.21	ug/L		99
79) n-Butylbenzene	11.966	91	159464	20.02	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	98384	21.60	ug/L		97
81) 1,2-Dibromo-3-Chloropr...	12.690	157	16891	18.64	ug/L		90
82) Hexachlorobutadiene	13.213	223	16541	22.43	ug/L		95
83) 1,2,4-Trichlorobenzene	13.238	180	61908	21.99	ug/L		98
84) Naphthalene	13.505	128	203324	19.02	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	63740	22.32	ug/L		97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011723.D
Acq On : 17 Jan 2020 7:22 pm
Operator : IMA
Sample : 0010544-BS4
Misc : 50X A19L349 5g/5mL 1000uL/50mL 20/40ppb VOCO
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 20 10:32:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**0A17017**	Instrument:	**VOA-GCMS10**
Date:	**01/17/20 09:11**	Calibration:	**A0A0801**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A17017-IBL1	Soil	QC	QC			A19L200	
2	0A17017-TUN1	Soil	QC	QC			A19L200	
3	0A17017-CCV1	Soil	QC	QC			A19L200	
4	0010530-BS1	Soil	QC	QC		0010530	A19L200	
5	0A17017-CCV2	Soil	QC	QC			A19L200	
6	0010530-BS2	Soil	QC	QC		0010530	A19L200	
7	0010530-BLK1	Soil	QC	QC		0010530	A19L200	
8	A0A0547-01	Soil	8260C Full List		01/17/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/17/20	0010530	A19L200	
9	A0A0539-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
10	0010530-DUP1	Soil	QC	QC		0010530	A19L200	
11	A0A0538-01	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
"	"	Soil	8260C BTEX	(QC Source)		0010530	A19L200	
"	"	Soil	8260C BTEX+N	(QC Source)		0010530	A19L200	
12	0010530-MS1	Soil	QC	QC		0010530	A19L200	
13	0A17017-IBL2	Soil	QC	QC			A19L200	
14	A0A0539-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
15	A0A0507-03	Soil	8260C BTEX+N		01/20/20	0010530	A19L200	
16	A0A0538-02	Soil	8260C Full List	Anchor QEA, LLC	01/27/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/21/20	0010530	A19L200	
17	0A17017-IBL3	Soil	QC	QC			A19L200	
18	0A17017-IBL4	Soil	QC	QC			A19L200	
19	A0A0436-03	Soil	8260C BTEX		01/20/20	0010530	A19L200	
"	"	Soil	NWTPH-Gx	"	01/20/20	0010530	A19L200	
20	0A17017-IBL5	Soil	QC	QC			A19L200	
21	0010544-BLK1	Soil	QC	QC		0010544	A19L200	
22	0010544-BS1	Soil	QC	QC		0010544	A19L200	
23	0010544-BS2	Soil	QC	QC		0010544	A19L200	
24	0010544-BS3	Soil	QC	QC		0010544	A19L200	
25	0010544-BS4	Soil	QC	QC		0010544	A19L200	
26	0010545-BLK1	Soil	QC	QC		0010545	A19L200	
27	0010545-BS1	Soil	QC	QC		0010545	A19L200	
28	0010545-BS2	Soil	QC	QC		0010545	A19L200	
29	0010545-BS3	Soil	QC	QC		0010545	A19L200	
30	0010545-BS4	Soil	QC	QC		0010545	A19L200	
31	0A17017-IBL6	Soil	QC	QC			A19L200	

Data Entered By: IMA 1/22/20

Data Reviewed By: [illegible] 1/27/20

Comments:

↑ 12DCPA to 1/2 ppb

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011724.D
Acq On : 17 Jan 2020 7:49 pm
Operator : IMA
Sample : 0010545-BLK1
Misc : 50X 7.5mL/5mL 1000uL/50mL DI+MeOH
ALS Vial : 24 Sample Multiplier: 1

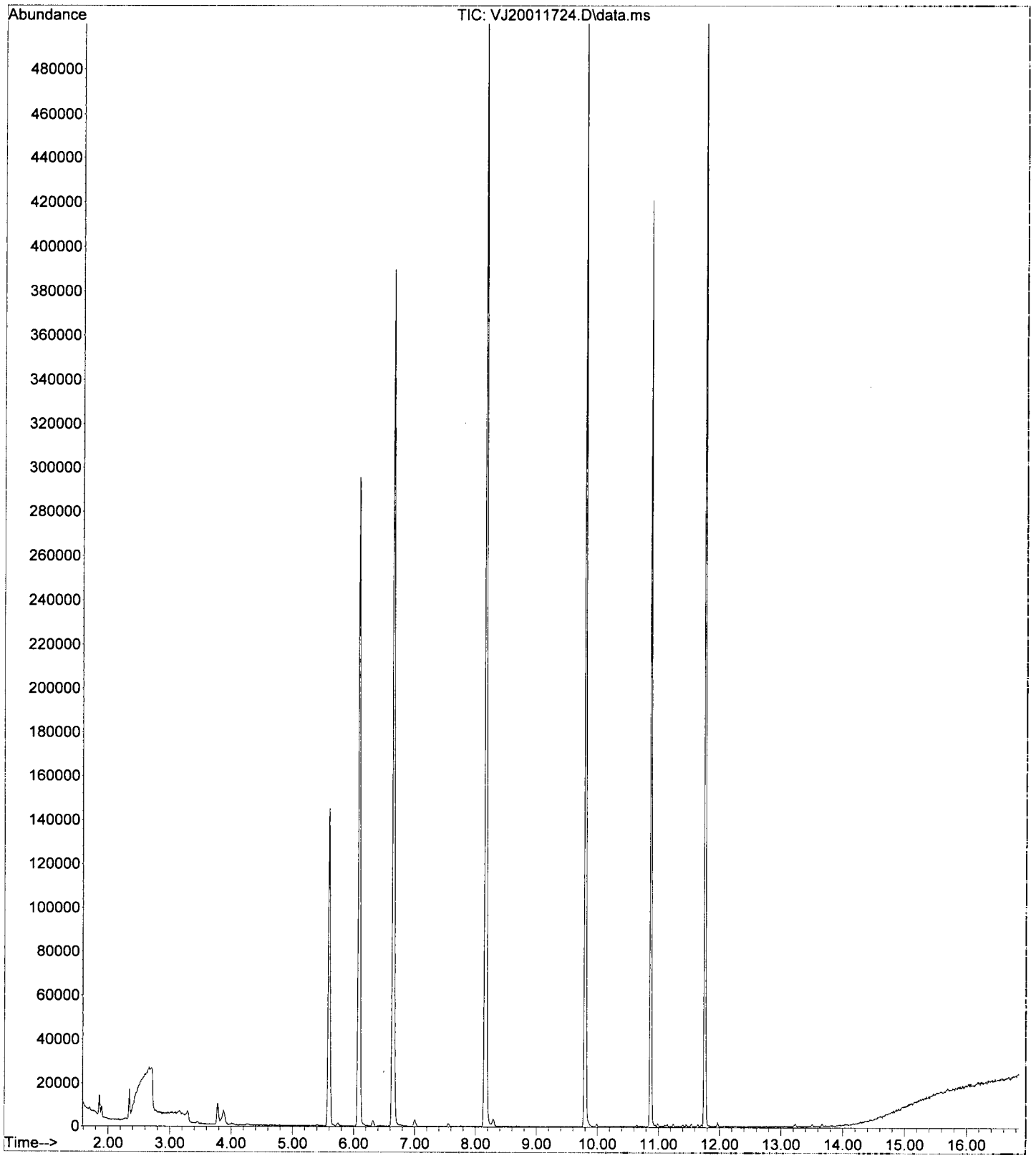
IMA
1/20/20

Quant Time: Jan 20 16:40:02 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	236537	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	364701	47.82	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.871	174	112920	50.41	ug/L	-0.01
9) Toluene-d8 (NR)	8.164	98	403896	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	301540	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	213309	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	70102m	26.06	ug/L	<MDL
5) TPHg (C5-C9)	9.239	TIC	433593m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	370384m	17.67	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	443931m	Below Cal		

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

File :C:\msdchem\1\data\2020-01\0A17017\VJ20011724.D
Operator : IMA
Acquired : 17 Jan 2020 7:49 pm using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010545-BLK1
Misc Info : 50X 7.5mL/5mL 1000uL/50mL DI+MeOH
Vial Number: 24



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011725.D
Acq On : 17 Jan 2020 8:15 pm
Operator : IMA
Sample : 0010545-BS1
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 25 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:40:11 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 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 (IS)	50.000	50.000	0.0	121	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	47.137	5.7	114	-0.01
3	S	4-Bromofluorobenzene (Sur)	50.000	50.054	-0.1	123	-0.01
4	H	NWTPH-Gx (TPH)	500.000	417.550	16.5	107	0.00
5	H	TPHg (C5-C9)	500.000	387.262	22.5	102	0.00
6	H	TPHg (C6-C10)	500.000	414.019	17.2	104	0.00
7	H	CA-LUFT (C5-C12)	500.000	390.527	21.9	103	0.00
8		Benzene (NR)	-1.000	0.000	0.0	112	-0.01
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	110	-0.01
10		Toluene (NR)	-1.000	0.000	0.0	110	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	113	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	123	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	124	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011725.D
Acq On : 17 Jan 2020 8:15 pm
Operator : IMA
Sample : 0010545-BS1
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 25 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:40:11 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

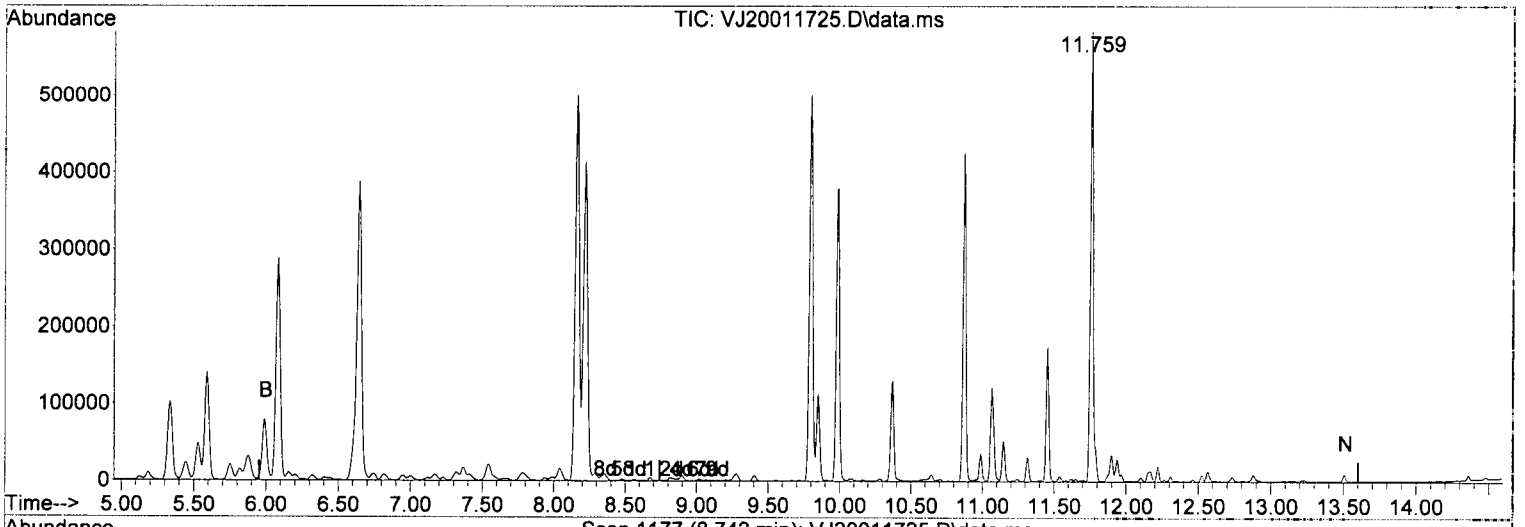
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	233640	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.643	114	355074	47.14	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.871	174	110757	50.05	ug/L	-0.01
9) Toluene-d8 (NR)	8.158	98	393871	0.00	ug/L	-0.01
11) Chlorobenzene-d5 (NR)	9.800	117	289468	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	217051	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3521758m	417.55	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4712547m	387.26	ug/L	
6) TPHg (C6-C10)	9.239	TIC	4110300m	414.02	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5572864m	390.53	ug/L	

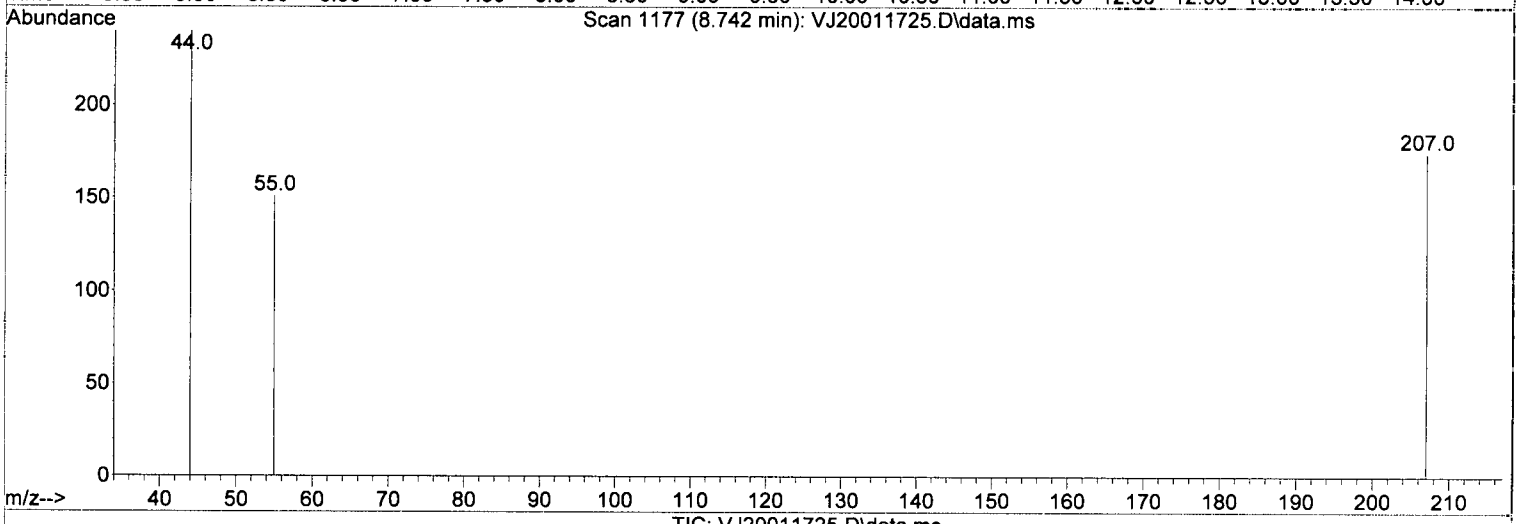
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011725.D
Acq On : 17 Jan 2020 8:15 pm
Operator : IMA
Sample : 0010545-BS1
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 20 16:40:11 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011725.D\data.ms

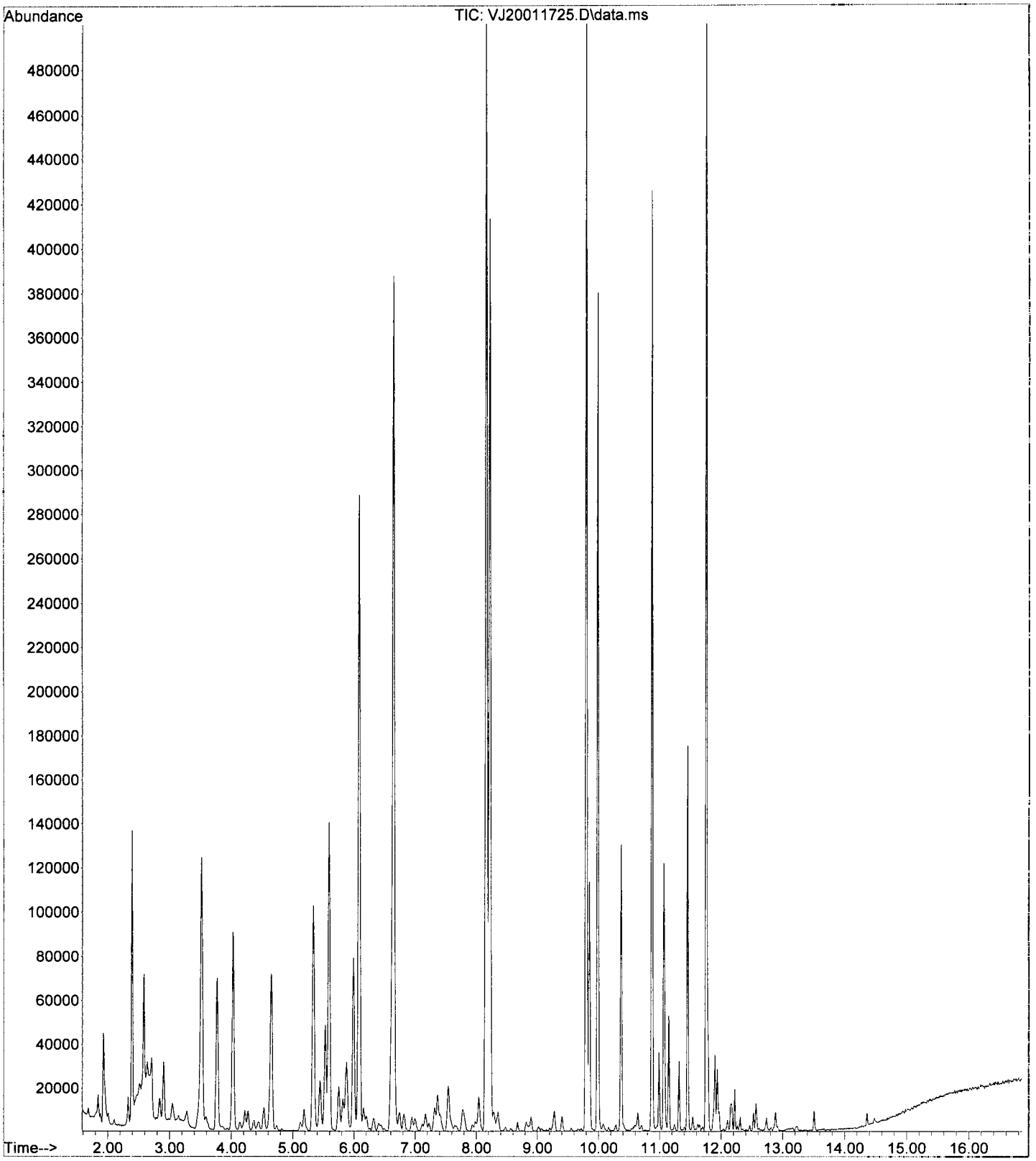
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 417.55 ug/L m

response 3521758

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\2020-01\0A17017\VJ20011725.D
Operator : IMA
Acquired : 17 Jan 2020 8:15 pm using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010545-BS1
Misc Info : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 25



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011726.D
Acq On : 17 Jan 2020 8:42 pm
Operator : IMA
Sample : 0010545-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 26 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:40:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 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 (IS)	50.000	50.000	0.0	118	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	47.023	6.0	111	-0.01
3	S	4-Bromofluorobenzene (Sur)	50.000	49.146	1.7	118	0.00
4	H	NWTPH-Gx (TPH)	500.000	416.969	16.6	104	0.00
5	H	TPHg (C5-C9)	500.000	383.578	23.3	99	0.00
6	H	TPHg (C6-C10)	500.000	405.922	18.8	100	0.00
7	H	CA-LUFT (C5-C12)	500.000	390.334	21.9	100	0.00
8		Benzene (NR)	-1.000	0.000	0.0	109	-0.01
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	106	-0.01
10		Toluene (NR)	-1.000	0.000	0.0	107	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	110	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	117	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	113	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011726.D
Acq On : 17 Jan 2020 8:42 pm
Operator : IMA
Sample : 0010545-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 26 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:40:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

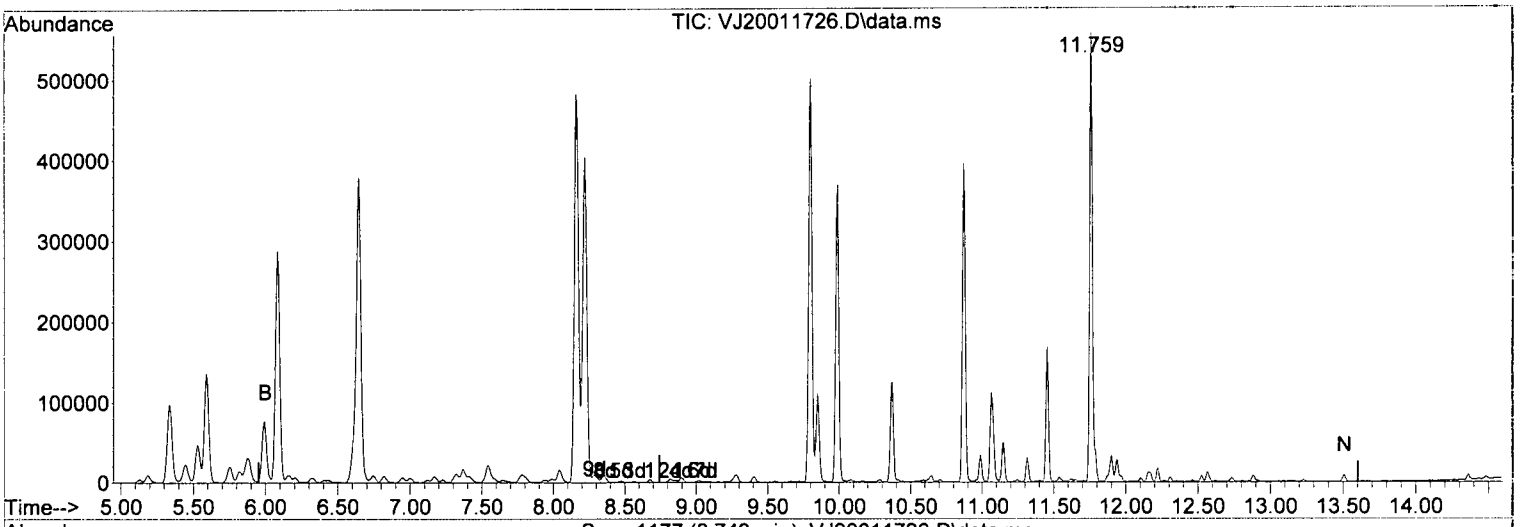
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	227886	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.643	114	345492	47.02	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.877	174	106070	49.15	ug/L	0.00
9) Toluene-d8 (NR)	8.158	98	381542	0.00	ug/L	-0.01
11) Chlorobenzene-d5 (NR)	9.800	117	282712	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	206706	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3430019m	416.97	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4557486m	383.58	ug/L	
6) TPHg (C6-C10)	9.239	TIC	3934479m	405.92	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5433143m	390.33	ug/L	

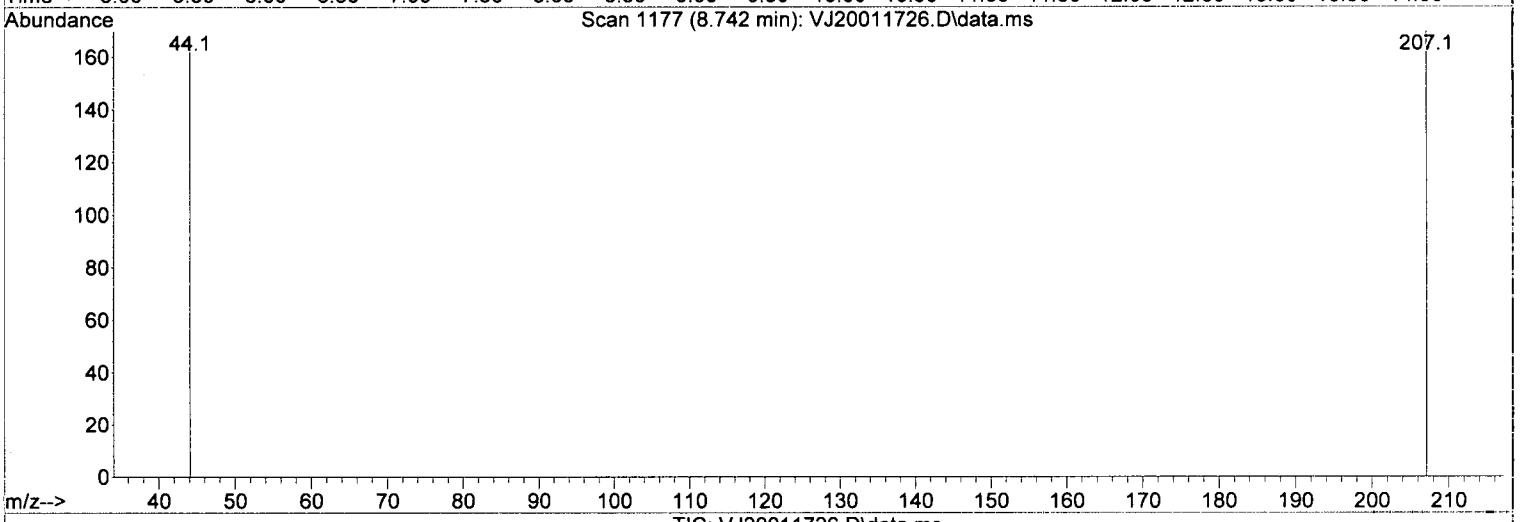
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011726.D
Acq On : 17 Jan 2020 8:42 pm
Operator : IMA
Sample : 0010545-BS2
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 20 16:40:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011726.D\data.ms

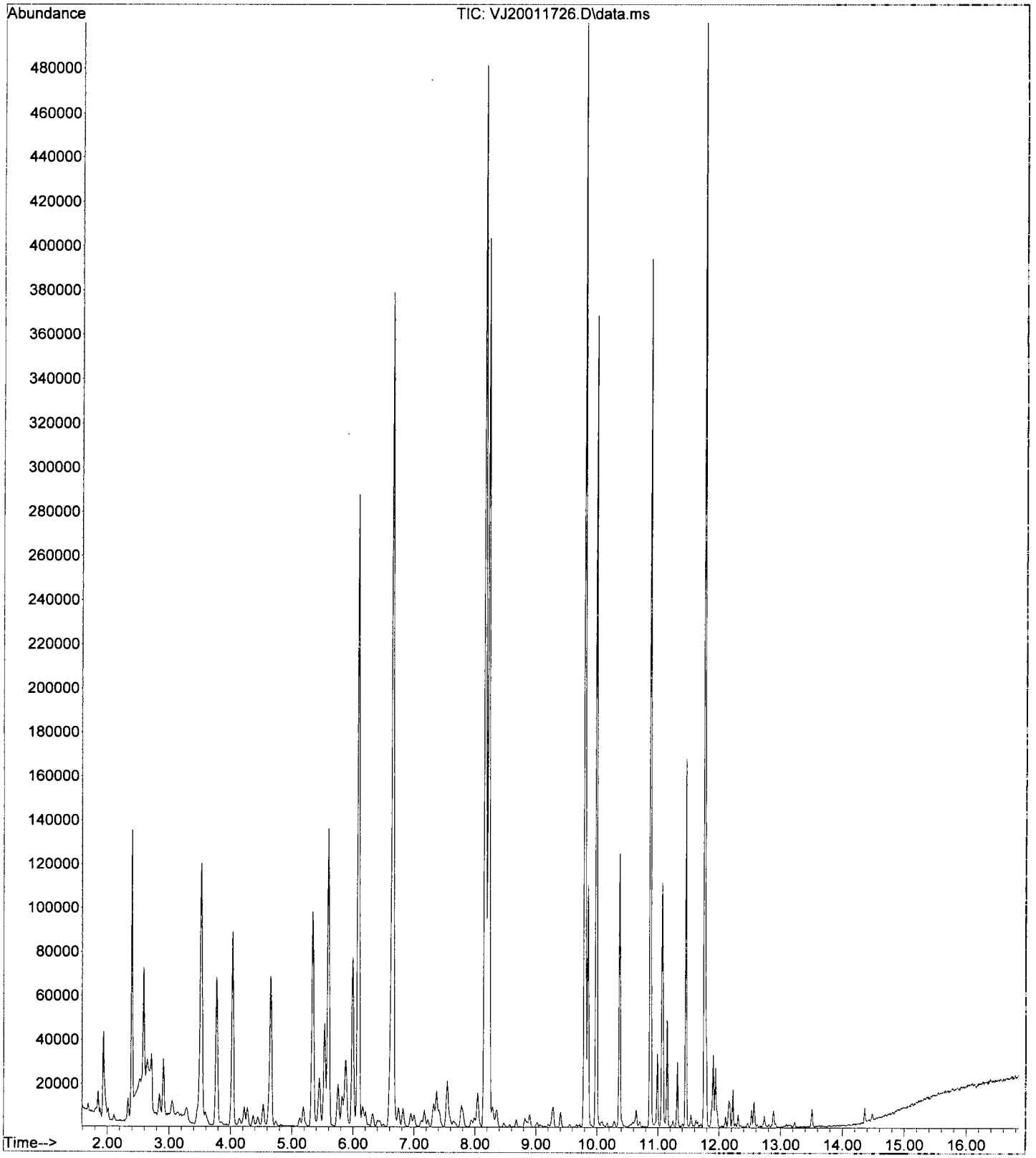
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 416.97 ug/L m

response 3430019

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\2020-01\0A17017\VJ20011726.D
Operator : IMA
Acquired : 17 Jan 2020 8:42 pm using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010545-BS2
Misc Info : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 26



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011727.D
Acq On : 17 Jan 2020 9:09 pm
Operator : IMA
Sample : 0010545-BS3
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 20 16:40:57 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

IMA
1/20/20

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 (IS)	50.000	50.000	0.0	119	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	47.136	5.7	112	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	50.012	-0.0	121	0.00
4	H	NWTPH-Gx (TPH)	500.000	430.637	13.9	108	0.00
5	H	TPHg (C5-C9)	500.000	400.533	19.9	104	0.00
6	H	TPHg (C6-C10)	500.000	426.424	14.7	106	0.00
7	H	CA-LUFT (C5-C12)	500.000	404.863	19.0	105	0.00
8		Benzene (NR)	-1.000	0.000	0.0	108	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	109	0.00
10		Toluene (NR)	-1.000	0.000	0.0	109	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	113	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	119	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	114	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011727.D
Acq On : 17 Jan 2020 9:09 pm
Operator : IMA
Sample : 0010545-BS3
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 27 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:40:57 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

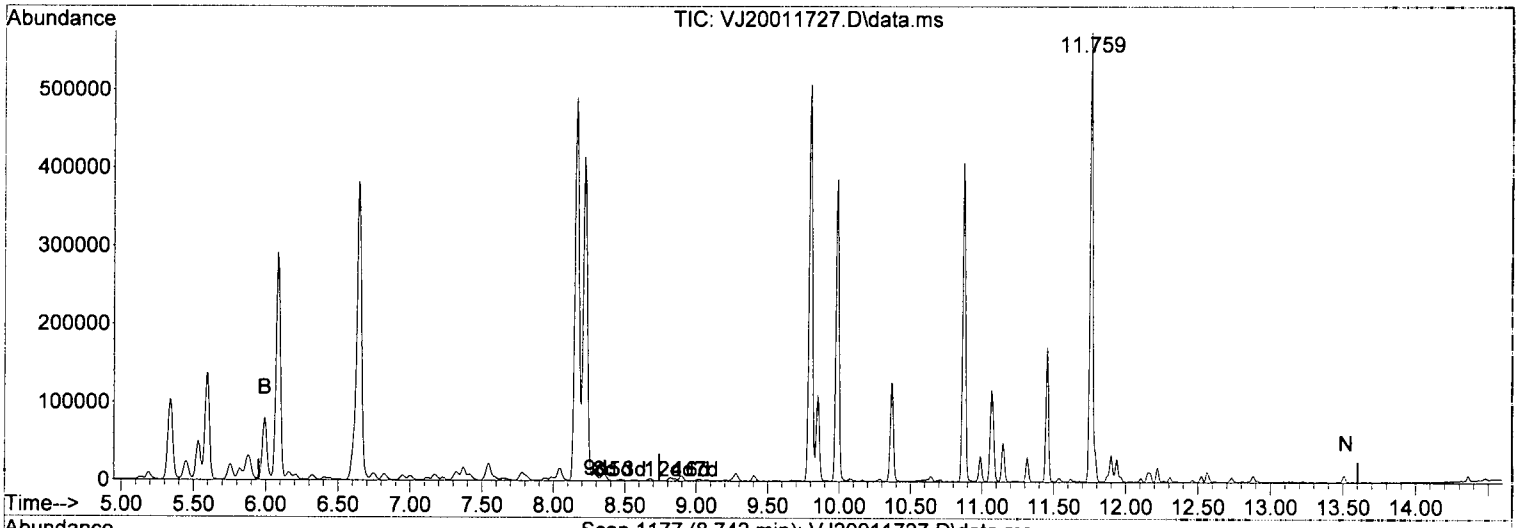
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	229890	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	349366	47.14	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	108889	50.01	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	389487	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	288350	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	210745	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3579073m	430.64	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4778624m	400.53	ug/L	
6) TPHg (C6-C10)	9.239	TIC	4159613m	426.42	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5668804m	404.86	ug/L	

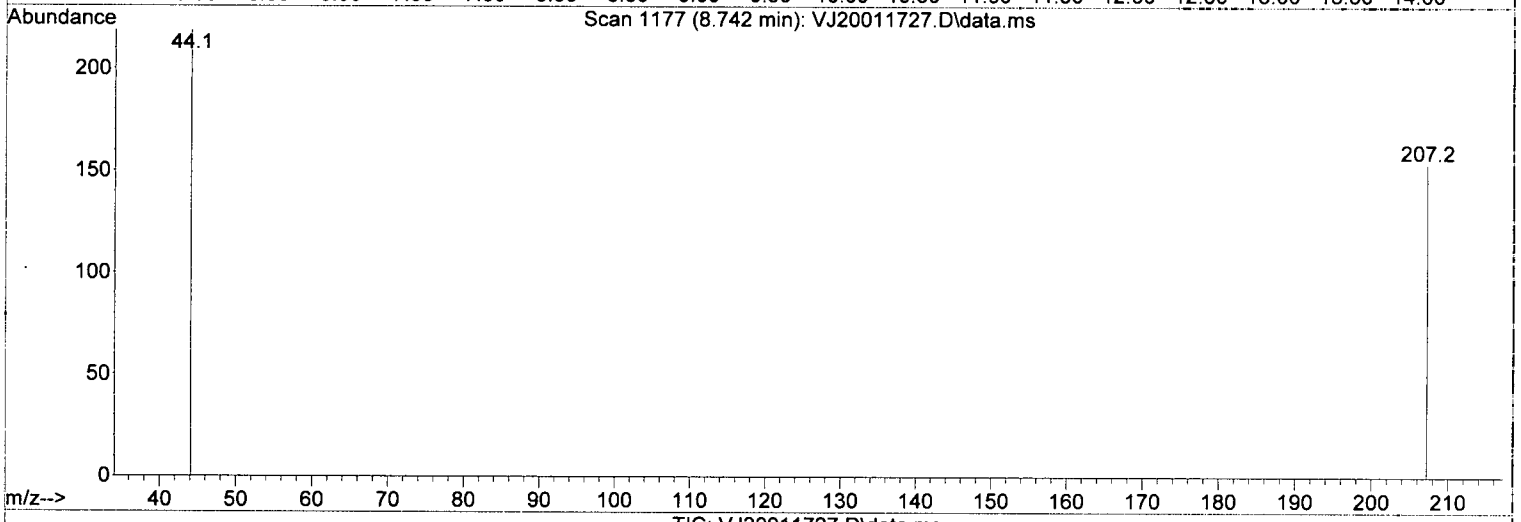
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011727.D
Acq On : 17 Jan 2020 9:09 pm
Operator : IMA
Sample : 0010545-BS3
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 20 16:40:57 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011727.D\data.ms

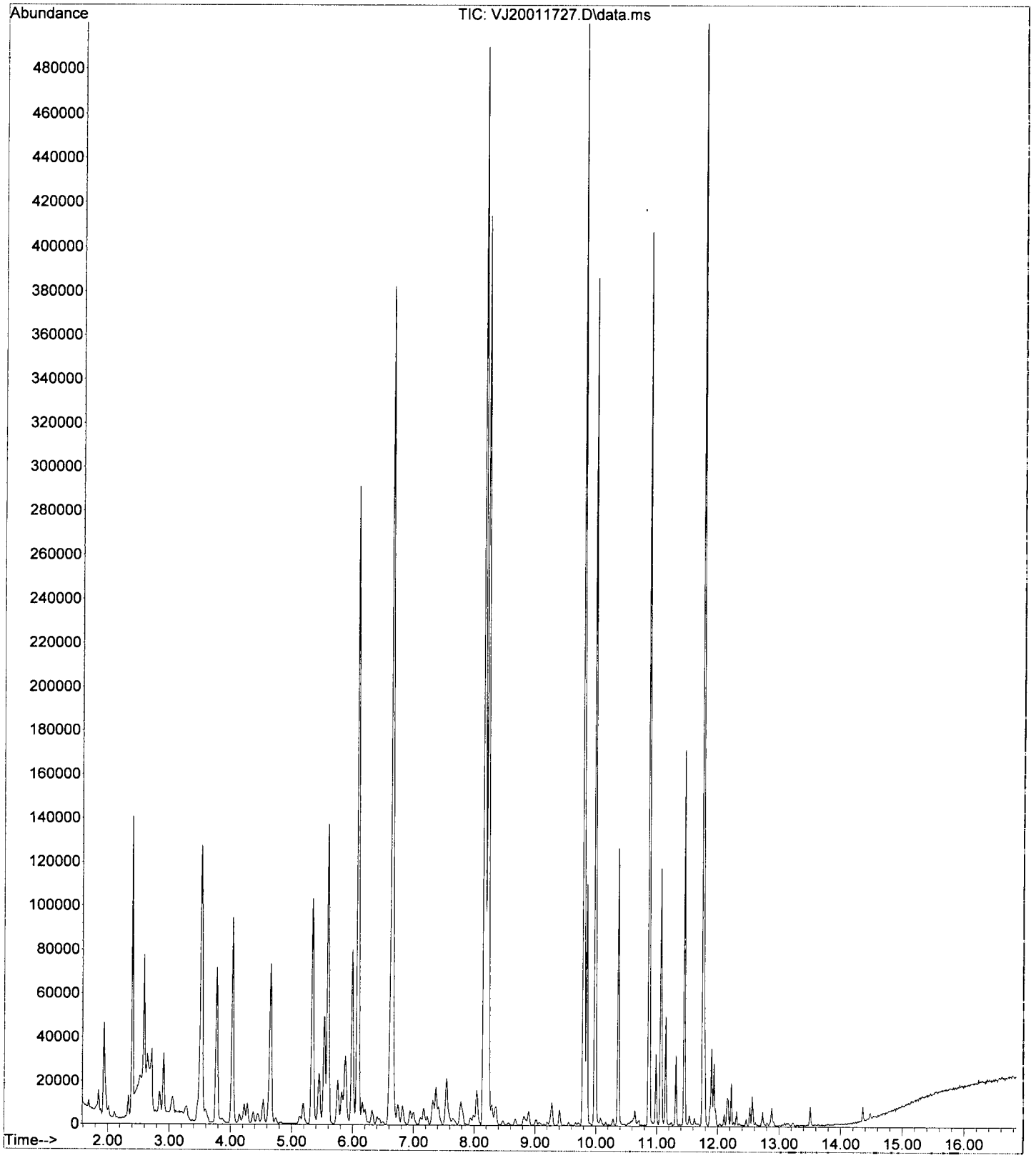
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 430.64 ug/L m

response 3579073

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\2020-01\0A17017\VJ20011727.D
Operator : IMA
Acquired : 17 Jan 2020 9:09 pm using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010545-BS3
Misc Info : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 27



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011728.D
Acq On : 17 Jan 2020 9:36 pm
Operator : IMA
Sample : 0010545-BS4
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 28 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:41:22 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 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 (IS)	50.000	50.000	0.0	118	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	47.496	5.0	112	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	52.102	-4.2	124	-0.01
4	H	NWTPH-Gx (TPH)	500.000	421.758	15.6	105	0.00
5	H	TPHg (C5-C9)	500.000	412.135	17.6	105	0.00
6	H	TPHg (C6-C10)	500.000	418.838	16.2	103	0.00
7	H	CA-LUFT (C5-C12)	500.000	411.513	17.7	105	0.00
8		Benzene (NR)	-1.000	0.000	0.0	105	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	107	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	114	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	122	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	114	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011728.D
Acq On : 17 Jan 2020 9:36 pm
Operator : IMA
Sample : 0010545-BS4
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 28 Sample Multiplier: 1

IMA
1/20/20

Quant Time: Jan 20 16:41:22 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

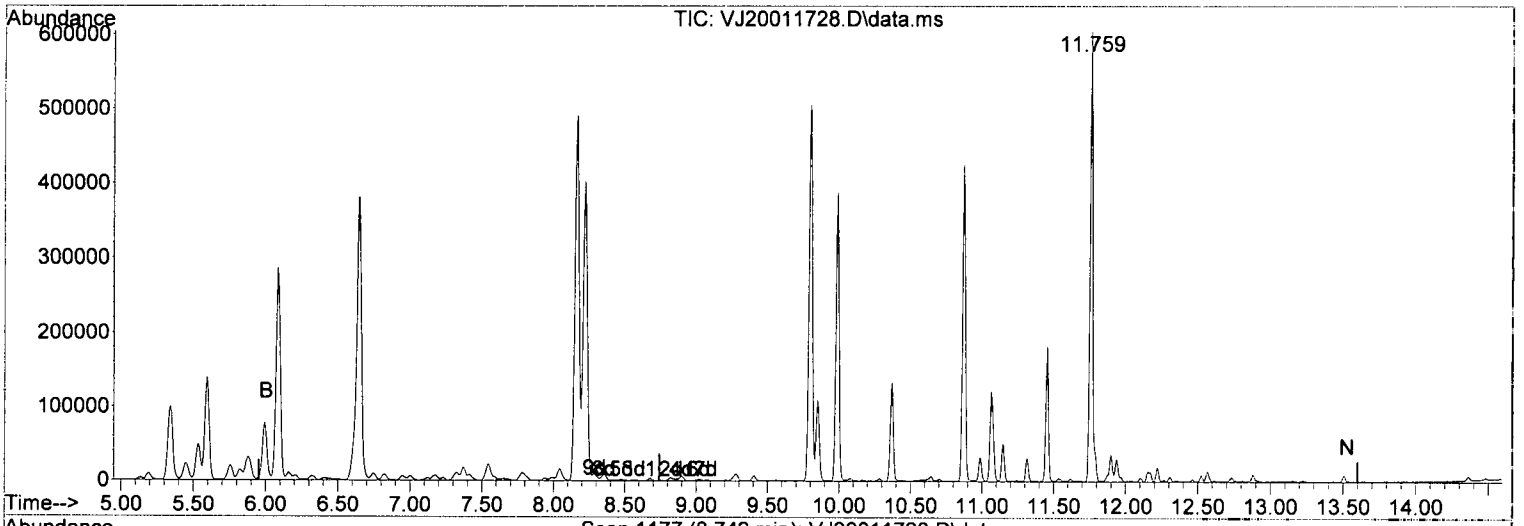
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	226760	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	347245	47.50	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.871	174	111895	52.10	ug/L	-0.01
9) Toluene-d8 (NR)	8.164	98	388498	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	291459	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	216746	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3454156m	421.76	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4835781m	412.14	ug/L	
6) TPHg (C6-C10)	9.239	TIC	4033441m	418.84	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5676446m	411.51	ug/L	

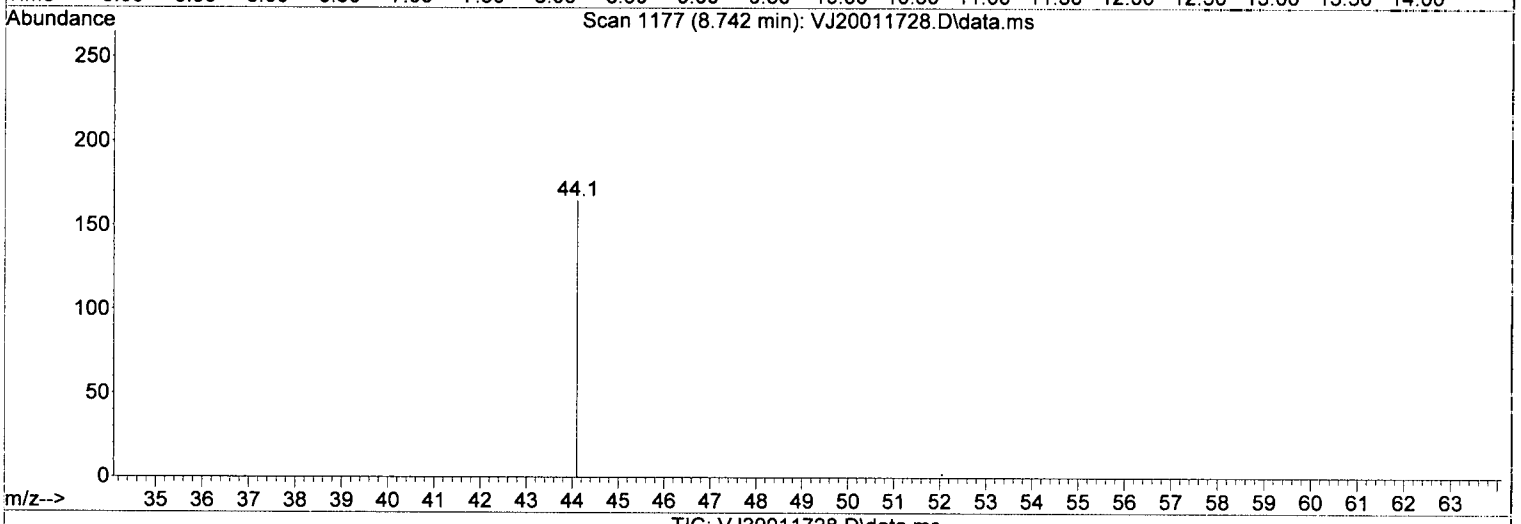
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A17017\
Data File : VJ20011728.D
Acq On : 17 Jan 2020 9:36 pm
Operator : IMA
Sample : 0010545-BS4
Misc : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 20 16:41:22 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20011728.D\data.ms

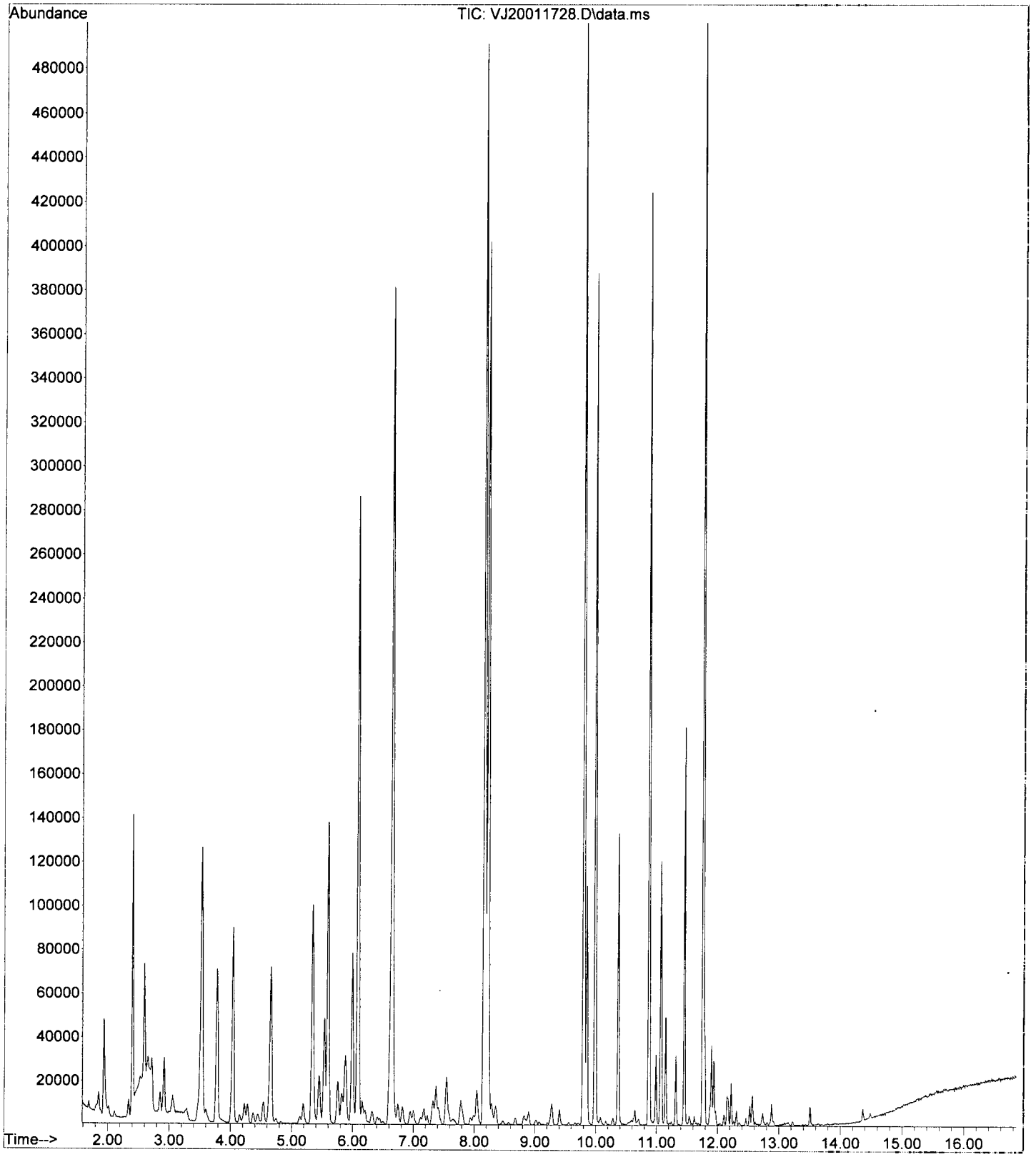
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 421.76 ug/L m

response 3454156

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\2020-01\0A17017\VJ20011728.D
Operator : IMA
Acquired : 17 Jan 2020 9:36 pm using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 0010545-BS4
Misc Info : 50X A20A132 5g/5mL 1000uL/50mL 500ppb GX
Vial Number: 28



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

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

Sequence 0A06051 (Cal ID A0A0801) VOA-GCMS10

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **0A06051** Instrument: **VOA-GCMS10**

Date: **01/06/20 15:15** Calibration: **A0A0801**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A06051-IBL1	Soil	QC	QC			A19L200	
2	0A06051-TUN1	Soil	QC	QC			A19L200	
3	0A06051-ICB1	Soil	QC	QC			A19L200	
4	0A06051-CAL1	Soil	QC	QC			A19L200	A19L304
5	0A06051-CAL2	Soil	QC	QC			A19L200	A19L305
6	0A06051-CAL3	Soil	QC	QC			A19L200	A19L306
7	0A06051-CAL4	Soil	QC	QC			A19L200	A19L307
8	0A06051-CAL5	Soil	QC	QC			A19L200	A19L308
9	0A06051-CAL6	Soil	QC	QC			A19L200	A19L309
10	0A06051-CAL7	Soil	QC	QC			A19L200	A19L310
11	0A06051-CAL8	Soil	QC	QC			A19L200	A19L311
12	0A06051-CAL9	Soil	QC	QC			A19L200	A19L312
13	0A06051-IBL2	Soil	QC	QC			A19L200	
14	0A06051-CALA	Soil	QC	QC			A19L200	A19L313
15	0A06051-IBL3	Soil	QC	QC			A19L200	
16	0A06051-CALB	Soil	QC	QC			A19L200	A19L314
17	0A06051-IBL4	Soil	QC	QC			A19L200	
18	0A06051-IBL5	Soil	QC	QC			A19L200	
19	0A06051-ICV1	Soil	QC	QC			A19L200	A19L250
20	0A06051-IBL6	Soil	QC	QC			A19L200	
21	0A06051-TUN2	Soil	QC	QC			A19L200	
22	0A06051-IBL7	Soil	QC	QC			A19L200	
23	0A06051-ICB2	Soil	QC	QC			A19L200	
24	0A06051-CALC	Soil	QC	QC			A19L200	A20A115
25	0A06051-CALD	Soil	QC	QC			A19L200	A20A116
26	0A06051-CALE	Soil	QC	QC			A19L200	A20A117
27	0A06051-CALF	Soil	QC	QC			A19L200	A20A118
28	0A06051-CALG	Soil	QC	QC			A19L200	A20A119
29	0A06051-CALH	Soil	QC	QC			A19L200	A20A120
30	0A06051-CALI	Soil	QC	QC			A19L200	A20A121
31	0A06051-CALJ	Soil	QC	QC			A19L200	A20A122
32	0A06051-IBL8	Soil	QC	QC			A19L200	
33	0A06051-IBL9	Soil	QC	QC			A19L200	
34	0A06051-ICV2	Soil	QC	QC			A19L200	A19G350
35	0A06051-IBLA	Soil	QC	QC			A19L200	

VOC CAL

GX CAL

Data Entered By: 1/8/20

Data Reviewed By: 1/9/20

Comments: Iodomethane EOS (ICV ↑)

Calibration Status Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Tue Jan 07 15:08:13 2020
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	-1	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010614.D
2	2	0	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010615.D
3	3	0	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010616.D
4	4	1	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010617.D
5	5	2	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010618.D
6	6	5	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010619.D
7	7	10	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010620.D
8	8	20	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010621.D
9	9	50	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010622.D
10	10	100	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010624.D
11	1a	200	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010626.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jan 07 15:08 2020	Jan 07 14:46 2020	6 Jan 2020 5:12 pm
2	2	Jan 07 15:08 2020	Jan 07 14:49 2020	6 Jan 2020 5:39 pm
3	3	Jan 07 15:08 2020	Jan 07 14:51 2020	6 Jan 2020 6:05 pm
4	4	Jan 07 15:08 2020	Jan 07 14:52 2020	6 Jan 2020 6:32 pm
5	5	Jan 07 15:08 2020	Jan 07 11:53 2020	6 Jan 2020 6:59 pm
6	6	Jan 07 15:08 2020	Jan 07 11:53 2020	6 Jan 2020 7:26 pm
7	7	Jan 07 15:08 2020	Jan 07 14:57 2020	6 Jan 2020 7:53 pm
8	8	Jan 07 15:08 2020	Jan 07 15:00 2020	6 Jan 2020 8:20 pm
9	9	Jan 07 15:08 2020	Jan 07 15:01 2020	6 Jan 2020 8:47 pm
10	10	Jan 07 15:08 2020	Jan 07 15:04 2020	6 Jan 2020 9:41 pm
11	1a	Jan 07 15:08 2020	Jan 07 15:06 2020	6 Jan 2020 10:34 pm

VJ200106S.M Wed Jan 08 12:25:41 2020

A0A06051

MW 1/9/20

Response Factor Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Tue Jan 07 15:08:13 2020
Response Via : Initial Calibration

Calibration Files
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7 =VJ20010620.D 8 =VJ20010621.D 9 =VJ20010622.D 10 =VJ20010624.D 1a =VJ20010626.D

		Compound	1	2	3	4	5	6	7	8	9	10	1a	Avg	%RSD
1)	I	Pentafluorobenzene...	ISTD												
2)		Dichlorodifluo...			0.853	0.960	0.898	0.885	0.912	0.887	1.215	1.176		0.973	14.47
3)	P	Chloromethane					1.543	1.402	1.347	1.336	1.520	1.459		1.434	6.08
4)	C	Vinyl Chloride			0.968	1.053	1.055	1.049	1.058	1.071	1.222	1.179		1.082	7.43
5)		Bromomethane				2.081	1.225	0.856	0.672	0.568	0.511	0.461		0.911	63.53
6)		Chloroethane					0.263	0.244	0.243	0.235	0.278	0.297		0.260	9.16
7)		Trichlorofluor...			0.323	0.403	0.374	0.383	0.388	0.372	0.415	0.412		0.384	7.69
8)		Ethanol				0.059	0.042	0.037	0.030	0.030	0.031	0.026		0.037	30.60
9)	C	1,1-Dichloroet...		1.282	1.275	1.241	1.235	1.188	1.190	1.169	1.229	1.169	1.168	1.215	3.59
10)		Carbon Disulfide		2.347	2.359	2.272	2.109	2.040	2.073	2.047	2.224	2.162	2.190	2.182	5.38
11)		Freon 113			0.834	0.883	0.919	0.897	0.916	0.912	0.942	0.913	0.907	0.903	3.34
12)		Iodomethane					0.204	0.165	0.168	0.184	0.265	0.337		0.220	30.79
13)		Methylene Chlo...				2.004	1.472	1.167	1.086	1.000	1.002	0.968	0.936	1.204	30.39
14)		Acetone						0.736	0.623	0.580	0.650	0.599	0.606	0.632	8.87
15)		t-1,2-Dichloro...		1.512	1.486	1.552	1.460	1.461	1.495	1.463	1.506	1.471	1.472	1.488	1.98
16)		n-Hexane				0.192	0.208	0.197	0.222	0.236	0.260	0.253	0.254	0.228	11.78
17)		Methyl-tert-bu...		3.765	3.730	3.706	3.396	3.430	3.580	3.636	3.799	3.781	3.819	3.664	4.14
18)		tert-Butanol (...			0.253	0.267	0.265	0.281	0.290	0.299	0.302	0.306		0.283	6.91
19)		Diisopropyl et...			3.161	3.123	3.109	3.086	3.363	3.455	3.264	3.548		3.264	5.35
20)	P	1,1-Dichloroet...		1.374	1.719	1.801	1.748	1.720	1.775	1.717	1.811	1.780	1.708	1.715	7.32
21)		Acrylonitrile				0.582	0.556	0.620	0.654	0.667	0.694	0.696	0.684	0.644	8.21
22)		Ethyl-tert-but...				2.895	2.869	3.022	3.255	3.391	3.073	3.226		3.104	6.26
23)		c-1,2-Dichloro...		1.027	1.352	1.380	1.373	1.380	1.456	1.435	1.490	1.492	1.460	1.385	9.79
24)		2,2-Dichloropr...		1.588	1.564	1.615	1.536	1.548	1.579	1.587	1.623	1.588	1.575	1.580	1.70
25)		Bromochloromet...			0.798	0.878	0.901	0.860	0.900	0.863	0.877	0.833	0.797	0.856	4.58
26)	C	Chloroform		1.678	1.908	1.997	1.890	1.902	1.935	1.882	1.930	1.889	1.835	1.885	4.45
27)		Carbon Tetrach...				1.132	1.245	1.257	1.339	1.366	1.483	1.482	1.532	1.354	10.27
28)		Tetrahydrofuran			0.530	0.616	0.601	0.591	0.595	0.614	0.650	0.660	0.658	0.613	6.68
29)		1,1,1-Trichlor...		1.434	1.519	1.753	1.767	1.764	1.794	1.793	1.853	1.842	1.842	1.736	8.22
30)	S	Dibromofluorom...	0.804	0.773	0.825	0.823	0.821	0.817	0.819	0.786	0.801	0.802	0.814	0.808	2.04
31)		1,1-Dichloropr...			1.213	1.319	1.337	1.368	1.419	1.497	1.574	1.581	1.579	1.432	9.32
32)		2-Butanone (MEK)					1.219	0.984	0.943	0.925	0.968	0.961	0.944	0.992	10.28
33)		Benzene	4.531	4.598	4.602	4.529	4.443	4.535	4.569	4.601	4.722	4.633	4.621	4.580	1.57
34)		tert-Amyl meth...				3.133	3.257	2.879	2.947	2.871	2.811	2.930		2.975	5.39
35)		1,2-Dichloroet...		1.345	1.626	1.694	1.691	1.676	1.675	1.639	1.661	1.622	1.601	1.623	6.33
36)		iso-Butyl Alcohol				0.121	0.098	0.094	0.098	0.102	0.114	0.116	0.115	0.107	9.64
37)	S	1,4-Difluorobe...	2.950	2.870	2.956	2.908	2.907	2.924	2.886	2.874	2.941	2.909	2.959	2.917	1.10
38)		Trichloroethen...		0.727	1.003	1.147	1.081	1.074	1.104	1.113	1.158	1.178	1.186	1.077	12.51
39)		tert-Amyl ethy...				1.910	2.037	1.936	2.054	2.103	2.098	2.285		2.060	6.03
40)		Dibromomethane			0.513	0.671	0.632	0.664	0.659	0.659	0.680	0.665	0.649	0.644	7.90

Method Path : C:\msdchem\1\methods\
Method File : VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds

41)	C	1,2-Dichloropr...			0.946	1.116	1.034	1.072	1.067	1.072	1.130	1.132	1.127	1.077	5.59
42)		Bromodichlorom...			0.975	1.130	1.196	1.261	1.262	1.314	1.422	1.439	1.478	1.275	12.66
43)		Chlorobenzene-d5 (I)	----------ISTD----------												
44)		c-1,3-Dichloro...			0.543	0.540	0.540	0.585	0.620	0.675	0.680	0.709	0.728	0.625	12.13
45)	S	Toluene-d8 (S)	1.396	1.429	1.366	1.352	1.356	1.375	1.391	1.409	1.392	1.387	1.393	1.386	1.65
46)	C	Toluene	2.133	2.016	1.860	1.977	1.865	1.870	1.931	1.968	2.002	1.973	1.952	1.959	4.07
47)		Tetrachloroeth...			0.353	0.464	0.420	0.449	0.463	0.479	0.489	0.487	0.485	0.454	9.69
48)		4-Methyl-2-Pen...						0.474	0.516	0.584	0.636	0.657	0.643	0.585	12.82
49)		t-1,3-Dichloro...		0.507	0.490	0.537	0.520	0.575	0.604	0.659	0.691	0.690	0.685	0.596	13.55
50)		1,1,2-Trichlor...			0.383	0.405	0.404	0.400	0.404	0.410	0.413	0.409	0.406	0.404	2.16
51)		Dibromochlorom...				0.318	0.337	0.334	0.352	0.375	0.409	0.426	0.439	0.374	12.32
52)		1,3-Dichloropr...		0.565	0.624	0.680	0.697	0.700	0.704	0.714	0.750	0.738	0.732	0.690	8.18
53)		1,2-Dibromoeth...			0.381	0.347	0.373	0.387	0.397	0.411	0.437	0.442	0.445	0.402	8.43
54)		2-Hexanone			0.217	0.268	0.267	0.304	0.361	0.421	0.484	0.510	0.514	0.372	30.79
55)	P	Chlorobenzene		1.156	1.178	1.259	1.160	1.188	1.173	1.191	1.200	1.187	1.169	1.186	2.46
56)	C	Ethylbenzene	2.015	1.794	1.856	1.890	1.827	1.930	2.012	2.070	2.146	2.136	2.093	1.979	6.38
57)		1,1,1,2-Tetrac...			0.356	0.394	0.364	0.390	0.407	0.401	0.424	0.421	0.418	0.397	6.11
58)		m,p-Xylenes (2)	1.242	1.262	1.200	1.234	1.240	1.344	1.462	1.536	1.598	1.602	1.569	1.390	11.82
59)		o-Xylene	1.078	1.077	1.022	1.127	1.155	1.234	1.315	1.440	1.559	1.604	1.590	1.291	17.22
60)		Styrene		0.562	0.614	0.695	0.697	0.811	0.919	1.025	1.159	1.215	1.227	0.892	28.35
61)	P	Bromoform				0.228	0.216	0.219	0.246	0.268	0.299	0.322	0.332	0.266	17.39
62)		Isopropylbenzene				1.313	1.330	1.503	1.692	1.823	1.969	2.003	1.969	1.700	16.89
63)	I	1,4-Dichlorobenzen...	----------ISTD----------												
64)	S	4-Bromofluorob...	0.776	0.774	0.794	0.797	0.787	0.784	0.751	0.772	0.771	0.752	0.732	0.772	2.58
65)		Bromobenzene	0.831	0.808	0.903	1.050	1.002	0.969	0.946	0.973	0.984	0.966	0.938	0.943	7.58
66)		n-Propylbenzene	4.544	4.079	4.021	4.356	4.093	4.288	4.377	4.652	4.705	4.545	4.329	4.363	5.34
67)	P	1,1,2,2-Tetrac...		0.864	1.008	1.152	1.143	1.096	1.147	1.193	1.167	1.159	1.129	1.106	8.95
68)		2-Chlorotoluene			0.635	0.783	0.794	0.796	0.834	0.890	0.894	0.886	0.859	0.819	9.97
69)		1,3,5-Trimethy...	2.749	2.400	2.558	2.709	2.684	3.000	3.107	3.345	3.380	3.266	3.078	2.934	11.34
70)		1,2,3-Trichlor...			0.302	0.474	0.437	0.416	0.421	0.440	0.438	0.421	0.409	0.418	11.35
71)		t-1,4-Dichloro...						0.149	0.159	0.181	0.198	0.196	0.196	0.180	11.70
72)		4-Chlorotoluene		1.884	2.201	2.407	2.503	2.560	2.654	2.743	2.773	2.732	2.633	2.509	11.19
73)		tert-Butylbenzene		1.508	1.417	1.512	1.494	1.594	1.645	1.781	1.829	1.786	1.728	1.629	8.93
74)		1,2,4-Trimethy...	3.026	2.256	2.436	2.616	2.623	2.916	3.104	3.354	3.374	3.291	3.123	2.920	13.15
75)		sec-Butylbenzene	3.205	2.833	3.141	3.257	3.243	3.585	3.711	3.970	4.030	3.957	3.766	3.518	11.42
76)		4-Isopropyltol...	2.702	2.406	2.341	2.416	2.550	2.834	3.027	3.305	3.467	3.370	3.242	2.878	14.71
77)		1,3-Dichlorobe...	1.368	1.577	1.643	1.723	1.702	1.754	1.744	1.811	1.770	1.757	1.691	1.685	7.32
78)		1,4-Dichlorobe...	1.662	2.086	1.976	1.911	1.806	1.818	1.759	1.788	1.785	1.759	1.711	1.824	6.71
79)		n-Butylbenzene	2.540	2.763	2.500	2.510	2.498	2.606	2.673	2.847	2.972	2.907	2.766	2.689	6.42
80)		1,2-Dichlorobe...	1.266	1.293	1.567	1.573	1.537	1.550	1.556	1.658	1.659	1.645	1.612	1.538	8.78
81)		1,2-Dibromo-3-...				0.217	0.241	0.252	0.266	0.296	0.321	0.344	0.360	0.287	17.92
82)		Hexachlorobuta...			0.186	0.222	0.265	0.263	0.245	0.266	0.266	0.268	0.259	0.249	11.22
83)		1,2,4-Trichlor...			0.806	0.858	0.815	0.850	0.909	1.008	1.076	1.114	1.119	0.951	13.61
84)		Naphthalene	2.749	2.327	2.221	2.403	2.339	2.592	2.944	3.512	3.883	3.971	4.001	2.995	23.78
85)		1,2,3-Trichlor...			0.768	0.825	0.833	0.893	0.974	1.062	1.103	1.110	1.112	0.964	14.31

(#) = Out of Range

Compound List Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Tue Jan 07 15:08:13 2020
Response Via : Initial Calibration

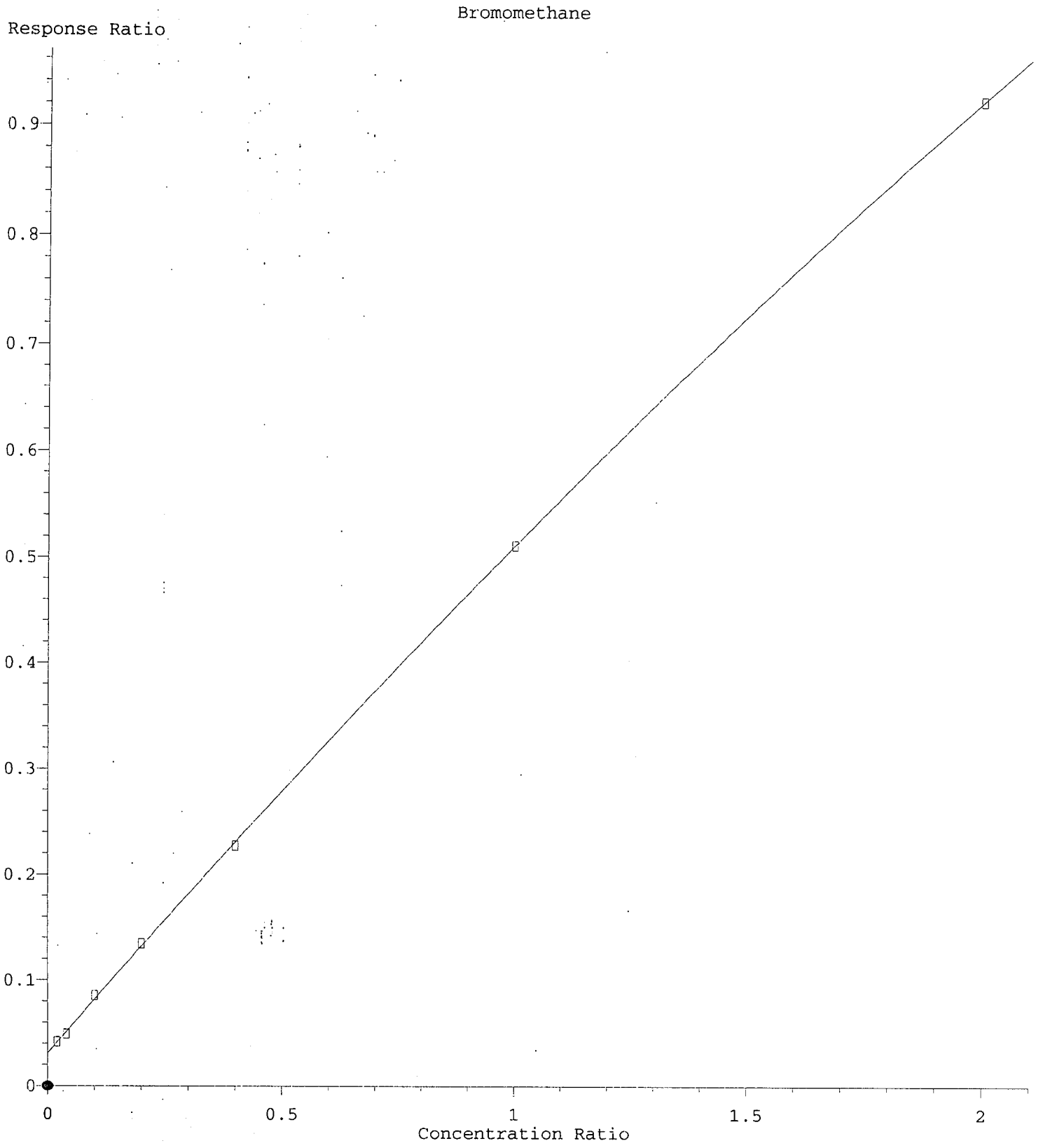
Total Cpnds : 85

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Pentafluorobenzene (I)	99	6.089	1.000	A	2	A	R
2		Dichlorodifluoromethane	85	1.696	0.279	A	2	A	R
3	P	Chloromethane	50	1.898	0.312	A	2	A	R
4	C	Vinyl Chloride	62	2.001	0.329	A	2	A	R
5		Bromomethane	96	2.341	0.384	Q	2	A	R
6		Chloroethane	64	2.463	0.404	A	2	A	R
7		Trichlorofluoromethane	101	2.597	0.427	A	2	A	R
8		Ethanol	45	3.266	0.536	Q	1	A	R
9	C	1,1-Dichloroethene	61	3.150	0.517	A	2	A	R
10		Carbon Disulfide	76	3.163	0.519	A	2	A	R
11		Freon 113	101	3.206	0.526	A	2	A	R
12		Iodomethane	142	3.302	0.542	Q	2	A	R
13		Methylene Chloride	84	3.783	0.621	Q	2	A	R
14		Acetone	43	3.868	0.635	A	1	A	R
15		t-1,2-Dichloroethene	61	3.948	0.648	A	2	A	R
16		n-Hexane	86	4.045	0.664	A	3	A	R
17		Methyl-tert-butyl-ether	73	4.106	0.674	A	3	A	R
18		tert-Butanol (TBA)	59	4.258	0.699	A	1	A	R
19		Diisopropyl ether (DIPE)	45	4.501	0.739	A	2	A	R
20	P	1,1-Dichloroethane	63	4.581	0.752	A	2	A	R
21		Acrylonitrile	53	4.635	0.761	A	2	A	R
22		Ethyl-tert-butyl ether (ETBE)	59	4.866	0.799	A	2	A	R
23		c-1,2-Dichloroethene	61	5.128	0.842	A	2	A	R
24		2,2-Dichloropropane	77	5.238	0.860	A	2	A	R
25		Bromochloromethane	49	5.329	0.875	A	2	A	R
26	C	Chloroform	83	5.414	0.889	A	2	A	R
27		Carbon Tetrachloride	117	5.554	0.912	A	2	A	R
28		Tetrahydrofuran	42	5.584	0.917	A	2	A	R
29		1,1,1-Trichloroethane	97	5.621	0.923	A	2	A	R
30	S	Dibromofluoromethane (S)	111	5.596	0.919	A	2	A	R
31		1,1-Dichloropropene	75	5.749	0.944	A	2	A	R
32		2-Butanone (MEK)	43	5.730	0.941	A	2	A	R
33		Benzene	78	5.998	0.985	A	2	A	R
34		tert-Amyl methyl ether (TAME)	73	6.150	1.010	A	2	A	R
35		1,2-Dichloroethane (EDC)	62	6.205	1.019	A	2	A	R
36		iso-Butyl Alcohol	43	6.272	1.030	A	2	A	R
37	S	1,4-Difluorobenzene (S)	114	6.649	1.092	A	2	A	R
38		Trichloroethene (TCE)	130	6.619	1.087	A	2	A	R
39		tert-Amyl ethyl ether (TAEE)	59	6.898	1.133	A	2	A	R
40		Dibromomethane	93	7.057	1.159	A	2	A	R
41	C	1,2-Dichloropropane	63	7.166	1.177	A	2	A	R
42		Bromodichloromethane	83	7.245	1.190	A	2	A	R
43	I	Chlorobenzene-d5 (I)	117	9.800	1.000	A	2	A	R
44		c-1,3-Dichloropropene	75	7.950	0.811	A	2	A	R
45	S	Toluene-d8 (S)	98	8.164	0.833	A	2	A	R
46	C	Toluene	91	8.225	0.839	A	2	A	R
47		Tetrachloroethene (PCE)	166	8.675	0.885	A	2	A	R
48		4-Methyl-2-Pentanone (MIBK)	43	8.663	0.884	A	2	A	R
49		t-1,3-Dichloropropene	75	8.699	0.888	A	2	A	R
50		1,1,2-Trichloroethane	97	8.869	0.905	A	2	A	R
51		Dibromochloromethane	129	9.058	0.924	A	2	A	R
52		1,3-Dichloropropane	76	9.155	0.934	A	2	A	R
53		1,2-Dibromoethane (EDB)	107	9.295	0.948	A	2	A	R
54		2-Hexanone	43	9.295	0.948	Q	2	A	R

55	P	Chlorobenzene	112	9.818	1.002	A	2	A	R
56	C	Ethylbenzene	91	9.855	1.006	A	2	A	R
57		1,1,1,2-Tetrachloroethane	131	9.879	1.008	A	2	A	R
58		m,p-Xylenes (2)	91	9.988	1.019	A	2	A	R
59		o-Xylene	91	10.372	1.058	A	2	A	R
60		Styrene	104	10.414	1.063	Q 1/a	2	A	R
61	P	Bromoform	173	10.432	1.064	Q 1/a²	2	A	R
62		Isopropylbenzene	105	10.645	1.086	A	2	A	R
63	I	1,4-Dichlorobenzene-d4 (I)	152	11.759	1.000	A	2	A	R
64	S	4-Bromofluorobenzene (S)	174	10.877	0.925	A	2	A	R
65		Bromobenzene	156	10.962	0.932	A	2	A	R
66		n-Propylbenzene	91	10.993	0.935	A	2	A	R
67	P	1,1,2,2-Tetrachloroethane	83	11.041	0.939	A	2	A	R
68		2-Chlorotoluene	126	11.114	0.945	A	2	A	R
69		1,3,5-Trimethylbenzene	105	11.150	0.948	A	2	A	R
70		1,2,3-Trichloropropane	110	11.145	0.948	A	2	A	R
71		t-1,4-Dichloro-2-butene	88	11.181	0.951	A	3	A	R
72		4-Chlorotoluene	91	11.242	0.956	A	2	A	R
73		tert-Butylbenzene	91	11.400	0.969	A	2	A	R
74		1,2,4-Trimethylbenzene	105	11.454	0.974	A	2	A	R
75		sec-Butylbenzene	105	11.540	0.981	A	2	A	R
76		4-Isopropyltoluene	119	11.649	0.991	A	2	A	R
77		1,3-Dichlorobenzene	146	11.704	0.995	A	2	A	R
78		1,4-Dichlorobenzene	146	11.771	1.001	A	2	A	R
79		n-Butylbenzene	91	11.972	1.018	A	2	A	R
80		1,2-Dichlorobenzene	146	12.088	1.028	A	2	A	R
81		1,2-Dibromo-3-Chloropropane	157	12.689	1.079	Q 1/m	2	A	R
82		Hexachlorobutadiene	223	13.213	1.124	A	3	A	R
83		1,2,4-Trichlorobenzene	180	13.237	1.126	A	2	A	R
84		Naphthalene	128	13.511	1.149	Q 1/a	2	A	R
85		1,2,3-Trichlorobenzene	180	13.669	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

VJ200106S.M Wed Jan 08 11:46:18 2020



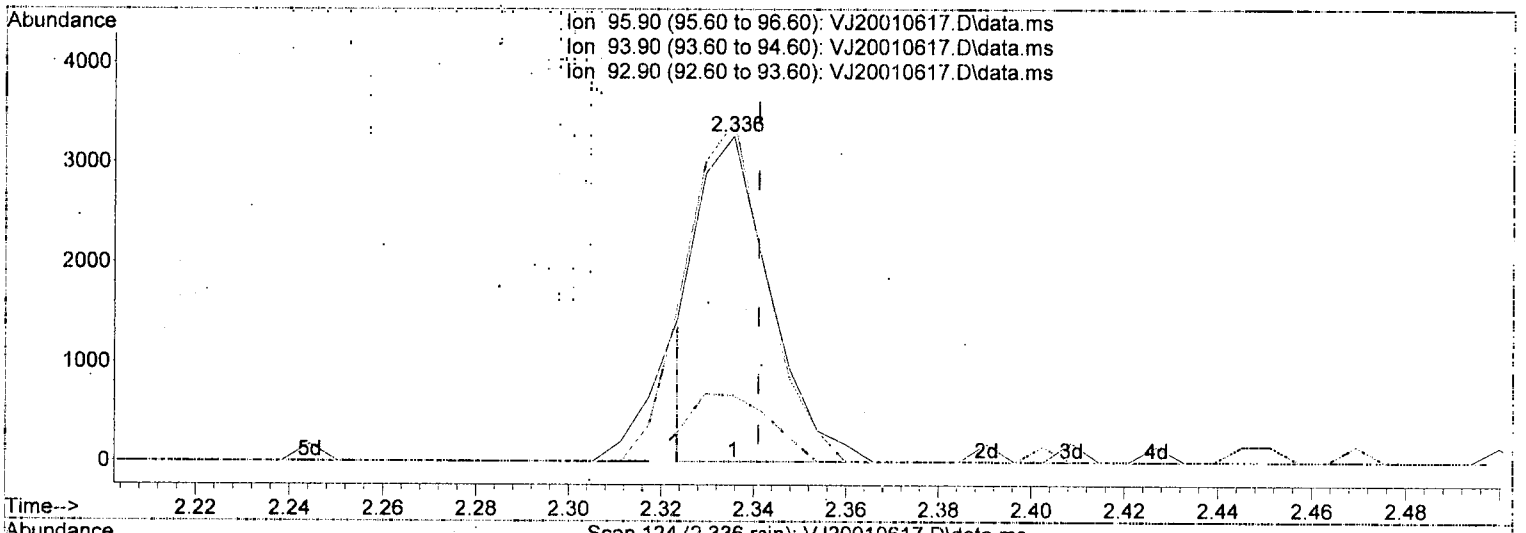
Int =(-)

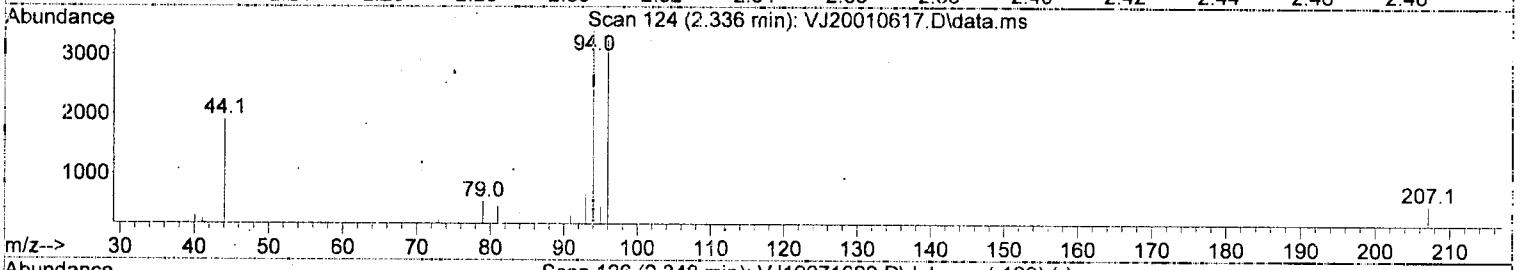
R = -3.37e-002 A*A + 5.13e-001 A + 3.09e-002
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\VJ2001065.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

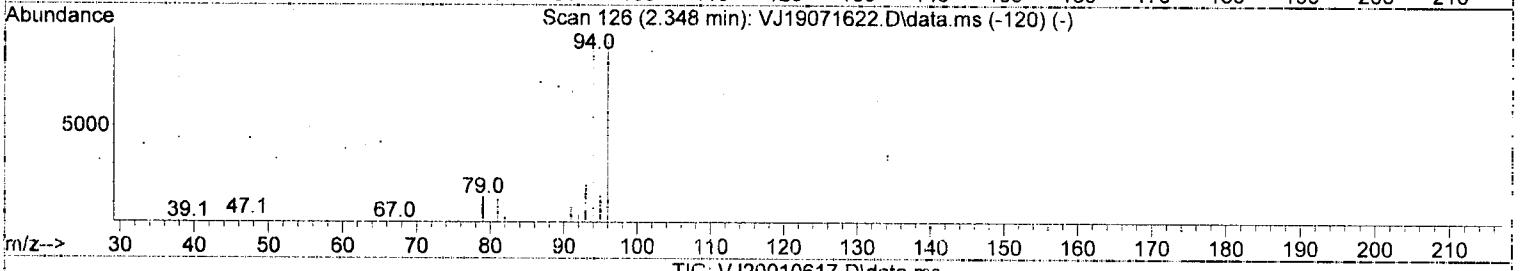
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20010617.D\data.ms

(5) Bromomethane

2.336min (-0.005) 0.27 ug/L m

response 3512

Ion	Exp%	Act%
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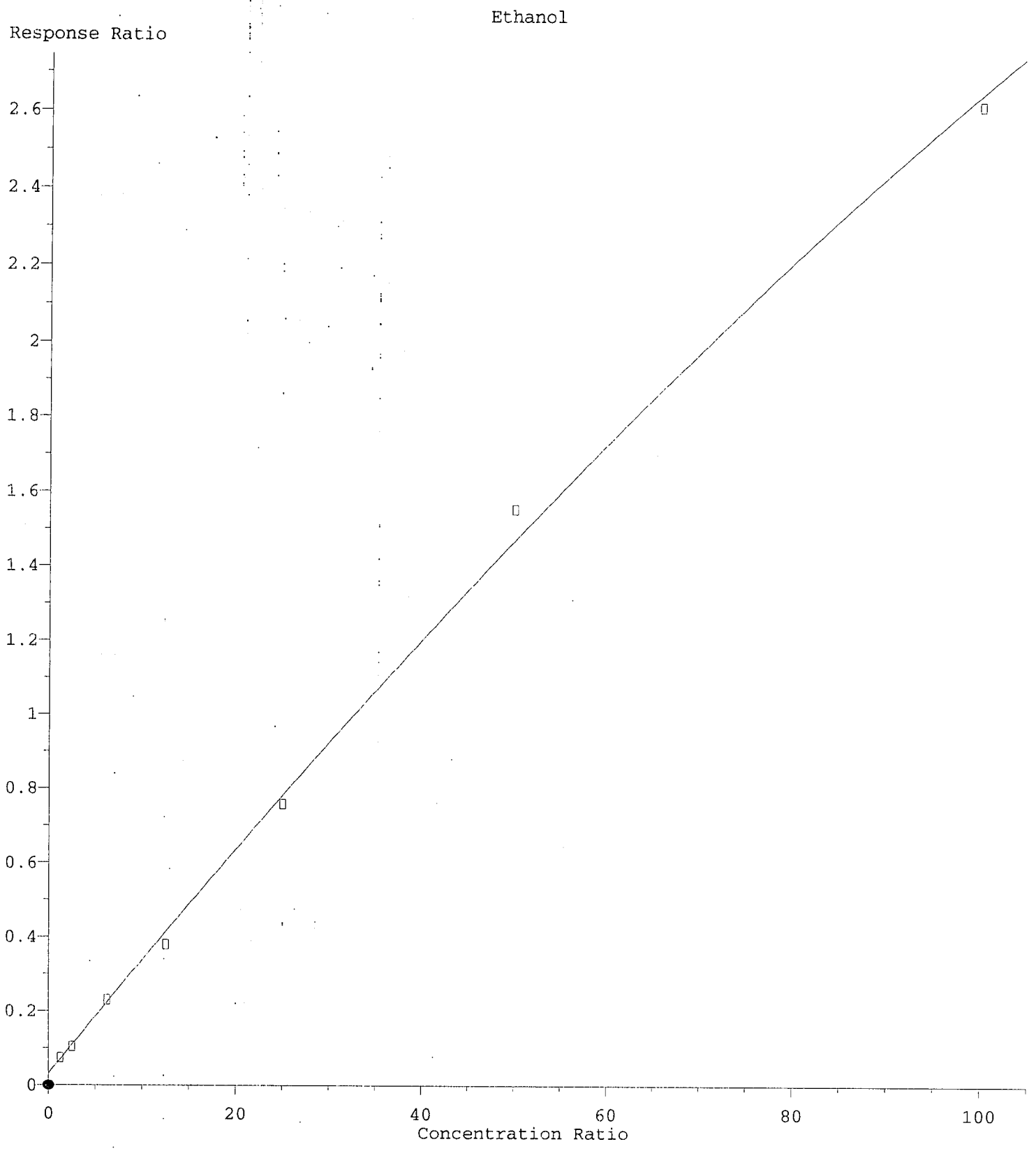
93.90	106.80	104.54
92.90	22.80	20.37
0.00	0.00	0.00



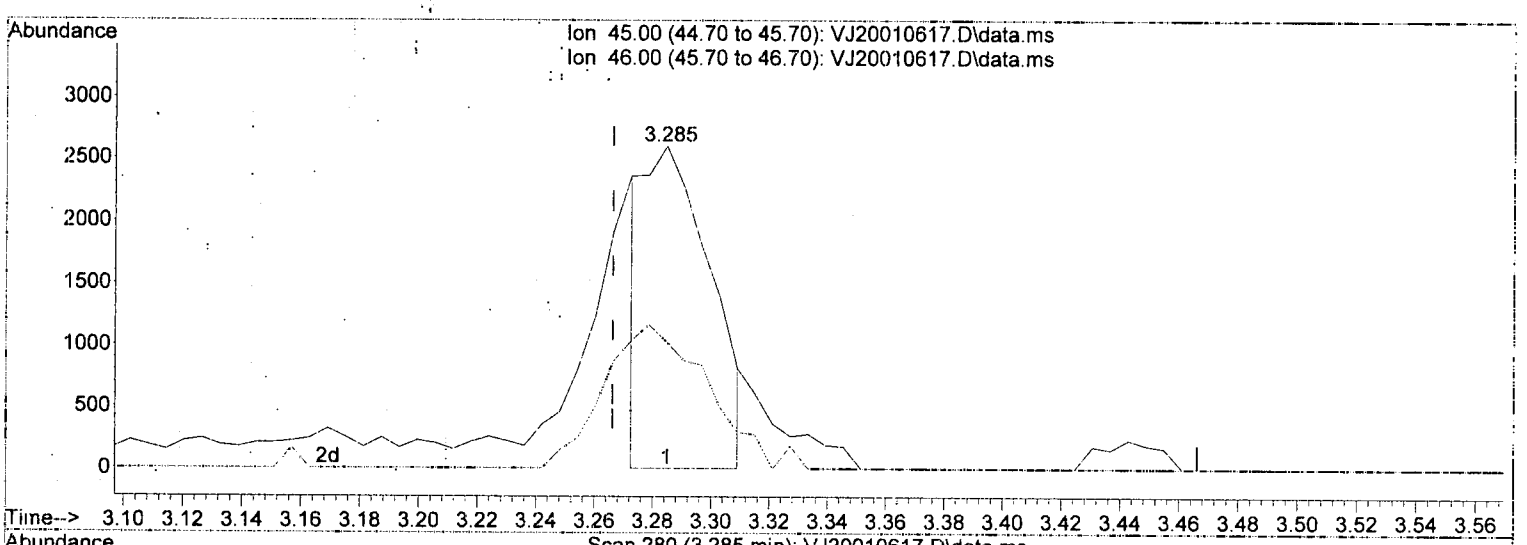
Int = (-)

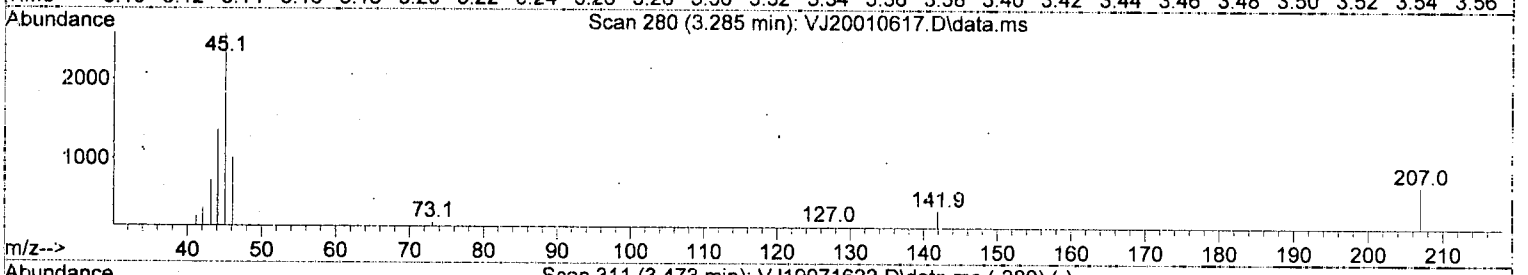
R = -5.18e-005 A*A + 3.13e-002 A + 3.10e-002
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ2001065.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

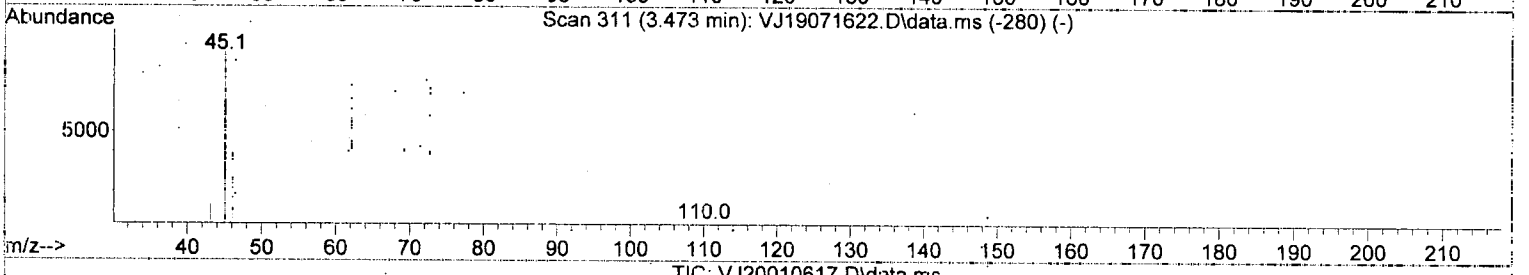
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







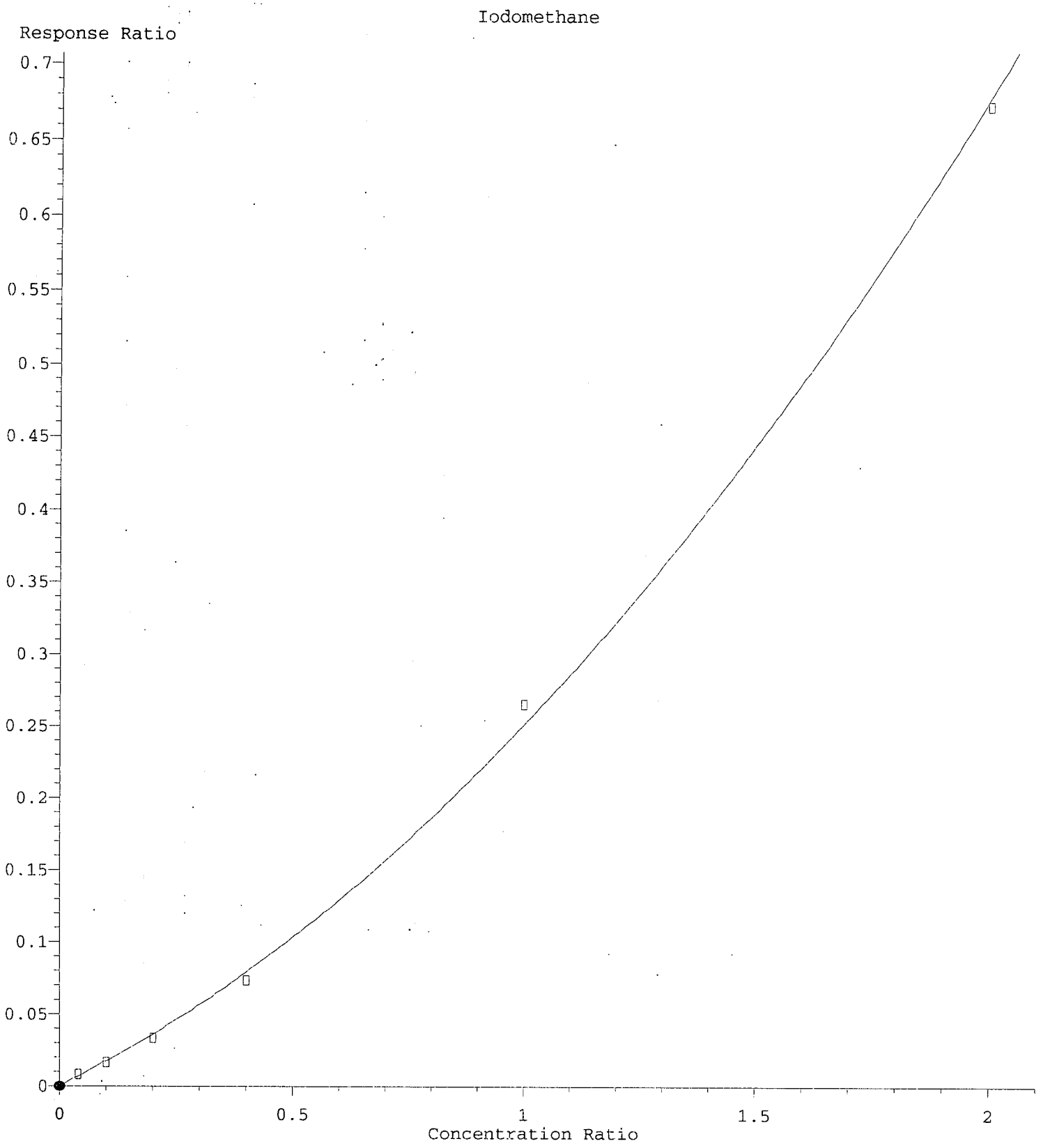
TIC: VJ20010617.D\data.ms

(8) Ethanol

3.285min (+ 0.019) 13.25 ug/L m

response 4099

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



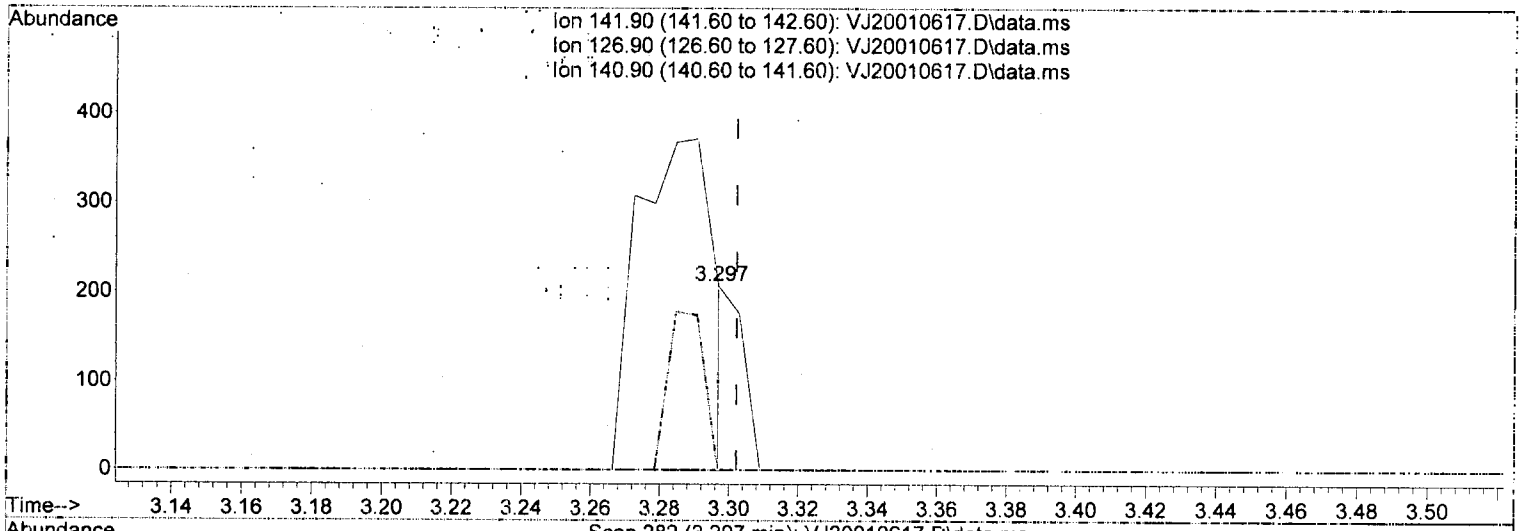
Int = 0.05

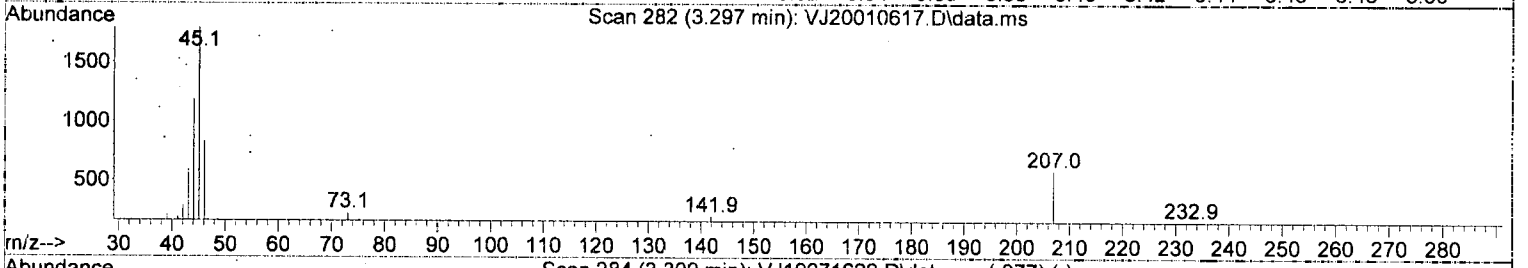
R = 8.89e-002 A*A + 1.62e-001 A + 4.55e-004
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ2001065.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

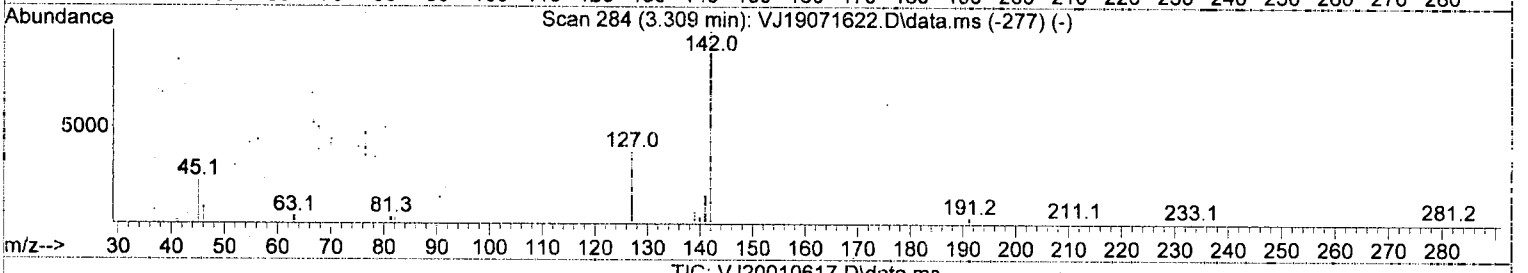
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







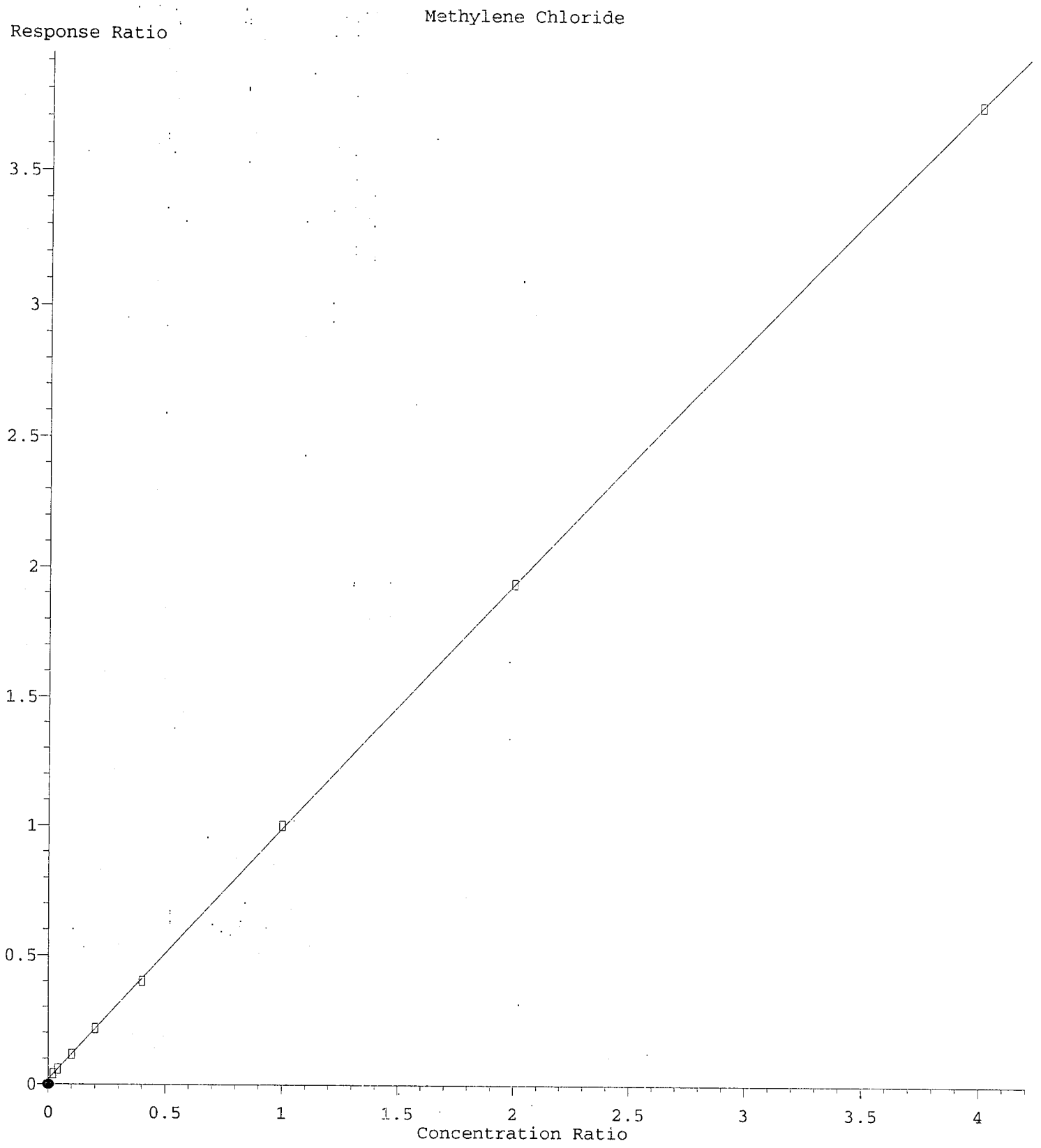
TIC: VJ20010617.D\data.ms

(12) Iodomethane

3.297min (-0.005) 0.05 ug/L m

response 64

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



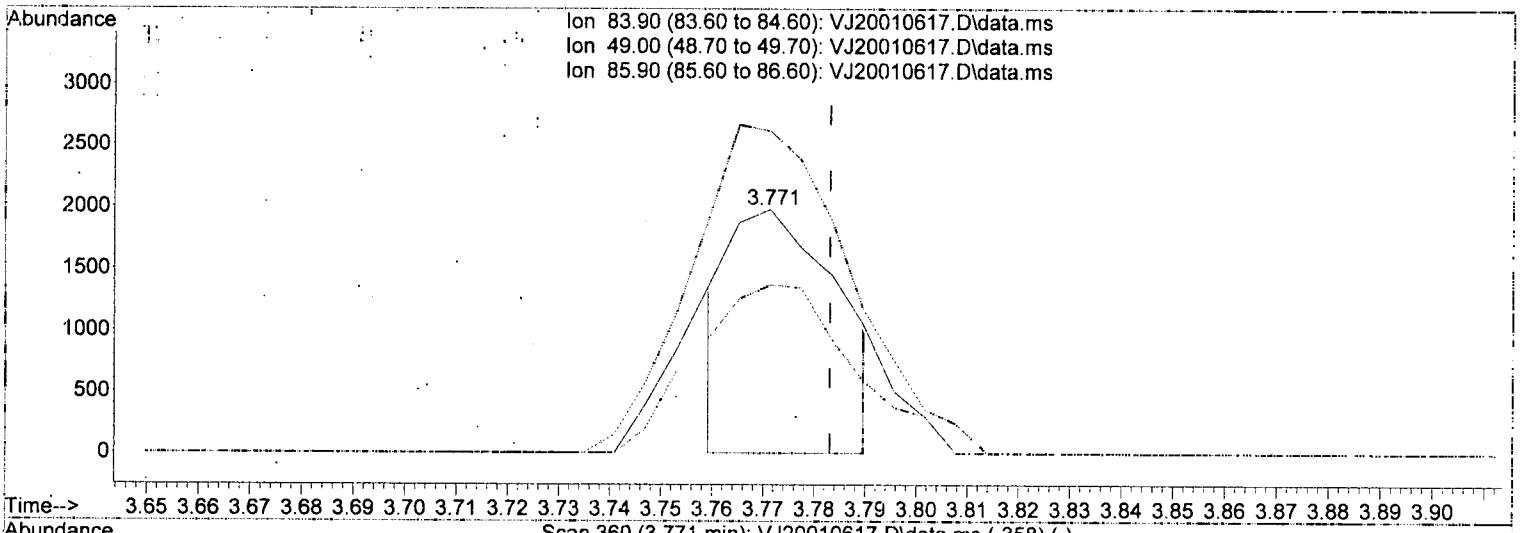
Int = (—) 11/8/20

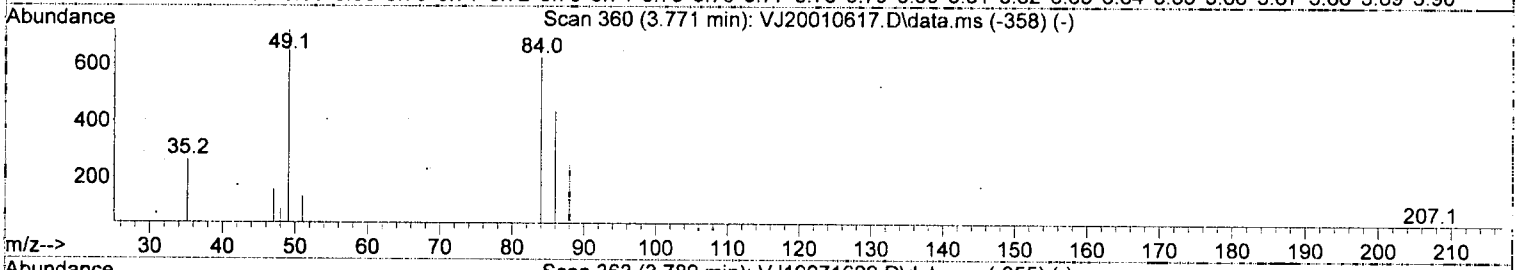
R = -1.30e-002 A*A + 9.83e-001 A + 1.98e-002
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj20001065.m
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

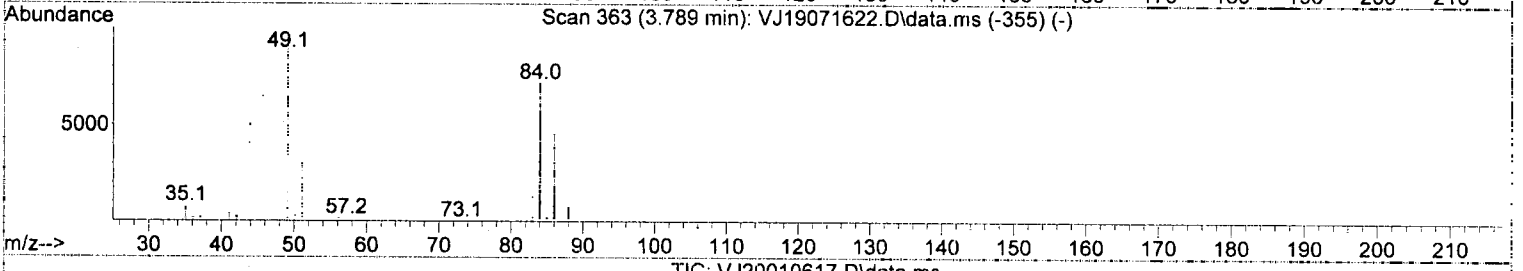
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







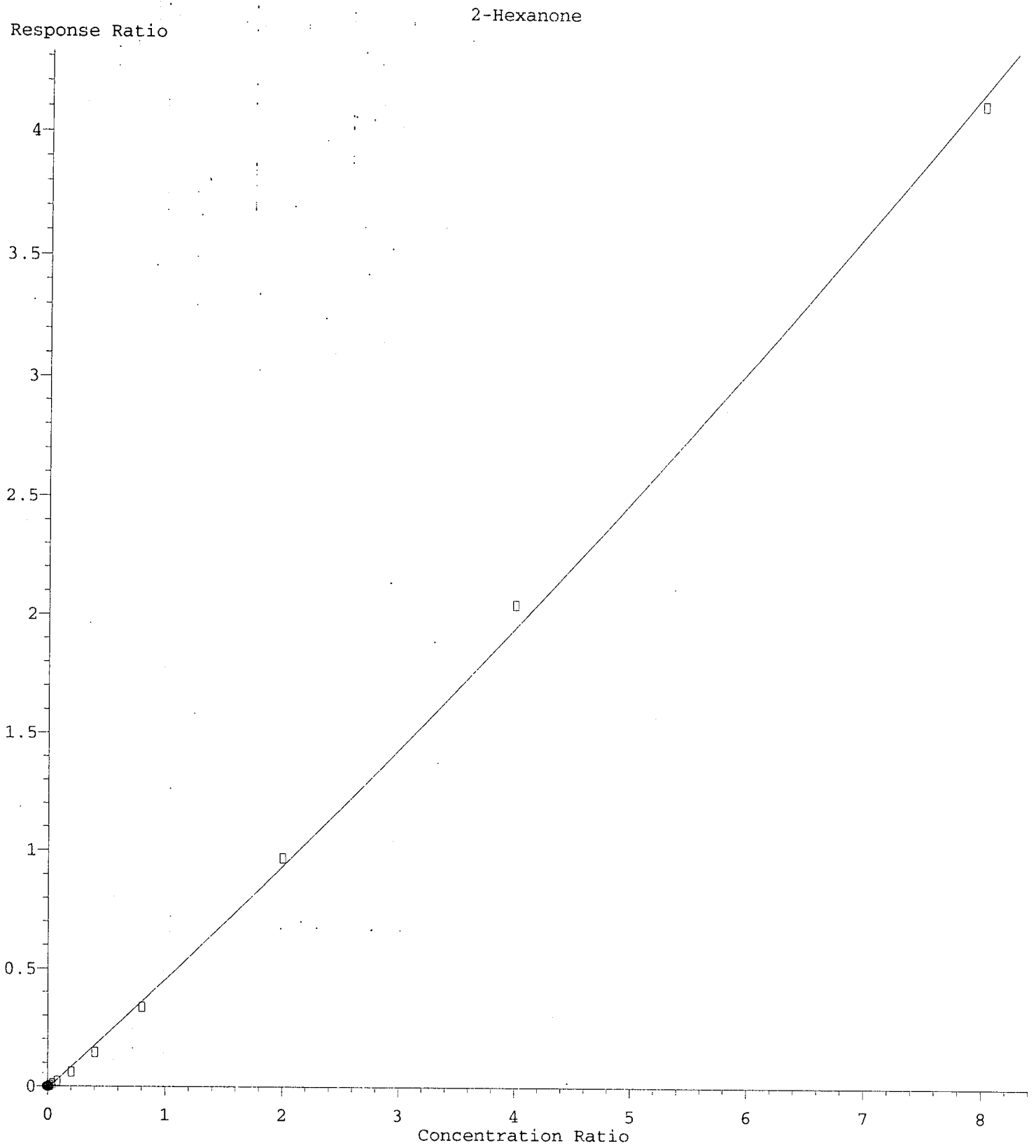
TIC: VJ20010617.D\data.ms

(13) Methylene Chloride

3.771min (-0.012) 0.42 ug/L m

response 2936

Ion	Exp%	Act%
83.90	100.00	100.00
49.00	123.30	131.82
85.90	63.90	69.19
0.00	0.00	0.00



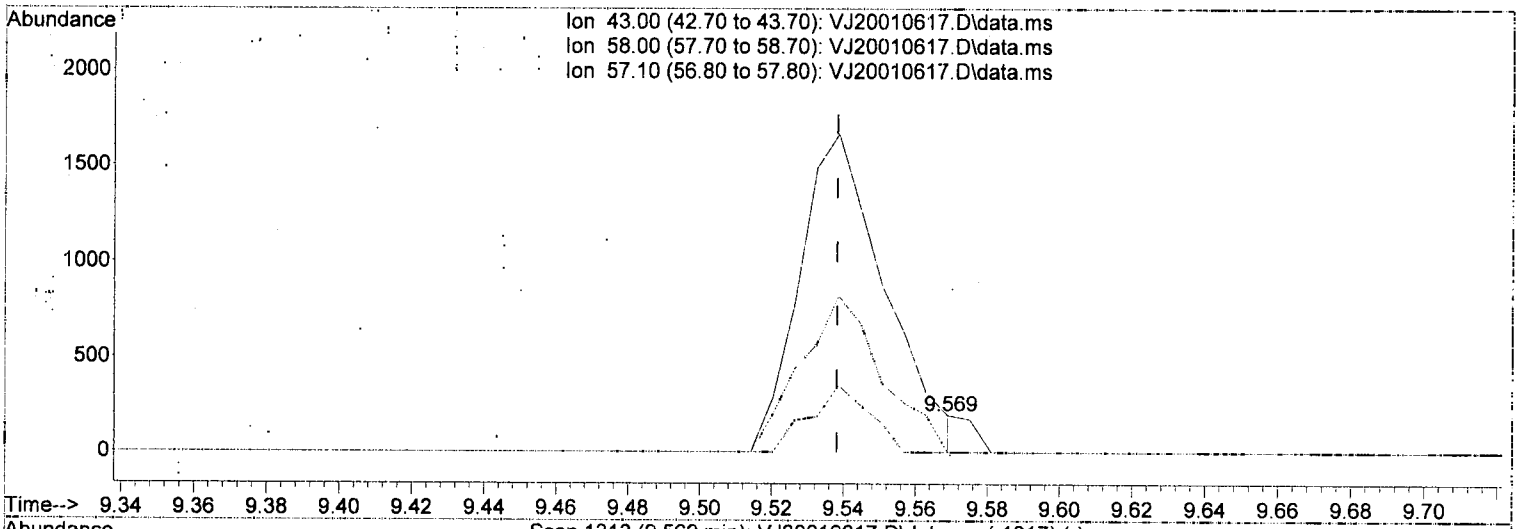
Int = 0.90

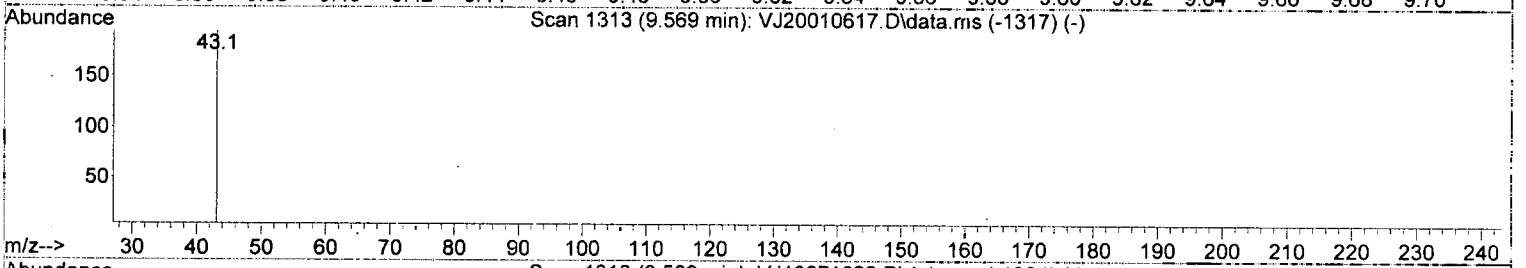
R = 8.50e-003 A*A + 4.54e-001 A - 7.94e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj200103.m
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

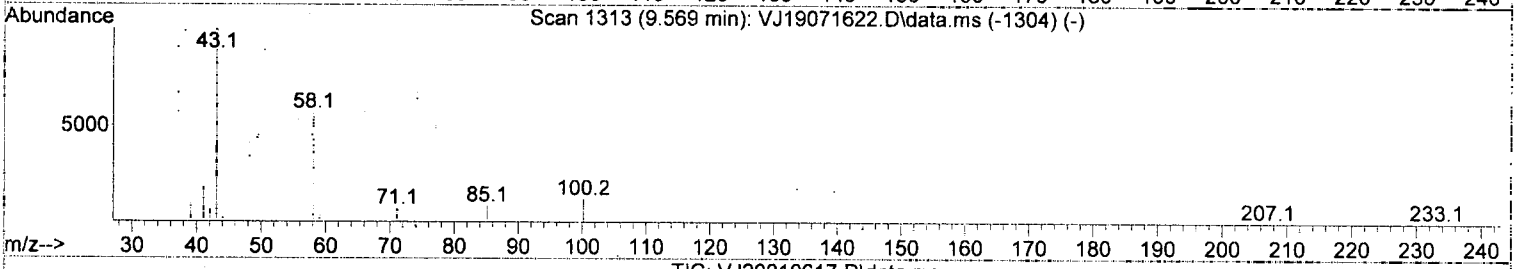
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X ; 5mL ; 1ppb ; DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







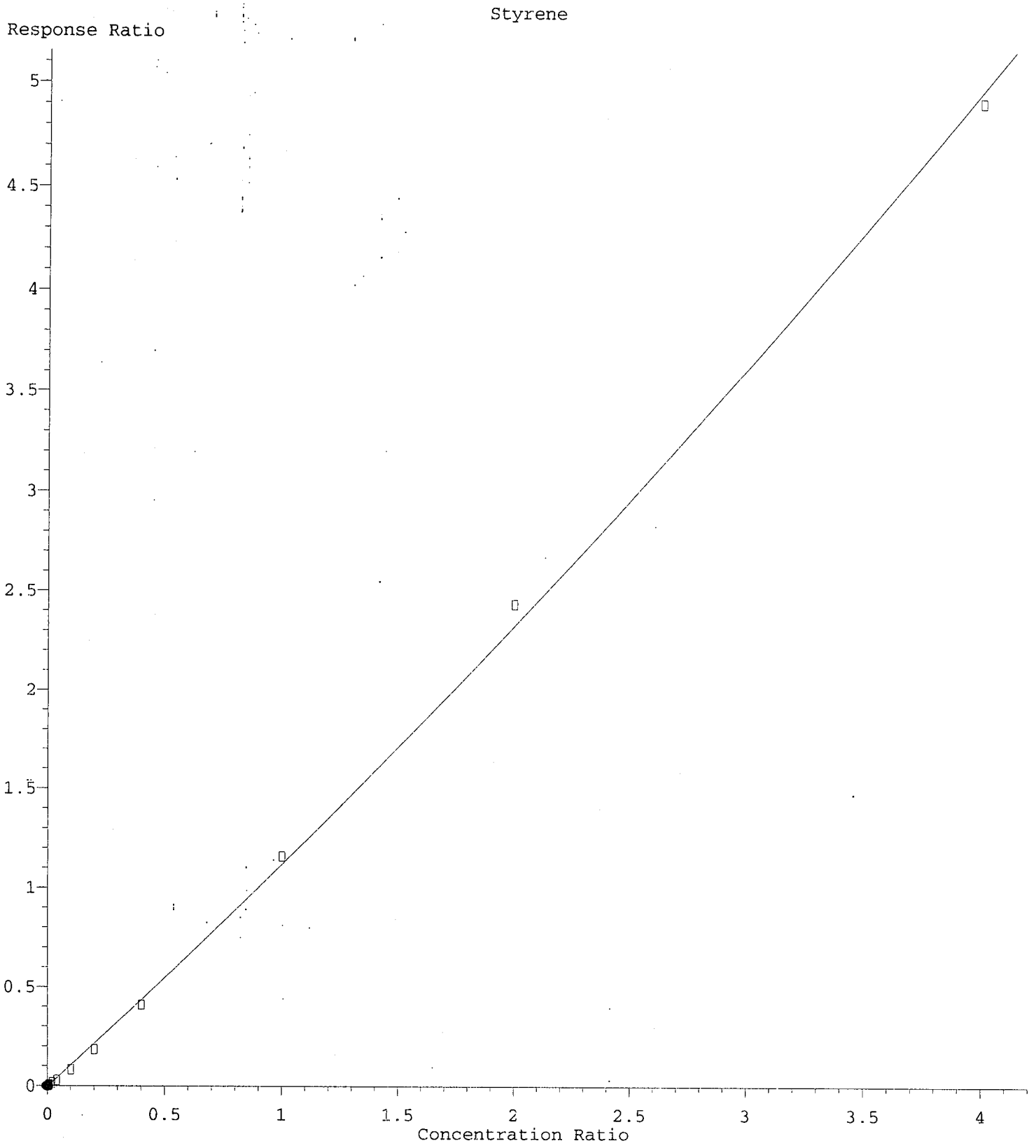
TIC: VJ20010617.D\data.ms

(54) 2-Hexanone

9.569min (+ 0.031) 0.90 ug/L m

response 64

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	55.80	0.00#
57.10	18.50	0.00
0.00	0.00	0.00



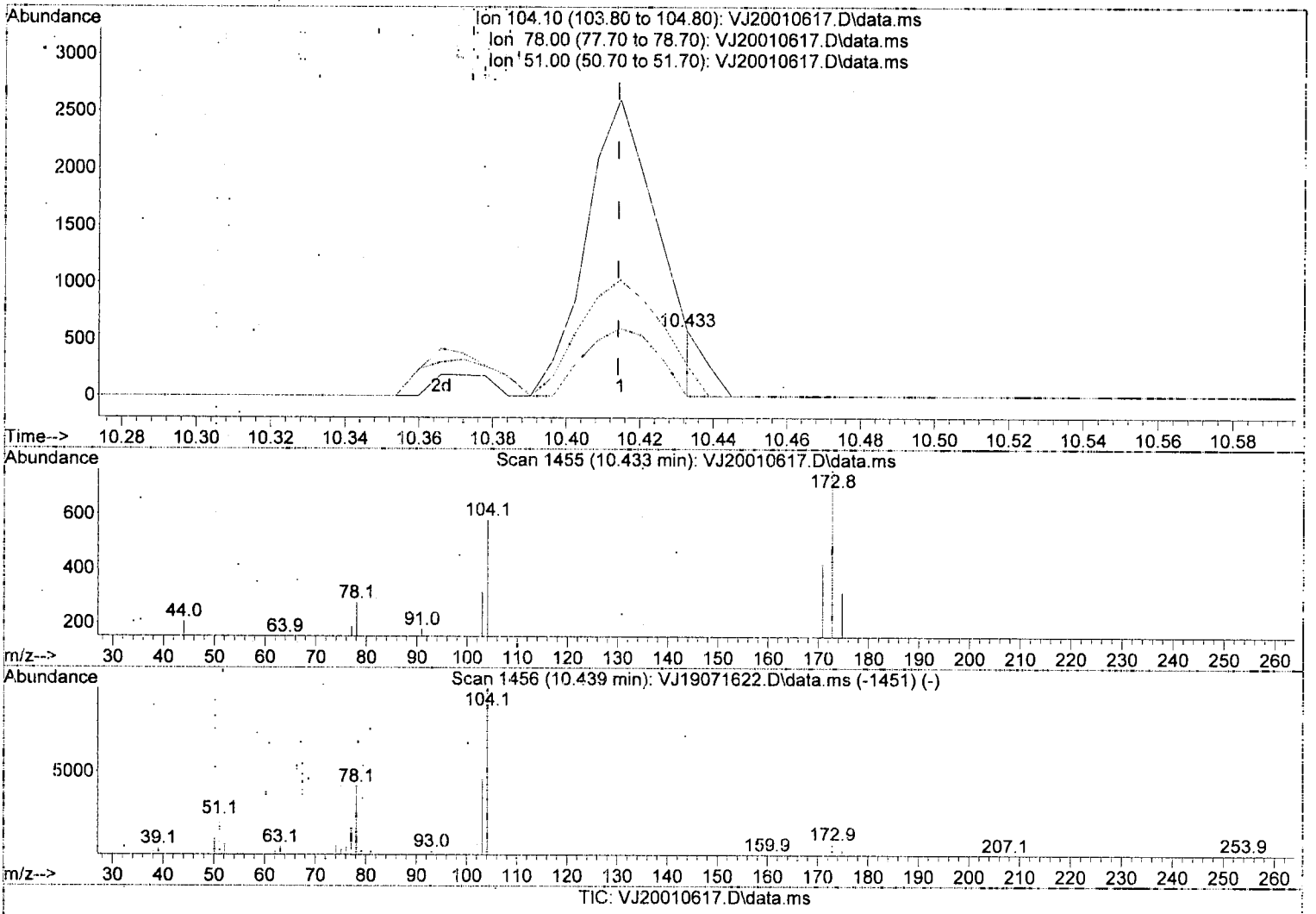
Int = 0.24

R = 3.96e-002 A*A + 1.08e+000 A - 4.75e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ2001065.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



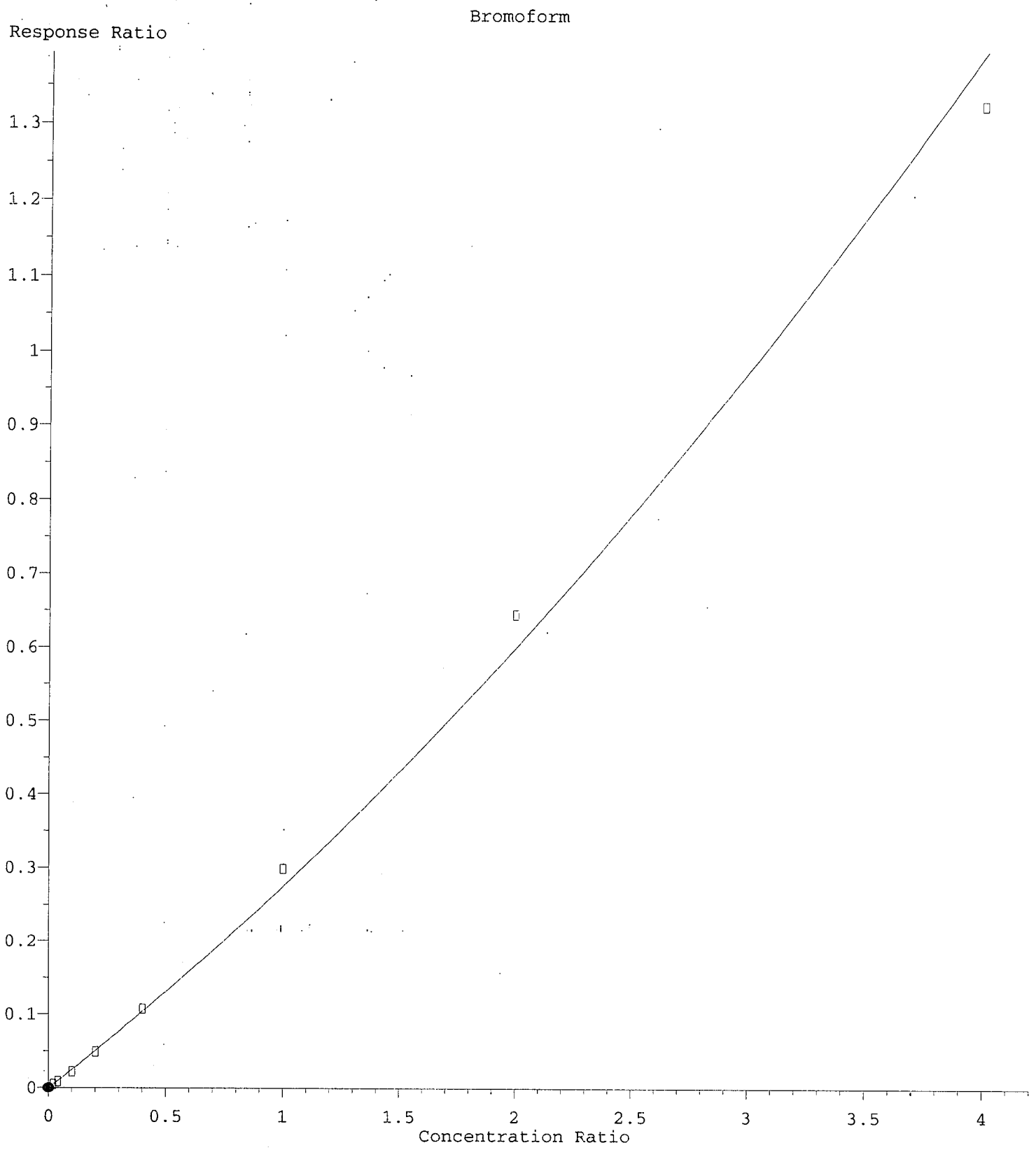
TIC: VJ20010617.D\data.ms

(60) Styrene

10.433min (+ 0.019) 0.24 ug/L m

response 99

Ion	Exp%	Act%
104.10	100.00	100.00
78.00	42.20	47.59
51.00	24.70	0.00
0.00	0.00	0.00



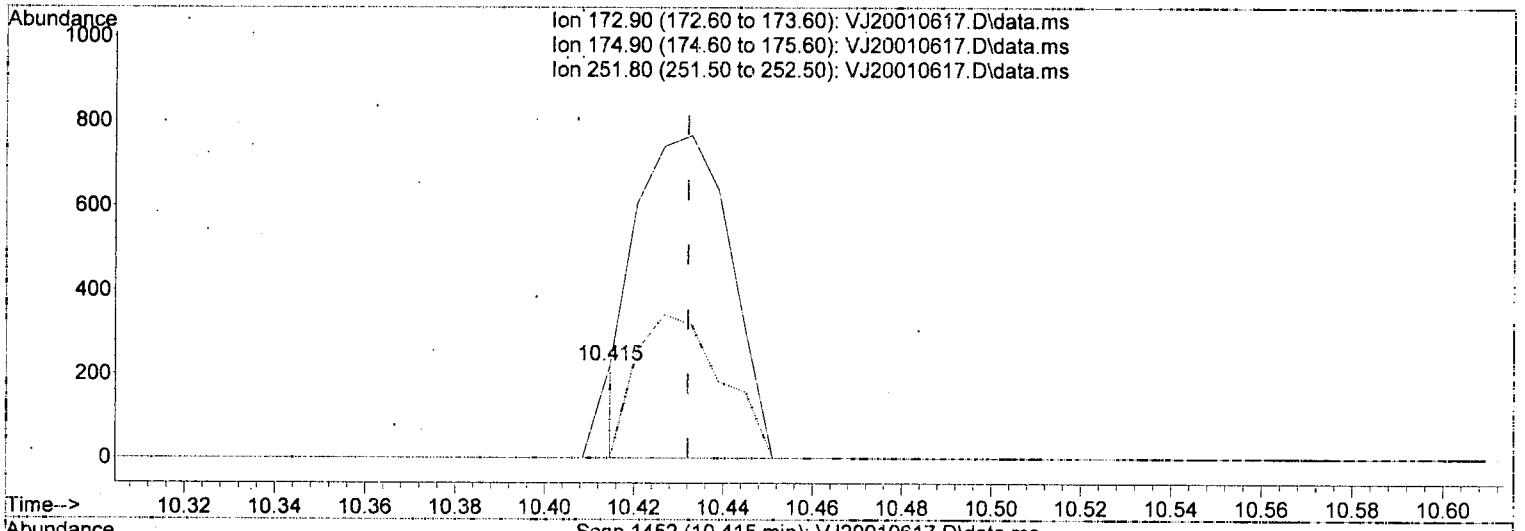
Int = 0.21

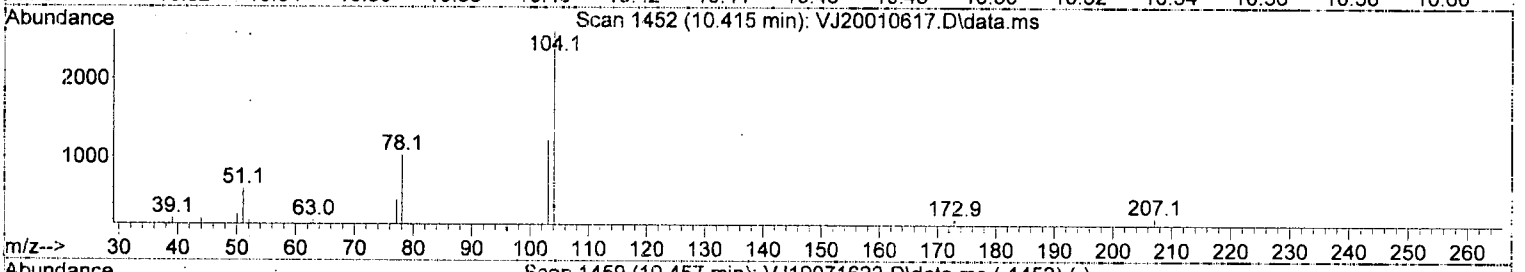
R = 2.42e-002 A*A + 2.52e-001 A - 7.58e-004
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msd2020\1\methods\V-Qa001.PeRDMDG
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

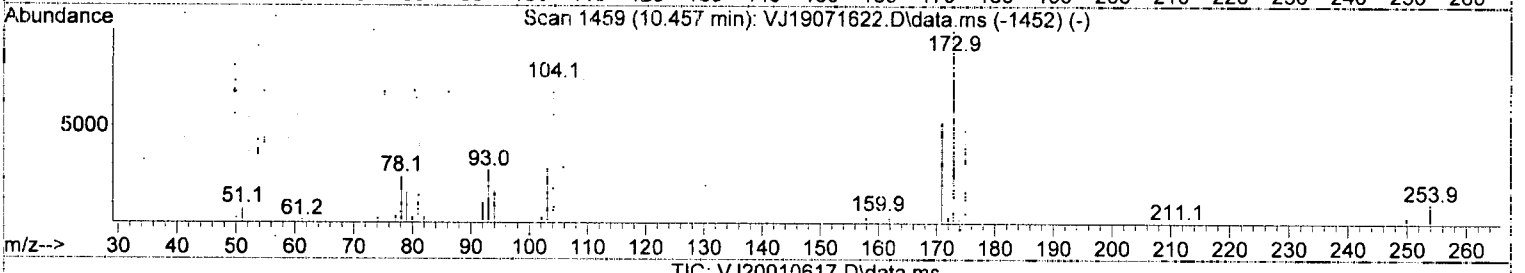
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







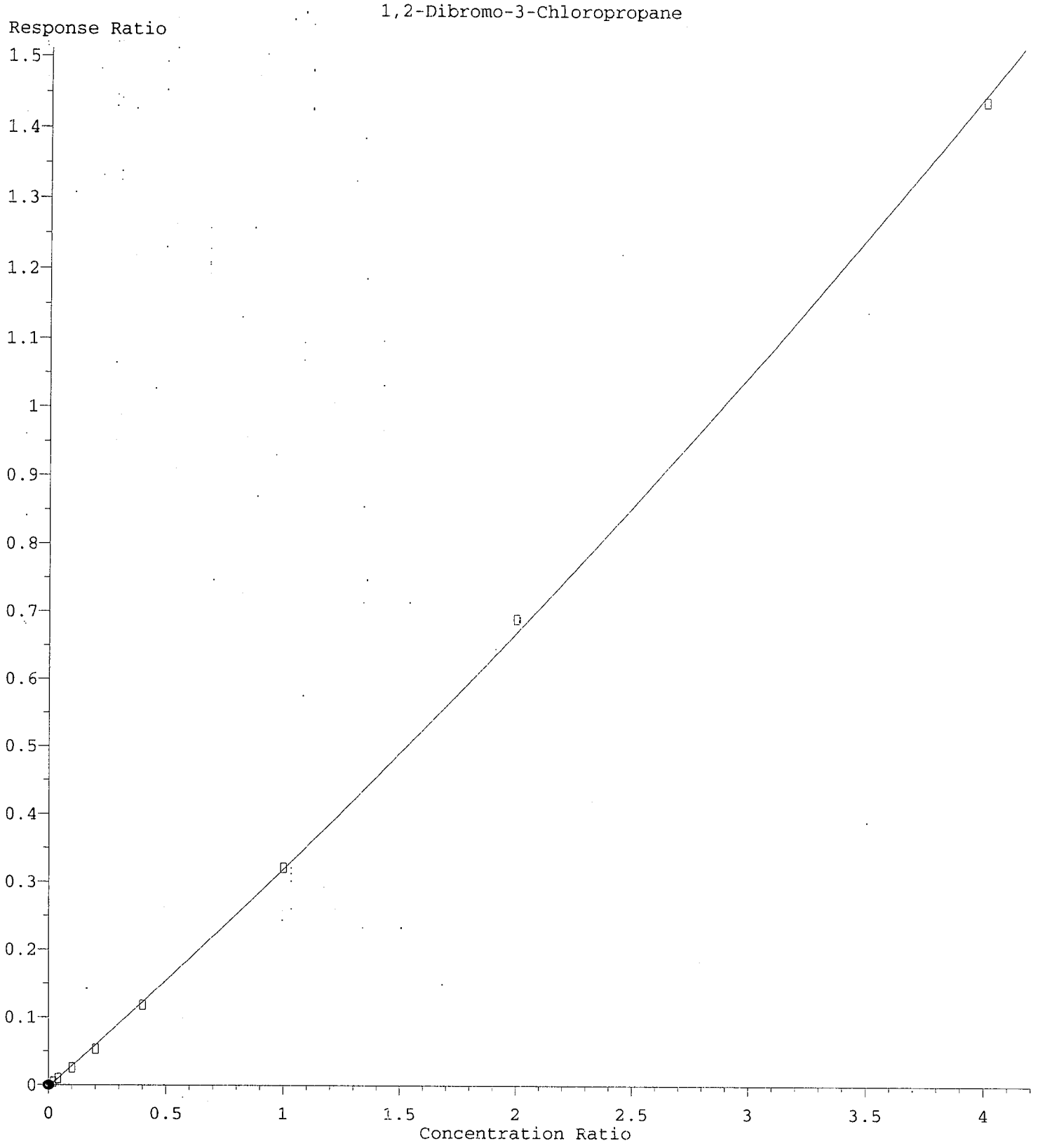
TIC: VJ20010617.D\data.ms

(61) Bromoform (P)

10.415min (-0.017) 0.21 ug/L m

response 81

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



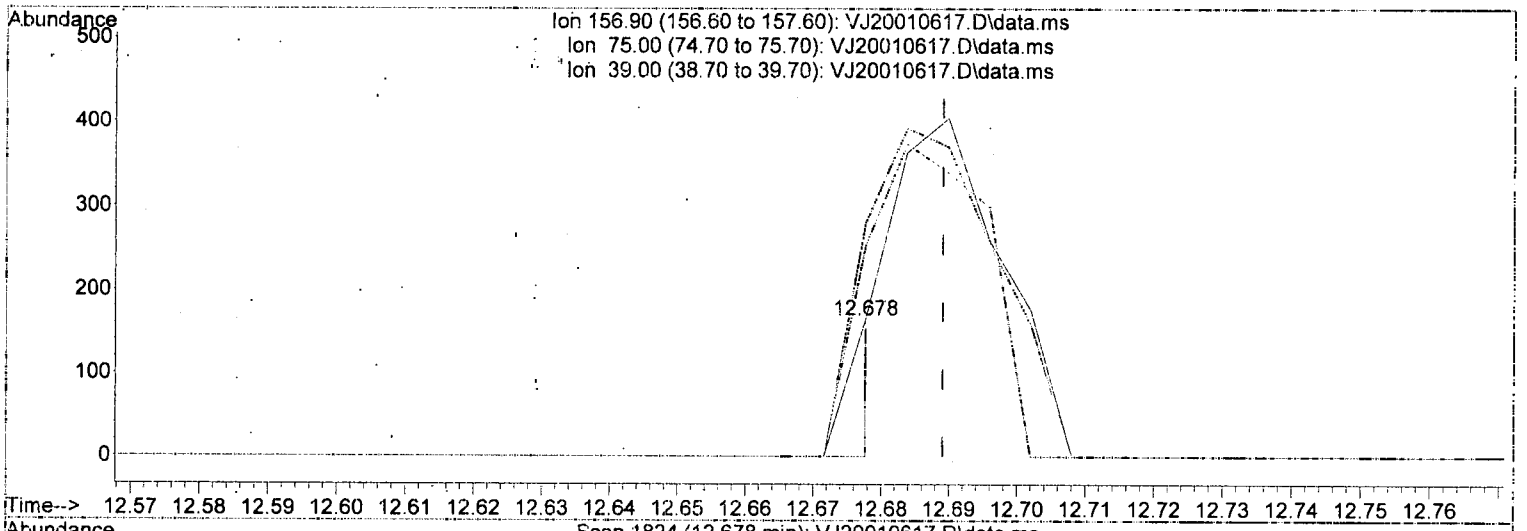
Int = 0.56

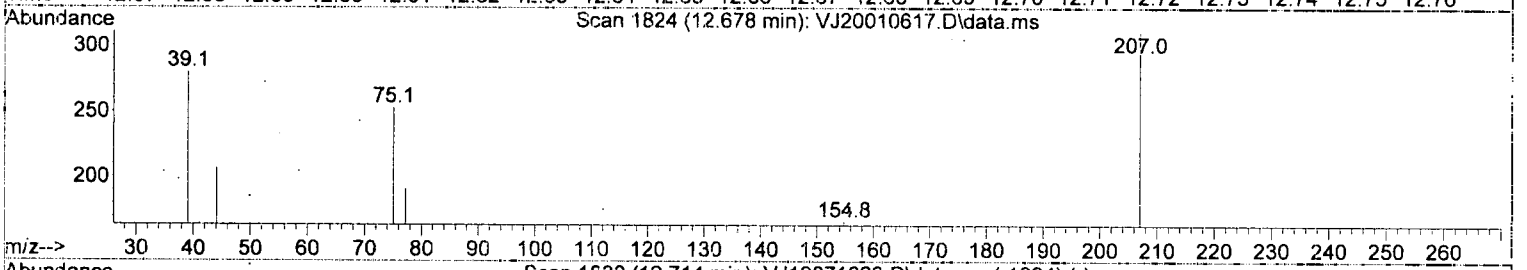
R = 1.35e-002 A*A + 3.09e-001 A - 2.96e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ2001065.M
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

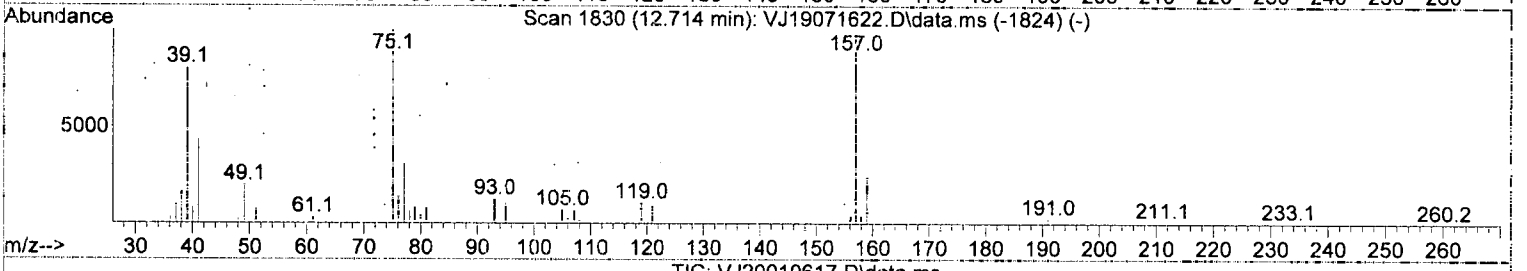
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







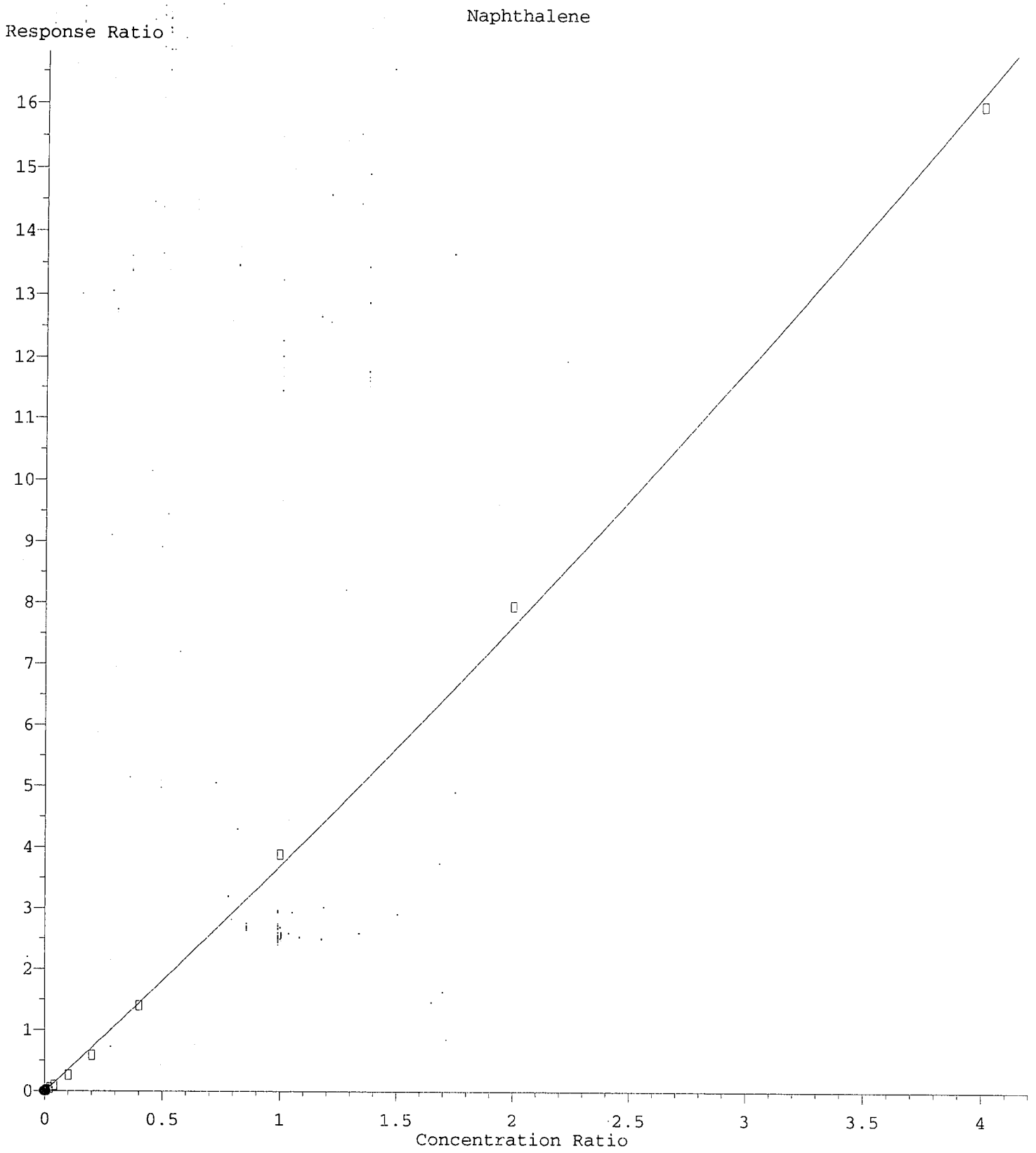
TIC: VJ20010617.D\data.ms

(81) 1,2-Dibromo-3-Chloropropane

12.678min (-0.011) 0.56 ug/L m

response 60

Ion	Exp%	Act%
156.90	100.00	100.00
75.00	73.10	154.27#
39.00	54.70	170.73#
0.00	0.00	0.00



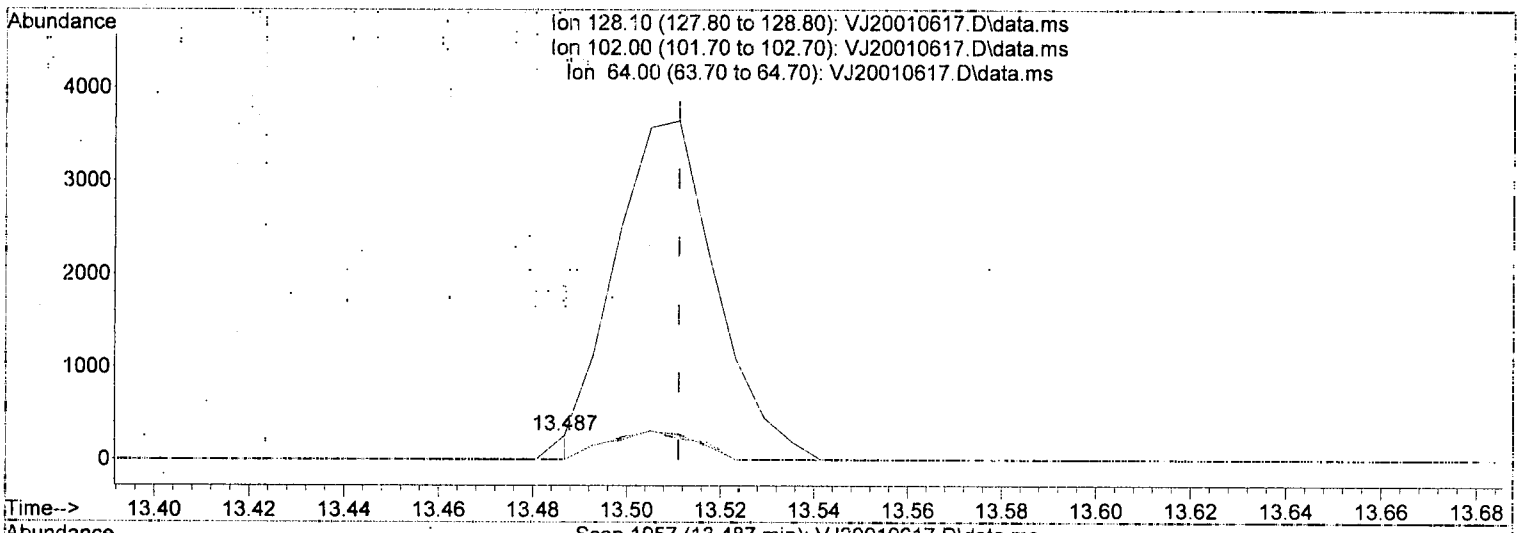
Int = 0.12

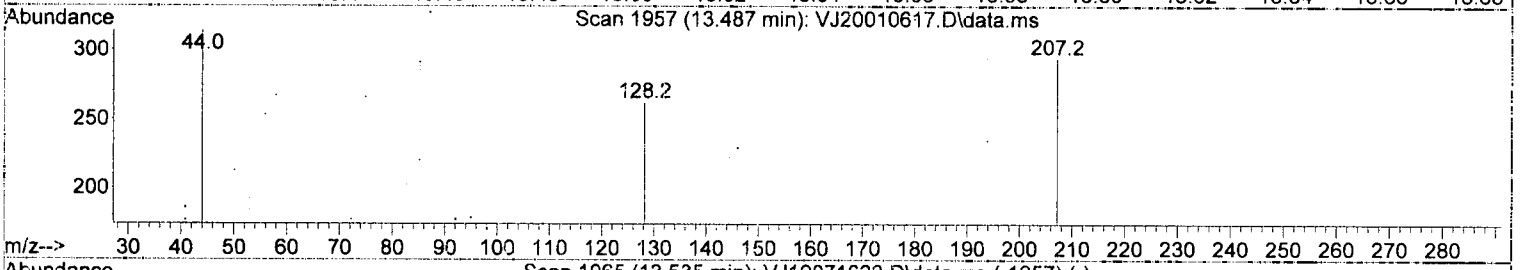
R = 1.16e-001 A*A + 3.59e+000 A - 7.64e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj20191105.m
Calibration Table Last Updated: Tue Jan 07 15:28:00 2020

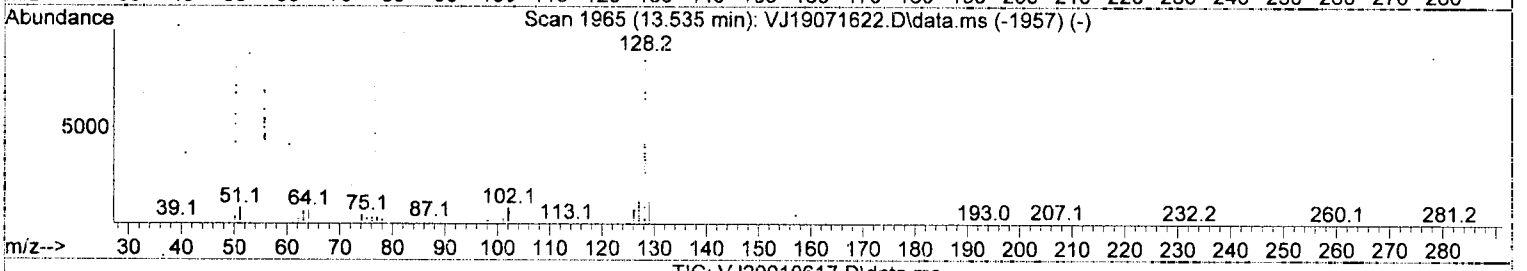
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\requant\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 15:33:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20010617.D\data.ms

(84) Naphthalene

13.487min (-0.024) 0.12 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 SEQUENCE REVIEW SHEET

SEQUENCE: 0A06051

Analysis Included
8260C Full List
8260C Iodomethane Add On
8260C Oxygenates

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
0A06051-TUN1	MS Tune	Soil		A19L200	1/6/2020 4:18:00PM
0A06051-ICB1	Initial Cal Blank	Soil		A19L200	1/6/2020 4:45:00PM
0A06051-CAL1	Cal Standard	Soil	A19L304	"	1/6/2020 5:12:00PM
0A06051-CAL2	Cal Standard	Soil	A19L305	"	1/6/2020 5:39:00PM
0A06051-CAL3	Cal Standard	Soil	A19L306	"	1/6/2020 6:05:00PM
0A06051-CAL4	Cal Standard	Soil	A19L307	"	1/6/2020 6:32:00PM
0A06051-CAL5	Cal Standard	Soil	A19L308	"	1/6/2020 6:59:00PM
0A06051-CAL6	Cal Standard	Soil	A19L309	"	1/6/2020 7:26:00PM
0A06051-CAL7	Cal Standard	Soil	A19L310	"	1/6/2020 7:53:00PM
0A06051-CAL8	Cal Standard	Soil	A19L311	"	1/6/2020 8:20:00PM
0A06051-CAL9	Cal Standard	Soil	A19L312	"	1/6/2020 8:47:00PM
0A06051-CALA	Cal Standard	Soil	A19L313	"	1/6/2020 9:41:00PM
0A06051-CALB	Cal Standard	Soil	A19L314	"	1/6/2020 10:34:00PM
0A06051-ICV1	Initial Cal Check	Soil	A19L250	"	1/6/2020 11:55:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: A0A0801 Instrument: VOA-GCMS10

8260C Full List Sequence: 0A06051 Matrix: Soil

0A06051-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CALB	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0A06051

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: **A0A0801** Instrument: **VOA-GCMS10**

8260C Full List Sequence: **0A06051** Matrix: **Soil**

0A06051-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual
Iodomethane	20	20.0	**33.02**	165	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\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:56:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

1/8/20

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	103	0.00
2		Dichlorodifluoromethane	20.000	16.825	15.9	95	-0.01
3	P	Chloromethane	20.000	19.971	0.1	111	-0.01
4	C	Vinyl Chloride	20.000	19.741	1.3	103	-0.01
5		Bromomethane	20.000	17.303	13.5	93	0.00
6		Chloroethane	20.000	18.365	8.2	105	0.00
7		Trichlorofluoromethane	20.000	19.025	4.9	101	-0.01
8		Ethanol	1250.000	1376.369	-10.1	116	0.01
9	C	1,1-Dichloroethene	20.000	21.273	-6.4	114	-0.02
10		Carbon Disulfide	20.000	20.931	-4.7	115	-0.02
11		Freon 113	20.000	20.117	-0.6	103	-0.02
12		Iodomethane	20.000	33.022	-65.1#	205	-0.02
13		Methylene Chloride	20.000	20.369	-1.8	108	-0.01
14		Acetone	40.000	39.798	0.5	112	0.00
15		t-1,2-Dichloroethene	20.000	20.708	-3.5	109	-0.01
16		n-Hexane	20.000	20.451	-2.3	102	-0.02
17		Methyl-tert-butyl-ether	20.000	19.367	3.2	101	0.00
18		tert-Butanol (TBA)	1250.000	1391.067	-11.3	109	0.00
19		Diisopropyl ether (DIPE)	5.000	5.306	-6.1	103	0.00
20	P	1,1-Dichloroethane	20.000	21.452	-7.3	111	0.00
21		Acrylonitrile	20.000	19.804	1.0	99	0.00
22		Ethyl-tert-butyl ether (ETB	5.000	5.150	-3.0	97	0.00
23		c-1,2-Dichloroethene	20.000	21.146	-5.7	105	0.00
24		2,2-Dichloropropane	20.000	18.268	8.7	94	0.00
25		Bromochloromethane	20.000	19.423	2.9	99	0.00
26	C	Chloroform	20.000	19.943	0.3	103	0.00
27		Carbon Tetrachloride	20.000	20.620	-3.1	106	0.00
28		Tetrahydrofuran	20.000	19.257	3.7	99	0.00
29		1,1,1-Trichloroethane	20.000	20.547	-2.7	103	0.00
30	S	Dibromofluoromethane (S)	50.000	48.775	2.5	103	0.00
31		1,1-Dichloropropene	20.000	20.616	-3.1	102	0.00
32		2-Butanone (MEK)	40.000	35.763	10.6	99	0.00
33		Benzene	20.000	20.180	-0.9	104	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.899	2.0	105	0.00
35		1,2-Dichloroethane (EDC)	20.000	19.924	0.4	102	0.00
36		iso-Butyl Alcohol	500.000	489.041	2.2	106	0.02
37	S	1,4-Difluorobenzene (S)	50.000	50.498	-1.0	106	0.00
38		Trichloroethene (TCE)	20.000	21.034	-5.2	105	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	5.197	-3.9	105	0.00
40		Dibromomethane	20.000	19.844	0.8	100	0.00
41	C	1,2-Dichloropropane	20.000	20.247	-1.2	105	0.00
42		Bromodichloromethane	20.000	19.867	0.7	100	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	105	0.00
44		c-1,3-Dichloropropene	20.000	19.066	4.7	93	0.00
45	S	Toluene-d8 (S)	50.000	49.990	0.0	103	0.00
46	C	Toluene	20.000	19.708	1.5	103	0.00
47		Tetrachloroethene (PCE)	20.000	20.983	-4.9	105	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	36.362	9.1	96	0.00
49		t-1,3-Dichloropropene	20.000	21.468	-7.3	102	0.00
50		1,1,2-Trichloroethane	20.000	19.822	0.9	103	0.00

-E05

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:56:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 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	19.417	2.9	102	0.00
52		1,3-Dichloropropane	20.000	20.140	-0.7	102	0.00
53		1,2-Dibromoethane (EDB)	20.000	20.031	-0.2	103	0.00
54		2-Hexanone	40.000	34.814	13.0	98	0.00
55	P	Chlorobenzene	20.000	19.583	2.1	103	0.00
56	C	Ethylbenzene	20.000	20.607	-3.0	104	0.00
57		1,1,1,2-Tetrachloroethane	20.000	19.985	0.1	104	0.00
58		m,p-Xylenes (2)	40.000	43.550	-8.9	104	0.00
59		o-Xylene	20.000	21.686	-8.4	102	0.00
60		Styrene	20.000	18.539	7.3	103	0.00
61	P	Bromoform	20.000	19.935	0.3	101	0.00
62		Isopropylbenzene	20.000	20.847	-4.2	102	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	108	0.00
64	S	4-Bromofluorobenzene (S)	50.000	48.963	2.1	106	0.00
65		Bromobenzene	20.000	19.868	0.7	104	0.00
66		n-Propylbenzene	20.000	19.889	0.6	101	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	20.274	-1.4	101	0.00
68		2-Chlorotoluene	20.000	20.458	-2.3	102	0.00
69		1,3,5-Trimethylbenzene	20.000	21.832	-9.2	103	0.00
70		1,2,3-Trichloropropane	20.000	19.869	0.7	102	0.00
71		t-1,4-Dichloro-2-butene	20.000	16.882	15.6	91	0.00
72		4-Chlorotoluene	20.000	20.735	-3.7	102	0.00
73		tert-Butylbenzene	20.000	20.904	-4.5	103	0.00
74		1,2,4-Trimethylbenzene	20.000	21.578	-7.9	101	0.00
75		sec-Butylbenzene	20.000	21.438	-7.2	102	0.00
76		4-Isopropyltoluene	20.000	22.010	-10.1	103	0.00
77		1,3-Dichlorobenzene	20.000	20.593	-3.0	103	0.00
78		1,4-Dichlorobenzene	20.000	19.188	4.1	105	0.00
79		n-Butylbenzene	20.000	20.378	-1.9	104	0.00
80		1,2-Dichlorobenzene	20.000	20.586	-2.9	103	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	18.077	9.6	101	0.00
82		Hexachlorobutadiene	20.000	20.802	-4.0	105	0.00
83		1,2,4-Trichlorobenzene	20.000	20.122	-0.6	102	0.00
84		Naphthalene	20.000	18.450	7.8	102	0.00
85		1,2,3-Trichlorobenzene	20.000	21.038	-5.2	103	0.00

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

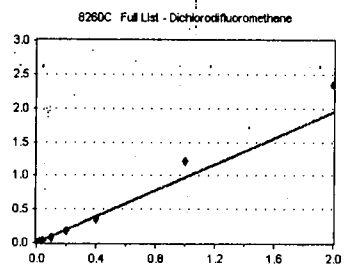
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Dichlorodifluoromethane

Curve Fit: **AVERAGE RF**

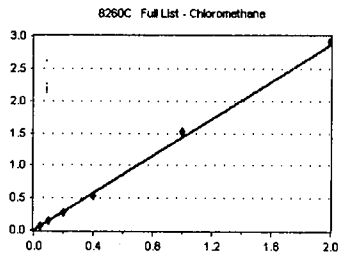


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	732	0.853	1.69
0A06051-CAL4	1	2002	0.960	1.69
0A06051-CAL5	2	3864	0.898	1.69
0A06051-CAL6	5	9676	0.885	1.69
0A06051-CAL7	10	19171	0.912	1.69
0A06051-CAL8	20	38529	0.887	1.69
0A06051-CAL9	50	133544	1.215	1.69
0A06051-CALA	100	260818	1.176	1.70
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **0.973** RF RSD **14.47** AVE RT **1.69**

Chloromethane

Curve Fit: **AVERAGE RF**

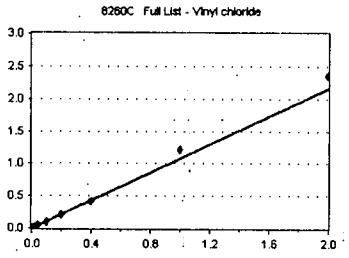


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~1721~~	~~8.089~~	~~1.89~~
~~0A06051-CAL2~~	~~0.2~~	~~2258~~	~~5.052~~	~~1.90~~
~~0A06051-CAL3~~	~~0.4~~	~~2494~~	~~2.907~~	~~1.89~~
~~0A06051-CAL4~~	~~1~~	~~4191~~	~~2.009~~	~~1.89~~
0A06051-CAL5	2	6640	1.543	1.89
0A06051-CAL6	5	15325	1.402	1.89
0A06051-CAL7	10	28319	1.347	1.89
0A06051-CAL8	20	58016	1.336	1.89
0A06051-CAL9	50	167097	1.520	1.89
0A06051-CALA	100	323609	1.459	1.90
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **1.434** RF RSD **6.08** AVE RT **1.89**

Vinyl chloride

Curve Fit: **AVERAGE RF**

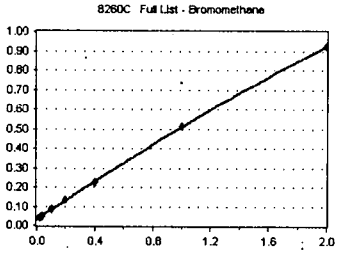


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	831	0.968	1.99
0A06051-CAL4	1	2198	1.053	1.99
0A06051-CAL5	2	4540	1.055	2.00
0A06051-CAL6	5	11467	1.049	1.99
0A06051-CAL7	10	22243	1.058	2.00
0A06051-CAL8	20	46537	1.071	1.99
0A06051-CAL9	50	134342	1.222	1.99
0A06051-CALA	100	261456	1.179	2.00
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **1.082** RF RSD **7.43** AVE RT **1.99**

Bromomethane

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~3306~~	~~15.539~~	~~2.34~~
~~0A06051-CAL2~~	~~0.2~~	~~4152~~	~~9.289~~	~~2.34~~
~~0A06051-CAL3~~	~~0.4~~	~~3494~~	~~4.072~~	~~2.34~~
0A06051-CAL4	1	4342	2.081	2.34
0A06051-CAL5	2	5274	1.225	2.34
0A06051-CAL6	5	9353	0.856	2.34
0A06051-CAL7	10	14130	0.672	2.34
0A06051-CAL8	20	24661	0.568	2.33
0A06051-CAL9	50	56169	0.511	2.34
0A06051-CALA	100	102308	0.461	2.34
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **0.911** RF RSD **63.53** AVE RT **2.34**

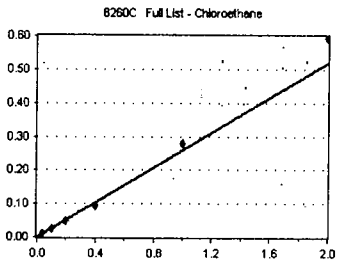
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Chloroethane

Curve Fit: **AVERAGE RF**

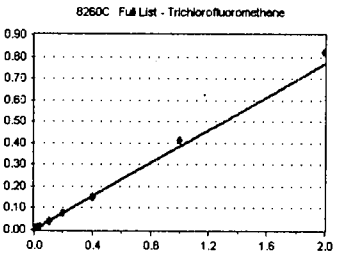


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL4~~	~~1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL5	2	1133	0.263	2.46
0A06051-CAL6	5	2663	0.244	2.46
0A06051-CAL7	10	5109	0.243	2.46
0A06051-CAL8	20	10213	0.235	2.46
0A06051-CAL9	50	30532	0.278	2.46
0A06051-CALA	100	65757	0.297	2.47
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **0.260** RF RSD **9.16** AVE RT **2.46**

Trichlorofluoromethane

Curve Fit: **AVERAGE RF**

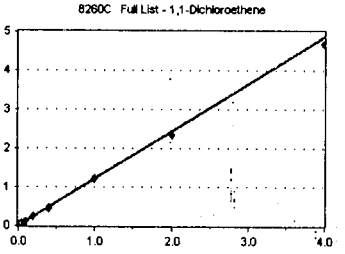


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	277	0.323	2.58
0A06051-CAL4	1	841	0.403	2.59
0A06051-CAL5	2	1611	0.374	2.59
0A06051-CAL6	5	4190	0.383	2.59
0A06051-CAL7	10	8153	0.388	2.59
0A06051-CAL8	20	16168	0.372	2.59
0A06051-CAL9	50	45598	0.415	2.59
0A06051-CALA	100	91399	0.412	2.59
~~0A06051-CALB~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **0.384** RF RSD **7.69** AVE RT **2.59**

1,1-Dichloroethene

Curve Fit: **AVERAGE RF**

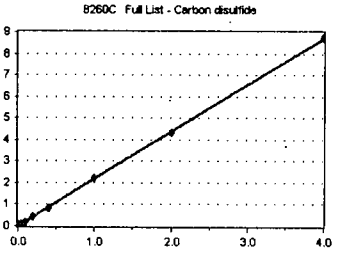


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	573	1.282	3.15
0A06051-CAL3	0.4	1094	1.275	3.13
0A06051-CAL4	1	2590	1.241	3.13
0A06051-CAL5	2	5315	1.235	3.14
0A06051-CAL6	5	12989	1.188	3.13
0A06051-CAL7	10	25020	1.190	3.14
0A06051-CAL8	20	50753	1.169	3.13
0A06051-CAL9	50	135159	1.229	3.13
0A06051-CALA	100	259216	1.169	3.15
0A06051-CALB	200	532160	1.168	3.13

AVE RF **1.215** RF RSD **3.59** AVE RT **3.14**

Carbon disulfide

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	1049	2.347	3.15
0A06051-CAL3	0.4	2024	2.359	3.15
0A06051-CAL4	1	4740	2.272	3.15
0A06051-CAL5	2	9078	2.109	3.15
0A06051-CAL6	5	22304	2.040	3.15
0A06051-CAL7	10	43573	2.073	3.15
0A06051-CAL8	20	88914	2.047	3.15
0A06051-CAL9	50	244493	2.224	3.15
0A06051-CALA	100	479467	2.162	3.16
0A06051-CALB	200	997437	2.190	3.15

AVE RF **2.182** RF RSD **5.38** AVE RT **3.15**

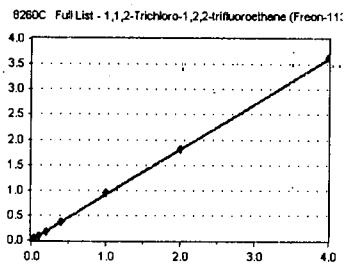
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

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

Curve Fit: **AVERAGE RF**

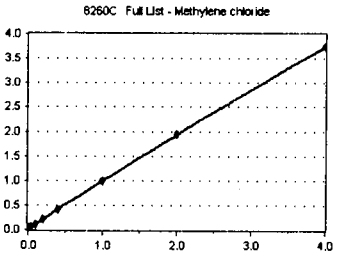


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	716	0.834	3.19
0A06051-CAL4	1	1843	0.883	3.19
0A06051-CAL5	2	3954	0.919	3.19
0A06051-CAL6	5	9807	0.897	3.19
0A06051-CAL7	10	19246	0.916	3.19
0A06051-CAL8	20	39592	0.912	3.19
0A06051-CAL9	50	103618	0.942	3.19
0A06051-CALA	100	202415	0.913	3.20
0A06051-CALB	200	413088	0.907	3.19

AVE RF **0.903** RF RSD **3.34** AVE RT **3.19**

Methylene chloride

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

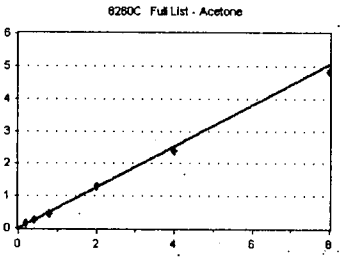


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~2558~~	~~12.023~~	~~3.77~~
~~0A06051-CAL2~~	~~0.2~~	~~2700~~	~~6.041~~	~~3.78~~
~~0A06051-CAL3~~	~~0.4~~	~~3164~~	~~3.687~~	~~3.77~~
0A06051-CAL4	1	4182	2.004	3.77
0A06051-CAL5	2	6338	1.472	3.78
0A06051-CAL6	5	12754	1.167	3.77
0A06051-CAL7	10	22826	1.086	3.77
0A06051-CAL8	20	43446	1.000	3.77
0A06051-CAL9	50	110204	1.002	3.77
0A06051-CALA	100	214594	0.968	3.78
0A06051-CALB	200	426237	0.936	3.77

AVE RF **1.204** RF RSD **30.39** AVE RT **3.77**

Acetone

Curve Fit: **AVERAGE RF**

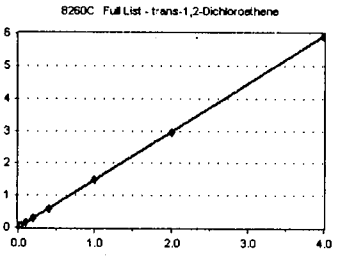


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.8~~	~~3011~~	~~1.755~~	~~3.87~~
~~0A06051-CAL4~~	~~2~~	~~4711~~	~~1.129~~	~~3.86~~
~~0A06051-CAL5~~	~~4~~	~~7670~~	~~0.891~~	~~3.87~~
0A06051-CAL6	10	16091	0.736	3.86
0A06051-CAL7	20	26202	0.623	3.86
0A06051-CAL8	40	50344	0.580	3.86
0A06051-CAL9	100	142899	0.650	3.86
0A06051-CALA	200	265824	0.599	3.86
0A06051-CALB	400	551814	0.606	3.86

AVE RF **0.632** RF RSD **8.87** AVE RT **3.86**

trans-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	676	1.512	3.94
0A06051-CAL3	0.4	1275	1.486	3.93
0A06051-CAL4	1	3238	1.552	3.94
0A06051-CAL5	2	6284	1.460	3.94
0A06051-CAL6	5	15967	1.461	3.94
0A06051-CAL7	10	31429	1.495	3.94
0A06051-CAL8	20	63531	1.463	3.94
0A06051-CAL9	50	165597	1.506	3.94
0A06051-CALA	100	326255	1.471	3.95
0A06051-CALB	200	670587	1.472	3.94

AVE RF **1.488** RF RSD **1.98** AVE RT **3.94**

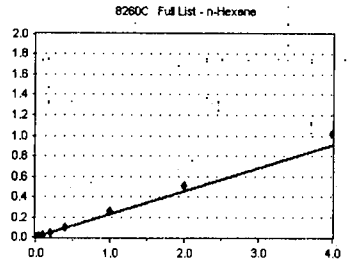
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

n-Hexane

Curve Fit: **AVERAGE RF**

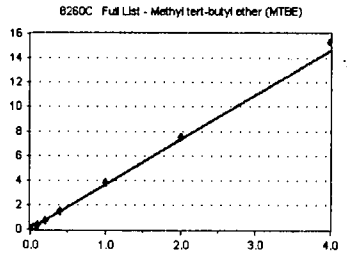


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL4	1	401	0.192	4.03
0A06051-CAL5	2	894	0.208	4.04
0A06051-CAL6	5	2157	0.197	4.03
0A06051-CAL7	10	4668	0.222	4.03
0A06051-CAL8	20	10258	0.236	4.03
0A06051-CAL9	50	28595	0.260	4.03
0A06051-CALA	100	56002	0.253	4.04
0A06051-CALB	200	115656	0.254	4.03

AVE RF **0.228** RF RSD **11.78** AVE RT **4.03**

Methyl tert-butyl ether (MTBE)

Curve Fit: **AVERAGE RF**

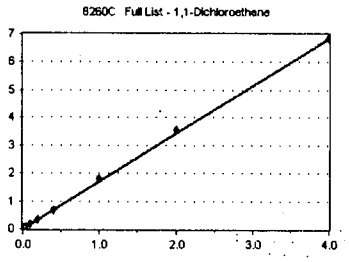


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	1683	3.765	4.11
0A06051-CAL3	0.4	3201	3.730	4.10
0A06051-CAL4	1	7733	3.706	4.10
0A06051-CAL5	2	14619	3.396	4.11
0A06051-CAL6	5	37490	3.430	4.10
0A06051-CAL7	10	75246	3.580	4.10
0A06051-CAL8	20	157914	3.636	4.10
0A06051-CAL9	50	417641	3.799	4.10
0A06051-CALA	100	838469	3.781	4.10
0A06051-CALB	200	1739636	3.819	4.09

AVE RF **3.664** RF RSD **4.14** AVE RT **4.10**

1,1-Dichloroethane

Curve Fit: **AVERAGE RF**

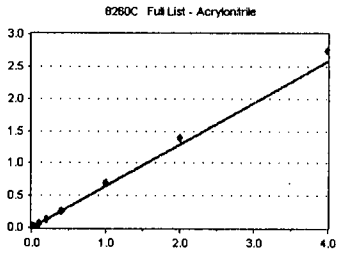


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	614	1.374	4.57
0A06051-CAL3	0.4	1475	1.719	4.58
0A06051-CAL4	1	3757	1.801	4.57
0A06051-CAL5	2	7524	1.748	4.57
0A06051-CAL6	5	18804	1.720	4.57
0A06051-CAL7	10	37310	1.775	4.58
0A06051-CAL8	20	74578	1.717	4.58
0A06051-CAL9	50	199104	1.811	4.57
0A06051-CALA	100	394635	1.780	4.57
0A06051-CALB	200	778036	1.708	4.57

AVE RF **1.715** RF RSD **7.32** AVE RT **4.57**

Acrylonitrile

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~267~~	~~0.311~~	~~4.64~~
0A06051-CAL4	1	1215	0.582	4.63
0A06051-CAL5	2	2393	0.556	4.63
0A06051-CAL6	5	6774	0.620	4.63
0A06051-CAL7	10	13757	0.654	4.62
0A06051-CAL8	20	28955	0.667	4.63
0A06051-CAL9	50	76346	0.694	4.62
0A06051-CALA	100	154316	0.696	4.63
0A06051-CALB	200	311398	0.684	4.62

AVE RF **0.644** RF RSD **8.21** AVE RT **4.63**

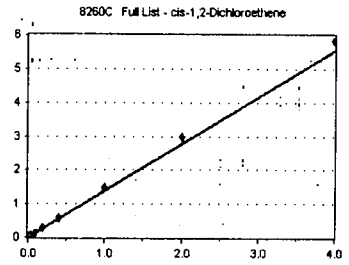
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

cis-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**

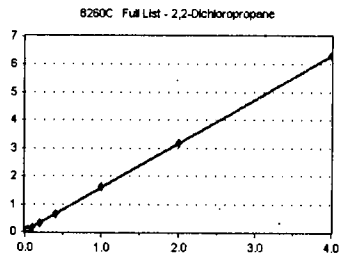


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	459	1.027	5.13
0A06051-CAL3	0.4	1160	1.352	5.12
0A06051-CAL4	1	2879	1.380	5.12
0A06051-CAL5	2	5912	1.373	5.12
0A06051-CAL6	5	15089	1.380	5.12
0A06051-CAL7	10	30607	1.456	5.13
0A06051-CAL8	20	62311	1.435	5.12
0A06051-CAL9	50	163860	1.490	5.12
0A06051-CALA	100	330862	1.492	5.13
0A06051-CALB	200	665136	1.460	5.12

AVE RF **1.385** RF RSD **9.79** AVE RT **5.12**

2,2-Dichloropropane

Curve Fit: **AVERAGE RF**

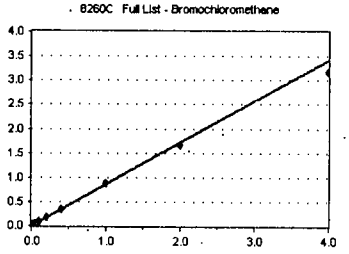


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	710	1.588	5.24
0A06051-CAL3	0.4	1342	1.564	5.23
0A06051-CAL4	1	3369	1.615	5.23
0A06051-CAL5	2	6612	1.536	5.24
0A06051-CAL6	5	16923	1.548	5.23
0A06051-CAL7	10	33201	1.579	5.23
0A06051-CAL8	20	68911	1.587	5.23
0A06051-CAL9	50	178479	1.623	5.23
0A06051-CALA	100	352081	1.588	5.24
0A06051-CALB	200	717593	1.575	5.23

AVE RF **1.580** RF RSD **1.70** AVE RT **5.23**

Bromochloromethane

Curve Fit: **AVERAGE RF**

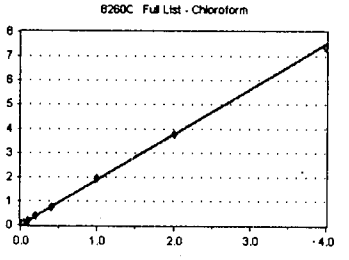


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	685	0.798	5.32
0A06051-CAL4	1	1832	0.878	5.32
0A06051-CAL5	2	3877	0.901	5.32
0A06051-CAL6	5	9397	0.860	5.32
0A06051-CAL7	10	18916	0.900	5.32
0A06051-CAL8	20	37485	0.863	5.32
0A06051-CAL9	50	96440	0.877	5.32
0A06051-CALA	100	184637	0.833	5.32
0A06051-CALB	200	362865	0.797	5.32

AVE RF **0.856** RF RSD **4.58** AVE RT **5.32**

Chloroform

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	750	1.678	5.41
0A06051-CAL3	0.4	1637	1.908	5.41
0A06051-CAL4	1	4167	1.997	5.41
0A06051-CAL5	2	8134	1.890	5.41
0A06051-CAL6	5	20786	1.902	5.41
0A06051-CAL7	10	40679	1.935	5.41
0A06051-CAL8	20	81758	1.882	5.41
0A06051-CAL9	50	212235	1.930	5.41
0A06051-CALA	100	418939	1.889	5.41
0A06051-CALB	200	835972	1.835	5.41

AVE RF **1.885** RF RSD **4.45** AVE RT **5.41**

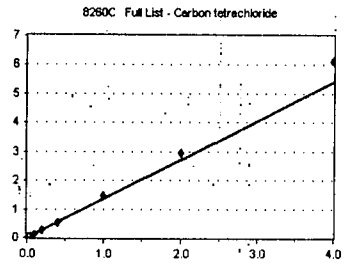
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Carbon tetrachloride

Curve Fit: **AVERAGE RF**

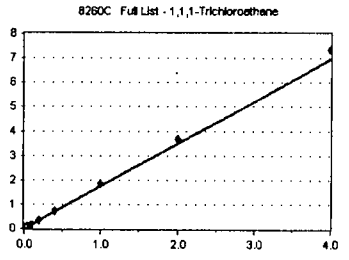


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~762~~	~~0.888~~	~~5.55~~
0A06051-CAL4	1	2362	1.132	5.55
0A06051-CAL5	2	5361	1.245	5.54
0A06051-CAL6	5	13736	1.257	5.54
0A06051-CAL7	10	28141	1.339	5.55
0A06051-CAL8	20	59324	1.366	5.55
0A06051-CAL9	50	163003	1.483	5.55
0A06051-CALA	100	328646	1.482	5.55
0A06051-CALB	200	697816	1.532	5.55

AVE RF **1.354** RF RSD **10.27** AVE RT **5.55**

1,1,1-Trichloroethane

Curve Fit: **AVERAGE RF**

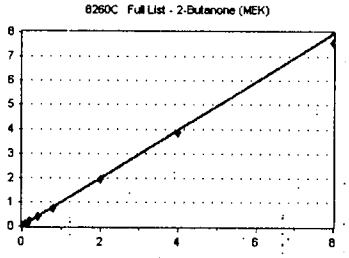


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	641	1.434	5.62
0A06051-CAL3	0.4	1303	1.519	5.62
0A06051-CAL4	1	3658	1.753	5.61
0A06051-CAL5	2	7608	1.767	5.62
0A06051-CAL6	5	19285	1.764	5.62
0A06051-CAL7	10	37707	1.794	5.62
0A06051-CAL8	20	77869	1.793	5.62
0A06051-CAL9	50	203751	1.853	5.62
0A06051-CALA	100	408532	1.842	5.62
0A06051-CALB	200	839286	1.842	5.62

AVE RF **1.736** RF RSD **8.22** AVE RT **5.62**

2-Butanone (MEK)

Curve Fit: **AVERAGE RF**

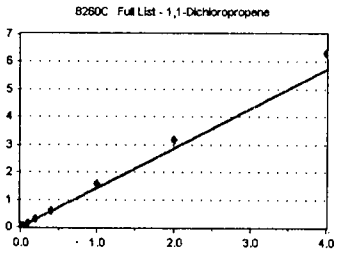


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.2~~	~~3330~~	~~7.826~~	~~5.73~~
~~0A06051-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.6~~	~~4185~~	~~2.439~~	~~5.73~~
~~0A06051-CAL4~~	~~2~~	~~6120~~	~~1.467~~	~~5.74~~
0A06051-CAL5	4	10497	1.219	5.73
0A06051-CAL6	10	21516	0.984	5.73
0A06051-CAL7	20	39626	0.943	5.72
0A06051-CAL8	40	80360	0.925	5.72
0A06051-CAL9	100	212809	0.968	5.72
0A06051-CALA	200	426227	0.961	5.72
0A06051-CALB	400	860392	0.944	5.72

AVE RF **0.992** RF RSD **10.28** AVE RT **5.73**

1,1-Dichloropropene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	1041	1.213	5.74
0A06051-CAL4	1	2751	1.319	5.74
0A06051-CAL5	2	5753	1.337	5.75
0A06051-CAL6	5	14954	1.368	5.74
0A06051-CAL7	10	29838	1.419	5.74
0A06051-CAL8	20	65020	1.497	5.74
0A06051-CAL9	50	173054	1.574	5.74
0A06051-CALA	100	350616	1.581	5.74
0A06051-CALB	200	719241	1.579	5.74

AVE RF **1.432** RF RSD **9.32** AVE RT **5.74**

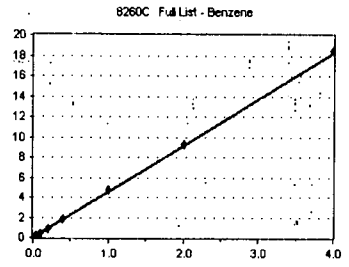
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Benzene

Curve Fit: **AVERAGE RF**

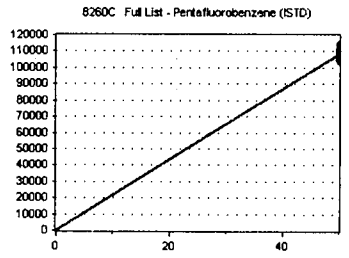


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	964	4.531	6.00
0A06051-CAL2	0.2	2055	4.598	6.00
0A06051-CAL3	0.4	3949	4.602	6.00
0A06051-CAL4	1	9450	4.529	5.99
0A06051-CAL5	2	19123	4.443	6.00
0A06051-CAL6	5	49577	4.535	5.99
0A06051-CAL7	10	96046	4.569	6.00
0A06051-CAL8	20	199822	4.601	6.00
0A06051-CAL9	50	519107	4.722	6.00
0A06051-CALA	100	1027410	4.633	6.00
0A06051-CALB	200	2104798	4.621	5.99

AVE RF **4.580** RF RSD **1.57** AVE RT **6.00**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

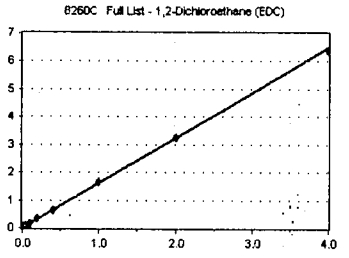


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	106379	2127.580	6.08
0A06051-CAL2	50	111744	2234.880	6.09
0A06051-CAL3	50	107259	2145.180	6.08
0A06051-CAL4	50	104320	2086.400	6.08
0A06051-CAL5	50	107612	2152.240	6.08
0A06051-CAL6	50	109312	2186.240	6.08
0A06051-CAL7	50	105104	2102.080	6.08
0A06051-CAL8	50	108585	2171.700	6.08
0A06051-CAL9	50	109944	2198.880	6.08
0A06051-CALA	50	110868	2217.360	6.08
0A06051-CALB	50	113880	2277.600	6.08

AVE RF **2172.740** RF RSD **2.66** AVE RT **6.08**

1,2-Dichloroethane (EDC)

Curve Fit: **AVERAGE RF**

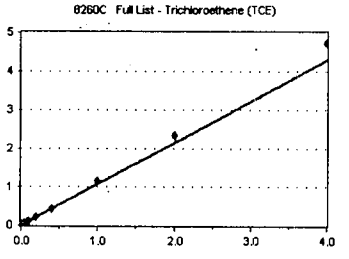


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	601	1.345	6.21
0A06051-CAL3	0.4	1395	1.626	6.20
0A06051-CAL4	1	3535	1.694	6.21
0A06051-CAL5	2	7281	1.691	6.21
0A06051-CAL6	5	18324	1.676	6.20
0A06051-CAL7	10	35220	1.675	6.20
0A06051-CAL8	20	71205	1.639	6.20
0A06051-CAL9	50	182611	1.661	6.20
0A06051-CALA	100	359673	1.622	6.21
0A06051-CALB	200	729497	1.601	6.20

AVE RF **1.623** RF RSD **6.33** AVE RT **6.20**

Trichloroethene (TCE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	325	0.727	6.61
0A06051-CAL3	0.4	861	1.003	6.61
0A06051-CAL4	1	2393	1.147	6.62
0A06051-CAL5	2	4651	1.081	6.62
0A06051-CAL6	5	11743	1.074	6.62
0A06051-CAL7	10	23199	1.104	6.61
0A06051-CAL8	20	48339	1.113	6.61
0A06051-CAL9	50	127363	1.158	6.61
0A06051-CALA	100	261248	1.178	6.62
0A06051-CALB	200	540121	1.186	6.61

AVE RF **1.077** RF RSD **12.51** AVE RT **6.61**

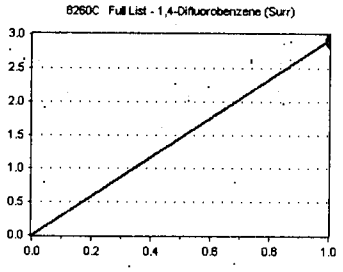
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

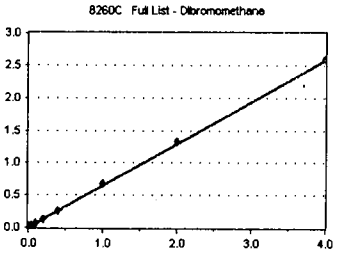


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	313857	2.950	6.64
0A06051-CAL2	50	320717	2.870	6.65
0A06051-CAL3	50	317056	2.956	6.64
0A06051-CAL4	50	303345	2.908	6.64
0A06051-CAL5	50	312825	2.907	6.65
0A06051-CAL6	50	319667	2.924	6.64
0A06051-CAL7	50	303283	2.886	6.65
0A06051-CAL8	50	312074	2.874	6.64
0A06051-CAL9	50	323337	2.941	6.64
0A06051-CALA	50	322488	2.909	6.65
0A06051-CALB	50	336999	2.959	6.64

AVE RF **2.917** RF RSD **1.10** AVE RT **6.65**

Dibromomethane

Curve Fit: **AVERAGE RF**

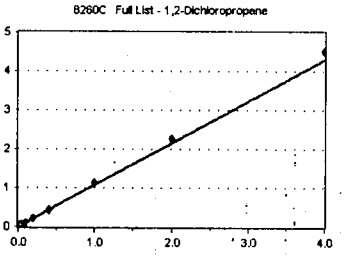


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	440	0.513	7.05
0A06051-CAL4	1	1401	0.671	7.05
0A06051-CAL5	2	2722	0.632	7.06
0A06051-CAL6	5	7254	0.664	7.06
0A06051-CAL7	10	13851	0.659	7.05
0A06051-CAL8	20	28602	0.659	7.06
0A06051-CAL9	50	74740	0.680	7.06
0A06051-CALA	100	147470	0.665	7.06
0A06051-CALB	200	295836	0.649	7.06

AVE RF **0.644** RF RSD **7.90** AVE RT **7.05**

1,2-Dichloropropane

Curve Fit: **AVERAGE RF**

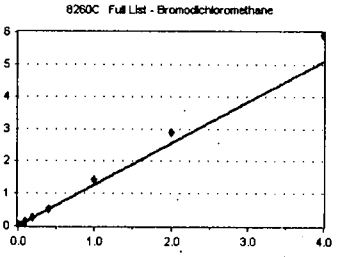


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	812	0.946	7.17
0A06051-CAL4	1	2329	1.116	7.17
0A06051-CAL5	2	4450	1.034	7.17
0A06051-CAL6	5	11716	1.072	7.17
0A06051-CAL7	10	22439	1.067	7.17
0A06051-CAL8	20	46552	1.072	7.17
0A06051-CAL9	50	124220	1.130	7.17
0A06051-CALA	100	251031	1.132	7.17
0A06051-CALB	200	513536	1.127	7.17

AVE RF **1.077** RF RSD **5.59** AVE RT **7.17**

Bromodichloromethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	837	0.975	7.23
0A06051-CAL4	1	2358	1.130	7.24
0A06051-CAL5	2	5147	1.196	7.24
0A06051-CAL6	5	13785	1.261	7.25
0A06051-CAL7	10	26524	1.262	7.24
0A06051-CAL8	20	57072	1.314	7.24
0A06051-CAL9	50	156309	1.422	7.24
0A06051-CALA	100	319153	1.439	7.25
0A06051-CALB	200	673068	1.478	7.24

AVE RF **1.275** RF RSD **12.66** AVE RT **7.24**

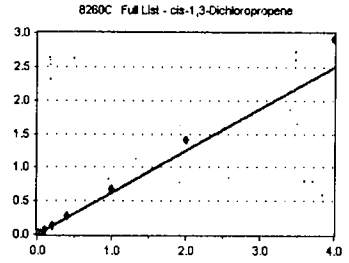
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

cis-1,3-Dichloropropene

Curve Fit: **AVERAGE RF**

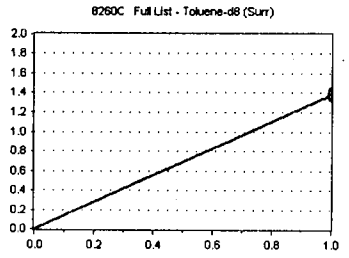


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	1184	0.543	7.94
0A06051-CAL4	1	2826	0.540	7.94
0A06051-CAL5	2	5846	0.540	7.95
0A06051-CAL6	5	15807	0.585	7.95
0A06051-CAL7	10	31802	0.620	7.95
0A06051-CAL8	20	69513	0.675	7.95
0A06051-CAL9	50	179213	0.680	7.95
0A06051-CALA	100	375031	0.709	7.95
0A06051-CALB	200	788701	0.728	7.95

AVE RF **0.625** RF RSD **12.13** AVE RT **7.94**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**

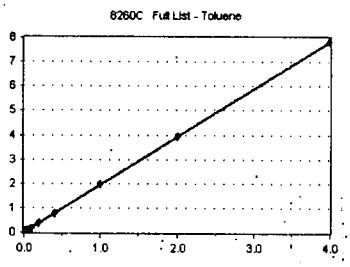


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	365118	1.396	8.16
0A06051-CAL2	50	371366	1.429	8.16
0A06051-CAL3	50	372287	1.366	8.16
0A06051-CAL4	50	353415	1.352	8.16
0A06051-CAL5	50	366801	1.356	8.16
0A06051-CAL6	50	371403	1.375	8.16
0A06051-CAL7	50	357128	1.391	8.16
0A06051-CAL8	50	363051	1.409	8.16
0A06051-CAL9	50	366647	1.392	8.16
0A06051-CALA	50	366947	1.387	8.16
0A06051-CALB	50	377155	1.393	8.16

AVE RF **1.386** RF RSD **1.65** AVE RT **8.16**

Toluene

Curve Fit: **AVERAGE RF**

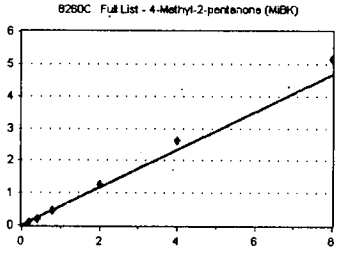


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	1116	2.133	8.23
0A06051-CAL2	0.2	2095	2.016	8.23
0A06051-CAL3	0.4	4056	1.860	8.22
0A06051-CAL4	1	10340	1.977	8.22
0A06051-CAL5	2	20173	1.865	8.22
0A06051-CAL6	5	50497	1.870	8.22
0A06051-CAL7	10	99117	1.931	8.22
0A06051-CAL8	20	202797	1.968	8.22
0A06051-CAL9	50	527429	2.002	8.22
0A06051-CALA	100	1043895	1.973	8.23
0A06051-CALB	200	2113193	1.952	8.22

AVE RF **1.959** RF RSD **4.07** AVE RT **8.22**

4-Methyl-2-pentanone (MiBK)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.8~~	~~1816~~	~~0.416~~	~~8.67~~
~~0A06051-CAL4~~	~~2~~	~~4709~~	~~0.450~~	~~8.66~~
~~0A06051-CAL5~~	~~4~~	~~9202~~	~~0.425~~	~~8.66~~
0A06051-CAL6	10	25616	0.474	8.66
0A06051-CAL7	20	52984	0.516	8.66
0A06051-CAL8	40	120371	0.584	8.66
0A06051-CAL9	100	335118	0.636	8.66
0A06051-CALA	200	694774	0.657	8.66
0A06051-CALB	400	1392617	0.643	8.66

AVE RF **0.585** RF RSD **12.82** AVE RT **8.66**

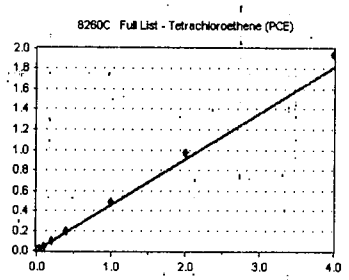
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Tetrachloroethene (PCE)

Curve Fit: **AVERAGE RF**

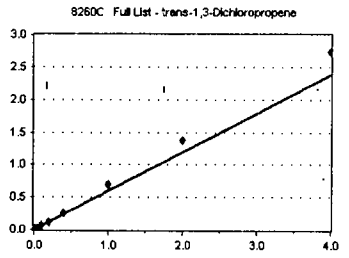


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	769	0.353	8.66
0A06051-CAL4	1	2425	0.464	8.67
0A06051-CAL5	2	4547	0.420	8.68
0A06051-CAL6	5	12115	0.449	8.67
0A06051-CAL7	10	23746	0.463	8.68
0A06051-CAL8	20	49335	0.479	8.67
0A06051-CAL9	50	128862	0.489	8.67
0A06051-CALA	100	257455	0.487	8.67
0A06051-CALB	200	525373	0.485	8.67

AVE RF **0.454** RF RSD **9.69** AVE RT **8.67**

trans-1,3-Dichloropropene

Curve Fit: **AVERAGE RF**

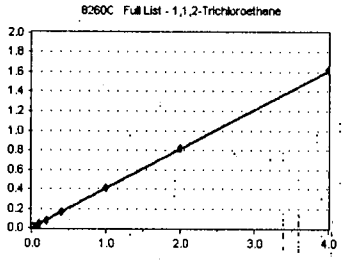


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	527	0.507	8.70
0A06051-CAL3	0.4	1069	0.490	8.70
0A06051-CAL4	1	2806	0.537	8.69
0A06051-CAL5	2	5629	0.520	8.69
0A06051-CAL6	5	15519	0.575	8.69
0A06051-CAL7	10	30984	0.604	8.69
0A06051-CAL8	20	67947	0.659	8.70
0A06051-CAL9	50	181998	0.691	8.69
0A06051-CALA	100	364799	0.690	8.69
0A06051-CALB	200	742175	0.685	8.69

AVE RF **0.596** RF RSD **13.55** AVE RT **8.69**

1,1,2-Trichloroethane

Curve Fit: **AVERAGE RF**

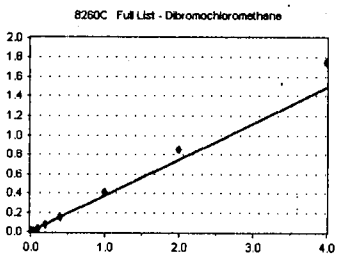


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	835	0.383	8.86
0A06051-CAL4	1	2116	0.405	8.86
0A06051-CAL5	2	4369	0.404	8.87
0A06051-CAL6	5	10798	0.400	8.87
0A06051-CAL7	10	20750	0.404	8.87
0A06051-CAL8	20	42261	0.410	8.87
0A06051-CAL9	50	108807	0.413	8.87
0A06051-CALA	100	216245	0.409	8.87
0A06051-CALB	200	439402	0.406	8.87

AVE RF **0.404** RF RSD **2.16** AVE RT **8.87**

Dibromochloromethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~513~~	~~0.235~~	~~9.06~~
0A06051-CAL4	1	1661	0.318	9.05
0A06051-CAL5	2	3651	0.337	9.06
0A06051-CAL6	5	9016	0.334	9.06
0A06051-CAL7	10	18046	0.352	9.06
0A06051-CAL8	20	38652	0.375	9.06
0A06051-CAL9	50	107752	0.409	9.06
0A06051-CALA	100	225531	0.426	9.06
0A06051-CALB	200	475554	0.439	9.06

AVE RF **0.374** RF RSD **12.32** AVE RT **9.06**

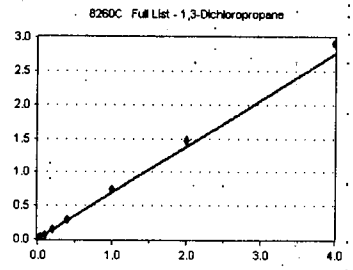
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,3-Dichloropropane

Curve Fit: **AVERAGE RF**

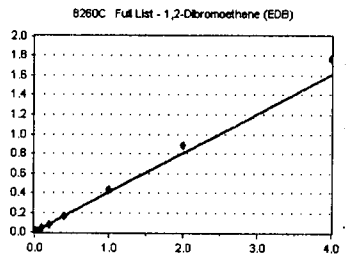


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	587	0.565	9.16
0A06051-CAL3	0.4	1360	0.624	9.15
0A06051-CAL4	1	3556	0.680	9.16
0A06051-CAL5	2	7539	0.697	9.16
0A06051-CAL6	5	18904	0.700	9.16
0A06051-CAL7	10	36128	0.704	9.16
0A06051-CAL8	20	73561	0.714	9.16
0A06051-CAL9	50	197608	0.750	9.16
0A06051-CALA	100	390171	0.738	9.16
0A06051-CALB	200	792112	0.732	9.16

AVE RF **0.690** RF RSD **8.18** AVE RT **9.15**

1,2-Dibromoethane (EDB)

Curve Fit: **AVERAGE RF**

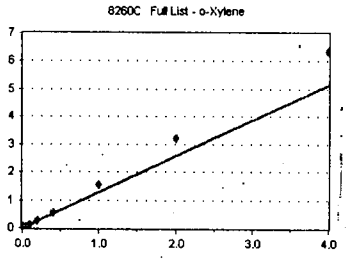


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~83~~	~~7.985~~	~~0.00~~
0A06051-CAL3	0.4	831	0.381	9.30
0A06051-CAL4	1	1817	0.347	9.30
0A06051-CAL5	2	4035	0.373	9.30
0A06051-CAL6	5	10465	0.387	9.30
0A06051-CAL7	10	20354	0.397	9.30
0A06051-CAL8	20	42367	0.411	9.30
0A06051-CAL9	50	115102	0.437	9.30
0A06051-CALA	100	233841	0.442	9.30
0A06051-CALB	200	481376	0.445	9.30

AVE RF **0.402** RF RSD **8.43** AVE RT **9.30**

o-Xylene

Curve Fit: **AVERAGE RF**

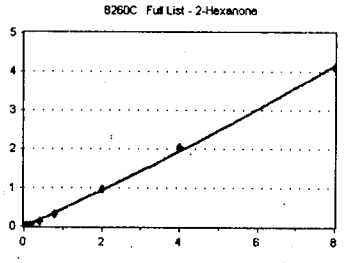


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	564	1.078	0.00
0A06051-CAL2	0.2	1119	1.077	10.37
0A06051-CAL3	0.4	2230	1.022	10.37
0A06051-CAL4	1	5891	1.127	10.37
0A06051-CAL5	2	12494	1.155	10.37
0A06051-CAL6	5	33335	1.234	10.37
0A06051-CAL7	10	67509	1.315	10.37
0A06051-CAL8	20	148399	1.440	10.37
0A06051-CAL9	50	410782	1.559	10.37
0A06051-CALA	100	848401	1.604	10.37
0A06051-CALB	200	1721459	1.590	10.37

AVE RF **1.291** RF RSD **17.22** AVE RT **9.43**

2-Hexanone

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



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.4~~	~~368~~	~~0.177~~	~~9.55~~
0A06051-CAL3	0.8	948	0.217	9.55
0A06051-CAL4	2	2805	0.268	9.54
0A06051-CAL5	4	5771	0.267	9.54
0A06051-CAL6	10	16429	0.304	9.54
0A06051-CAL7	20	37094	0.361	9.54
0A06051-CAL8	40	86807	0.421	9.54
0A06051-CAL9	100	255220	0.484	9.54
0A06051-CALA	200	540017	0.510	9.54
0A06051-CALB	400	1114091	0.514	9.53

AVE RF **0.372** RF RSD **30.79** AVE RT **9.54**

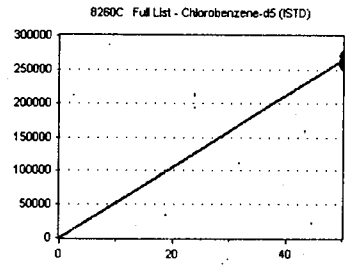
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

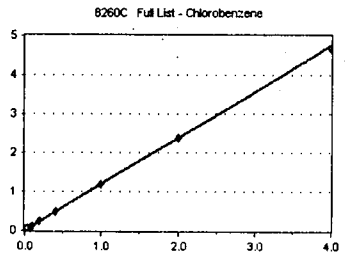


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	261559	5231.180	9.80
0A06051-CAL2	50	259849	5196.980	9.80
0A06051-CAL3	50	272623	5452.460	9.80
0A06051-CAL4	50	261444	5228.880	9.80
0A06051-CAL5	50	270452	5409.040	9.80
0A06051-CAL6	50	270091	5401.820	9.80
0A06051-CAL7	50	256667	5133.340	9.80
0A06051-CAL8	50	257589	5151.780	9.80
0A06051-CAL9	50	263462	5269.240	9.80
0A06051-CALA	50	264522	5290.440	9.80
0A06051-CALB	50	270707	5414.140	9.80

AVE RF **5289.027** RF RSD **2.14** AVE RT **9.80**

Chlorobenzene

Curve Fit: **AVERAGE RF**

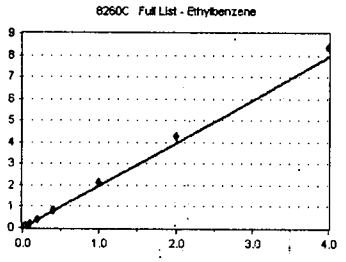


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	1202	1.156	9.82
0A06051-CAL3	0.4	2570	1.178	9.82
0A06051-CAL4	1	6584	1.259	9.82
0A06051-CAL5	2	12552	1.160	9.81
0A06051-CAL6	5	32096	1.188	9.81
0A06051-CAL7	10	60211	1.173	9.82
0A06051-CAL8	20	122718	1.191	9.82
0A06051-CAL9	50	316184	1.200	9.81
0A06051-CALA	100	628098	1.187	9.82
0A06051-CALB	200	1265574	1.169	9.82

AVE RF **1.186** RF RSD **2.46** AVE RT **9.82**

Ethylbenzene

Curve Fit: **AVERAGE RF**

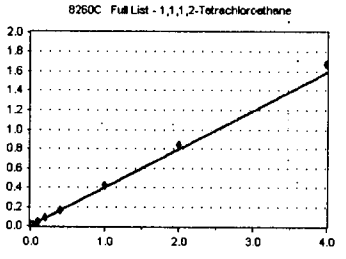


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	1054	2.015	9.85
0A06051-CAL2	0.2	1865	1.794	9.86
0A06051-CAL3	0.4	4047	1.856	9.85
0A06051-CAL4	1	9882	1.890	9.85
0A06051-CAL5	2	19761	1.827	9.85
0A06051-CAL6	5	52137	1.930	9.85
0A06051-CAL7	10	103298	2.012	9.86
0A06051-CAL8	20	213322	2.070	9.85
0A06051-CAL9	50	565519	2.146	9.85
0A06051-CALA	100	1130105	2.136	9.85
0A06051-CALB	200	2266469	2.093	9.85

AVE RF **1.979** RF RSD **6.38** AVE RT **9.85**

1,1,1,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~233~~	~~0.224~~	~~9.89~~
0A06051-CAL3	0.4	777	0.356	9.88
0A06051-CAL4	1	2058	0.394	9.88
0A06051-CAL5	2	3933	0.364	9.88
0A06051-CAL6	5	10529	0.390	9.88
0A06051-CAL7	10	20894	0.407	9.88
0A06051-CAL8	20	41303	0.401	9.88
0A06051-CAL9	50	111798	0.424	9.88
0A06051-CALA	100	222622	0.421	9.88
0A06051-CALB	200	452718	0.418	9.88

AVE RF **0.397** RF RSD **6.11** AVE RT **9.88**

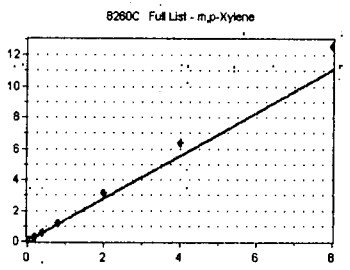
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

m,p-Xylene

Curve Fit: **AVERAGE RF**

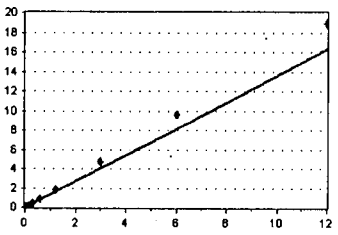


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.2	1299	1.242	9.99
0A06051-CAL2	0.4	2624	1.262	9.99
0A06051-CAL3	0.8	5235	1.200	9.99
0A06051-CAL4	2	12904	1.234	9.99
0A06051-CAL5	4	26834	1.240	9.99
0A06051-CAL6	10	72607	1.344	9.99
0A06051-CAL7	20	150111	1.462	9.99
0A06051-CAL8	40	316584	1.536	9.99
0A06051-CAL9	100	841910	1.598	9.99
0A06051-CALA	200	1695177	1.602	9.99
0A06051-CALB	400	3397624	1.569	9.99

AVE RF **1.390** RF RSD **11.82** AVE RT **9.99**

Xylenes, total

Curve Fit: **AVERAGE RF**

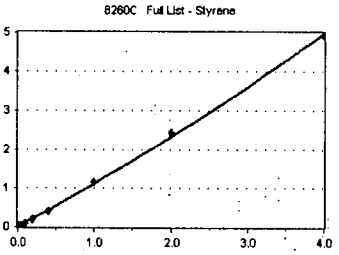


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.3	1863	1.187	9.99
0A06051-CAL2	0.6	3743	1.200	10.37
0A06051-CAL3	1.2	7465	1.141	10.37
0A06051-CAL4	3	18795	1.198	10.37
0A06051-CAL5	6	39328	1.212	10.37
0A06051-CAL6	15	105942	1.307	10.37
0A06051-CAL7	30	217620	1.413	10.37
0A06051-CAL8	60	464983	1.504	10.37
0A06051-CAL9	150	1252692	1.585	10.37
0A06051-CALA	300	2543578	1.603	10.37
0A06051-CALB	600	5119083	1.576	10.37

AVE RF **1.357** RF RSD **13.47** AVE RT **10.34**

Styrene

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

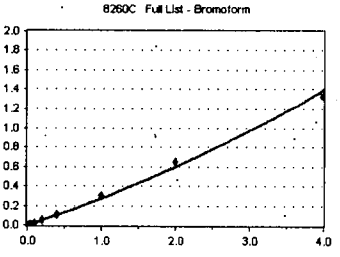


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	584	0.562	10.42
0A06051-CAL3	0.4	1339	0.614	10.42
0A06051-CAL4	1	3632	0.695	10.42
0A06051-CAL5	2	7538	0.697	10.42
0A06051-CAL6	5	21910	0.811	10.42
0A06051-CAL7	10	47163	0.919	10.42
0A06051-CAL8	20	105595	1.025	10.42
0A06051-CAL9	50	305455	1.159	10.42
0A06051-CALA	100	642559	1.215	10.42
0A06051-CALB	200	1328257	1.227	10.42

AVE RF **0.892** RF RSD **28.35** AVE RT **10.42**

Bromoform

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL4	1	1194	0.228	10.43
0A06051-CAL5	2	2340	0.216	10.43
0A06051-CAL6	5	5923	0.219	10.43
0A06051-CAL7	10	12623	0.246	10.43
0A06051-CAL8	20	27653	0.268	10.43
0A06051-CAL9	50	78801	0.299	10.43
0A06051-CALA	100	170457	0.322	10.43
0A06051-CALB	200	358978	0.332	10.43

AVE RF **0.266** RF RSD **17.39** AVE RT **10.43**

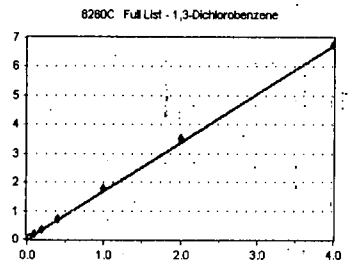
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

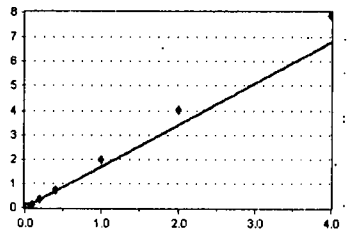


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	321	1.368	0.00
0A06051-CAL2	0.2	734	1.577	11.70
0A06051-CAL3	0.4	1584	1.643	11.70
0A06051-CAL4	1	3963	1.723	11.70
0A06051-CAL5	2	8234	1.702	11.70
0A06051-CAL6	5	21401	1.754	11.70
0A06051-CAL7	10	42611	1.744	11.70
0A06051-CAL8	20	87350	1.811	11.70
0A06051-CAL9	50	225400	1.770	11.70
0A06051-CALA	100	464345	1.757	11.70
0A06051-CALB	200	940100	1.691	11.70

AVE RF **1.685** RF RSD **7.32** AVE RT **10.64**

Isopropylbenzene

Curve Fit: **AVERAGE RF**

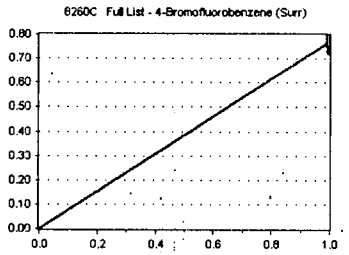


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~735~~	~~1.405~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~1389~~	~~1.336~~	~~10.65~~
~~0A06051-CAL3~~	~~0.4~~	~~2678~~	~~1.228~~	~~10.65~~
0A06051-CAL4	1	6863	1.313	10.65
0A06051-CAL5	2	14392	1.330	10.65
0A06051-CAL6	5	40606	1.503	10.65
0A06051-CAL7	10	86843	1.692	10.65
0A06051-CAL8	20	187864	1.823	10.65
0A06051-CAL9	50	518688	1.969	10.65
0A06051-CALA	100	1059421	2.003	10.65
0A06051-CALB	200	2132542	1.969	10.65

AVE RF **1.700** RF RSD **16.89** AVE RT **10.65**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

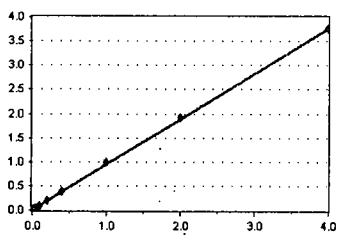


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	91026	0.776	10.88
0A06051-CAL2	50	90060	0.774	10.88
0A06051-CAL3	50	95713	0.794	10.87
0A06051-CAL4	50	91612	0.797	10.88
0A06051-CAL5	50	95258	0.787	10.88
0A06051-CAL6	50	95713	0.784	10.88
0A06051-CAL7	50	91761	0.751	10.88
0A06051-CAL8	50	93096	0.772	10.88
0A06051-CAL9	50	98126	0.771	10.88
0A06051-CALA	50	99383	0.752	10.88
0A06051-CALB	50	101679	0.732	10.88

AVE RF **0.772** RF RSD **2.58** AVE RT **10.88**

Bromobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	195	0.831	10.96
0A06051-CAL2	0.2	376	0.808	10.96
0A06051-CAL3	0.4	871	0.903	10.96
0A06051-CAL4	1	2415	1.050	10.96
0A06051-CAL5	2	4846	1.002	10.96
0A06051-CAL6	5	11819	0.969	10.96
0A06051-CAL7	10	23107	0.946	10.96
0A06051-CAL8	20	46956	0.973	10.96
0A06051-CAL9	50	125364	0.984	10.96
0A06051-CALA	100	255205	0.966	10.96
0A06051-CALB	200	521478	0.938	10.96

AVE RF **0.943** RF RSD **7.58** AVE RT **10.96**

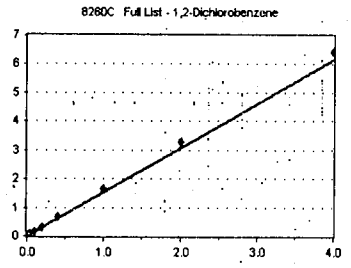
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

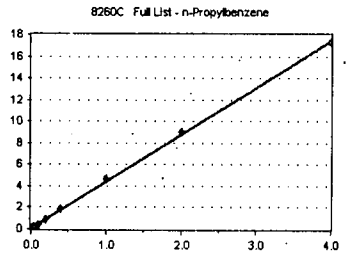


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	297	1.266	0.00
0A06051-CAL2	0.2	602	1.293	12.08
0A06051-CAL3	0.4	1511	1.567	12.09
0A06051-CAL4	1	3619	1.573	12.09
0A06051-CAL5	2	7435	1.537	12.09
0A06051-CAL6	5	18907	1.550	12.09
0A06051-CAL7	10	37998	1.556	12.09
0A06051-CAL8	20	79965	1.658	12.09
0A06051-CAL9	50	211241	1.659	12.09
0A06051-CALA	100	434657	1.645	12.09
0A06051-CALB	200	895922	1.612	12.09

AVE RF **1.538** RF RSD **8.78** AVE RT **10.99**

n-Propylbenzene

Curve Fit: **AVERAGE RF**

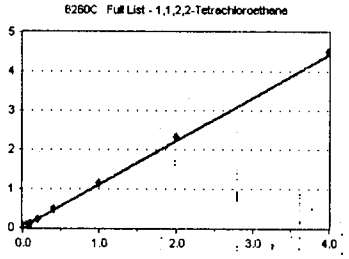


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	1066	4.544	10.99
0A06051-CAL2	0.2	1899	4.079	10.99
0A06051-CAL3	0.4	3877	4.021	10.99
0A06051-CAL4	1	10018	4.356	10.99
0A06051-CAL5	2	19804	4.093	10.99
0A06051-CAL6	5	52319	4.288	10.99
0A06051-CAL7	10	106920	4.377	10.99
0A06051-CAL8	20	224394	4.652	10.99
0A06051-CAL9	50	599088	4.705	10.99
0A06051-CALA	100	1201239	4.545	10.99
0A06051-CALB	200	2406935	4.329	10.99

AVE RF **4.363** RF RSD **5.34** AVE RT **10.99**

1,1,2,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**

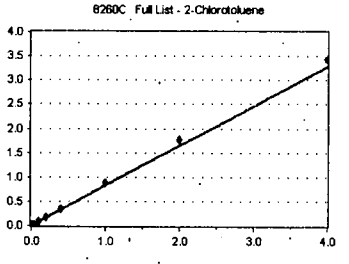


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	402	0.864	11.04
0A06051-CAL3	0.4	972	1.008	11.04
0A06051-CAL4	1	2649	1.152	11.04
0A06051-CAL5	2	5532	1.143	11.04
0A06051-CAL6	5	13376	1.096	11.04
0A06051-CAL7	10	28029	1.147	11.04
0A06051-CAL8	20	57542	1.193	11.04
0A06051-CAL9	50	148641	1.167	11.04
0A06051-CALA	100	306207	1.159	11.04
0A06051-CALB	200	627455	1.129	11.04

AVE RF **1.106** RF RSD **8.95** AVE RT **11.04**

2-Chlorotoluene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	612	0.635	11.11
0A06051-CAL4	1	1802	0.783	11.11
0A06051-CAL5	2	3844	0.794	11.11
0A06051-CAL6	5	9710	0.796	11.11
0A06051-CAL7	10	20381	0.834	11.11
0A06051-CAL8	20	42921	0.890	11.11
0A06051-CAL9	50	113827	0.894	11.11
0A06051-CALA	100	234244	0.886	11.11
0A06051-CALB	200	477290	0.859	11.11

AVE RF **0.819** RF RSD **9.97** AVE RT **11.11**

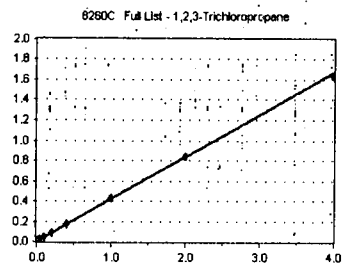
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,2,3-Trichloropropane

Curve Fit: **AVERAGE RF**

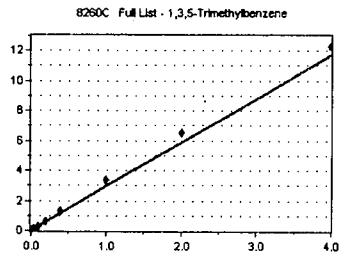


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	291	0.302	11.15
0A06051-CAL4	1	1090	0.474	11.15
0A06051-CAL5	2	2114	0.437	11.15
0A06051-CAL6	5	5081	0.416	11.15
0A06051-CAL7	10	10290	0.421	11.15
0A06051-CAL8	20	21237	0.440	11.15
0A06051-CAL9	50	55741	0.438	11.15
0A06051-CALA	100	111214	0.421	11.15
0A06051-CALB	200	227473	0.409	11.15

AVE RF **0.418** RF RSD **11.35** AVE RT **11.15**

1,3,5-Trimethylbenzene

Curve Fit: **AVERAGE RF**

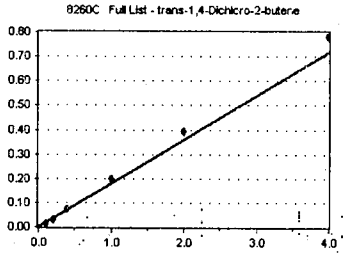


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	645	2.749	11.15
0A06051-CAL2	0.2	1117	2.400	11.15
0A06051-CAL3	0.4	2466	2.558	11.15
0A06051-CAL4	1	6230	2.709	11.15
0A06051-CAL5	2	12985	2.684	11.15
0A06051-CAL6	5	36600	3.000	11.15
0A06051-CAL7	10	75905	3.107	11.15
0A06051-CAL8	20	161340	3.345	11.15
0A06051-CAL9	50	430440	3.380	11.15
0A06051-CALA	100	863093	3.266	11.15
0A06051-CALB	200	1711211	3.078	11.15

AVE RF **2.934** RF RSD **11.34** AVE RT **11.15**

trans-1,4-Dichloro-2-butene

Curve Fit: **AVERAGE RF**

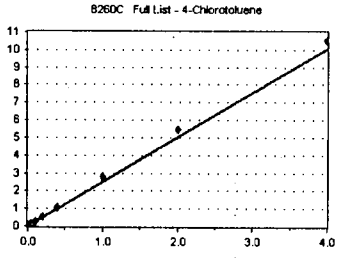


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL4~~	~~1~~	~~226~~	~~9.826~~	~~11.18~~
~~0A06051-CAL5~~	~~2~~	~~619~~	~~0.128~~	~~11.18~~
0A06051-CAL6	5	1822	0.149	11.18
0A06051-CAL7	10	3884	0.159	11.18
0A06051-CAL8	20	8711	0.181	11.18
0A06051-CAL9	50	25245	0.198	11.18
0A06051-CALA	100	51769	0.196	11.18
0A06051-CALB	200	108766	0.196	11.18

AVE RF **0.180** RF RSD **11.70** AVE RT **11.18**

4-Chlorotoluene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	877	1.884	11.25
0A06051-CAL3	0.4	2122	2.201	11.24
0A06051-CAL4	1	5536	2.407	11.24
0A06051-CAL5	2	12109	2.503	11.24
0A06051-CAL6	5	31240	2.560	11.24
0A06051-CAL7	10	64835	2.654	11.24
0A06051-CAL8	20	132335	2.743	11.24
0A06051-CAL9	50	353161	2.773	11.24
0A06051-CALA	100	721994	2.732	11.24
0A06051-CALB	200	1463967	2.633	11.24

AVE RF **2.509** RF RSD **11.19** AVE RT **11.24**

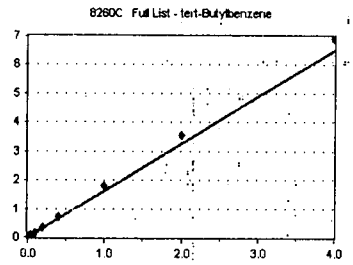
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

tert-Butylbenzene

Curve Fit: **AVERAGE RF**

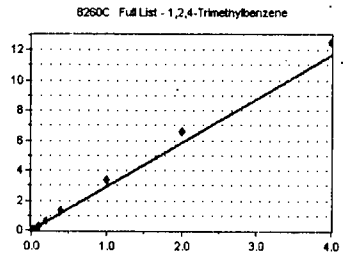


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL2	0.2	702	1.508	11.40
0A06051-CAL3	0.4	1366	1.417	11.40
0A06051-CAL4	1	3477	1.512	11.40
0A06051-CAL5	2	7227	1.494	11.40
0A06051-CAL6	5	19450	1.594	11.40
0A06051-CAL7	10	40173	1.645	11.40
0A06051-CAL8	20	85895	1.781	11.40
0A06051-CAL9	50	232884	1.829	11.40
0A06051-CALA	100	472004	1.786	11.40
0A06051-CALB	200	960546	1.728	11.40

AVE RF **1.629** RF RSD **8.93** AVE RT **11.40**

1,2,4-Trimethylbenzene

Curve Fit: **AVERAGE RF**

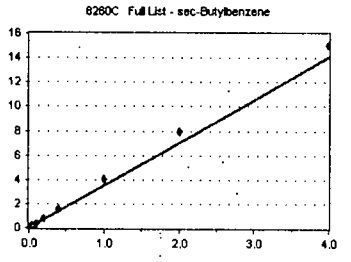


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	710	3.026	11.46
0A06051-CAL2	0.2	1050	2.256	11.46
0A06051-CAL3	0.4	2349	2.436	11.46
0A06051-CAL4	1	6016	2.616	11.46
0A06051-CAL5	2	12691	2.623	11.46
0A06051-CAL6	5	35579	2.916	11.46
0A06051-CAL7	10	75834	3.104	11.46
0A06051-CAL8	20	161792	3.354	11.46
0A06051-CAL9	50	429588	3.374	11.46
0A06051-CALA	100	869693	3.291	11.46
0A06051-CALB	200	1736316	3.123	11.46

AVE RF **2.920** RF RSD **13.15** AVE RT **11.46**

sec-Butylbenzene

Curve Fit: **AVERAGE RF**

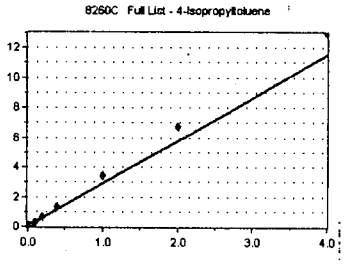


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	752	3.205	11.54
0A06051-CAL2	0.2	1319	2.833	11.54
0A06051-CAL3	0.4	3028	3.141	11.54
0A06051-CAL4	1	7491	3.257	11.54
0A06051-CAL5	2	15694	3.243	11.54
0A06051-CAL6	5	43743	3.585	11.54
0A06051-CAL7	10	90653	3.711	11.54
0A06051-CAL8	20	191481	3.970	11.54
0A06051-CAL9	50	513113	4.030	11.54
0A06051-CALA	100	1045783	3.957	11.54
0A06051-CALB	200	2093887	3.766	11.54

AVE RF **3.518** RF RSD **11.42** AVE RT **11.54**

4-Isopropyltoluene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	634	2.702	11.65
0A06051-CAL2	0.2	1120	2.406	11.65
0A06051-CAL3	0.4	2257	2.341	11.65
0A06051-CAL4	1	5556	2.416	11.65
0A06051-CAL5	2	12340	2.550	11.65
0A06051-CAL6	5	34578	2.834	11.65
0A06051-CAL7	10	73953	3.027	11.65
0A06051-CAL8	20	159437	3.305	11.65
0A06051-CAL9	50	441545	3.467	11.65
0A06051-CALA	100	890642	3.370	11.65
0A06051-CALB	200	1802226	3.242	11.65

AVE RF **2.878** RF RSD **14.71** AVE RT **11.65**

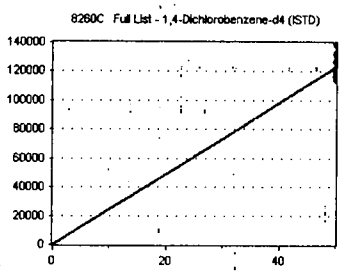
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

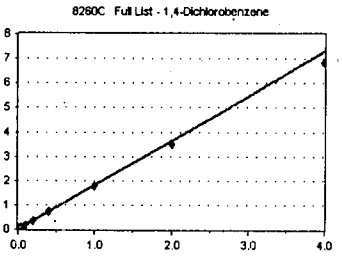


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	117300	2346.000	11.76
0A06051-CAL2	50	116376	2327.520	11.76
0A06051-CAL3	50	120513	2410.260	11.76
0A06051-CAL4	50	114999	2299.980	11.76
0A06051-CAL5	50	120966	2419.320	11.76
0A06051-CAL6	50	122018	2440.360	11.76
0A06051-CAL7	50	122138	2442.760	11.76
0A06051-CAL8	50	120591	2411.820	11.76
0A06051-CAL9	50	127339	2546.780	11.76
0A06051-CALA	50	132141	2642.820	11.76
0A06051-CALB	50	138986	2779.720	11.76

AVE RF **2460.667** RF RSD **5.84** AVE RT **11.76**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

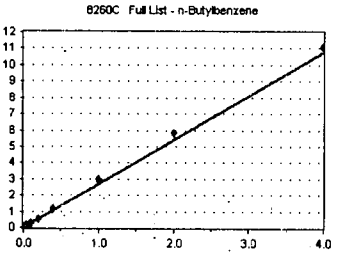


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	390	1.662	11.77
0A06051-CAL2	0.2	971	2.086	11.77
0A06051-CAL3	0.4	1905	1.976	11.77
0A06051-CAL4	1	4395	1.911	11.77
0A06051-CAL5	2	8741	1.806	11.77
0A06051-CAL6	5	22186	1.818	11.77
0A06051-CAL7	10	42971	1.759	11.77
0A06051-CAL8	20	86262	1.788	11.77
0A06051-CAL9	50	227356	1.785	11.77
0A06051-CALA	100	464868	1.759	11.77
0A06051-CALB	200	951168	1.711	11.77

AVE RF **1.824** RF RSD **6.71** AVE RT **11.77**

n-Butylbenzene

Curve Fit: **AVERAGE RF**

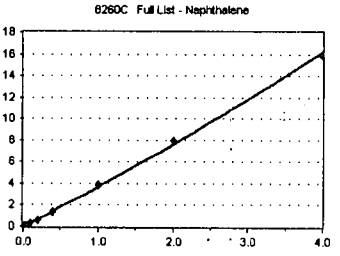


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	596	2.540	11.97
0A06051-CAL2	0.2	1286	2.763	11.97
0A06051-CAL3	0.4	2410	2.500	11.97
0A06051-CAL4	1	5772	2.510	11.97
0A06051-CAL5	2	12089	2.498	11.97
0A06051-CAL6	5	31798	2.606	11.97
0A06051-CAL7	10	65286	2.673	11.97
0A06051-CAL8	20	137345	2.847	11.97
0A06051-CAL9	50	378474	2.972	11.97
0A06051-CALA	100	768302	2.907	11.97
0A06051-CALB	200	1537990	2.766	11.97

AVE RF **2.689** RF RSD **6.42** AVE RT **11.97**

Naphthalene

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



Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	0.1	645	2.749	0.00
0A06051-CAL2	0.2	1083	2.327	13.51
0A06051-CAL3	0.4	2141	2.221	13.51
0A06051-CAL4	1	5528	2.403	13.51
0A06051-CAL5	2	11317	2.339	13.51
0A06051-CAL6	5	31622	2.592	13.51
0A06051-CAL7	10	71917	2.944	13.51
0A06051-CAL8	20	169409	3.512	13.51
0A06051-CAL9	50	494428	3.883	13.51
0A06051-CALA	100	1049457	3.971	13.51
0A06051-CALB	200	2224076	4.001	13.51

AVE RF **2.995** RF RSD **23.78** AVE RT **12.28**

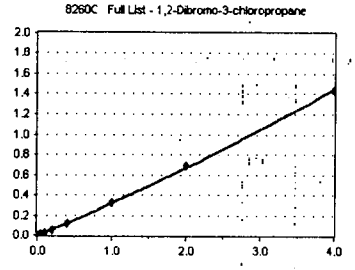
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Full List** Instrument Cal ID: **VJ200106S VJ200106G**

1,2-Dibromo-3-chloropropane

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

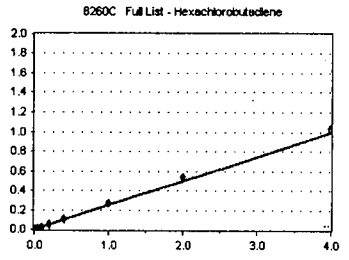


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.4~~	~~62~~	~~6.431~~	~~12.68~~
0A06051-CAL4	1	499	0.217	12.69
0A06051-CAL5	2	1165	0.241	12.69
0A06051-CAL6	5	3076	0.252	12.69
0A06051-CAL7	10	6494	0.266	12.69
0A06051-CAL8	20	14277	0.296	12.69
0A06051-CAL9	50	40894	0.321	12.69
0A06051-CALA	100	91004	0.344	12.69
0A06051-CALB	200	200017	0.360	12.69

AVE RF **0.287** RF RSD **17.92** AVE RT **12.69**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

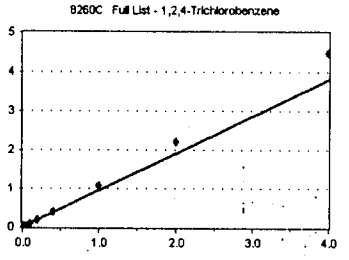


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.4	179	0.186	13.21
0A06051-CAL4	1	511	0.222	13.21
0A06051-CAL5	2	1281	0.265	13.21
0A06051-CAL6	5	3211	0.263	13.21
0A06051-CAL7	10	5995	0.245	13.21
0A06051-CAL8	20	12808	0.266	13.21
0A06051-CAL9	50	33881	0.266	13.21
0A06051-CALA	100	70914	0.268	13.21
0A06051-CALB	200	144234	0.259	13.21

AVE RF **0.249** RF RSD **11.22** AVE RT **13.21**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**

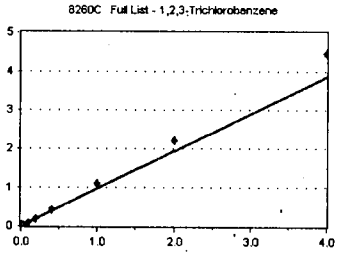


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~366~~	~~0.786~~	~~13.24~~
0A06051-CAL3	0.4	777	0.806	13.24
0A06051-CAL4	1	1974	0.858	13.24
0A06051-CAL5	2	3943	0.815	13.24
0A06051-CAL6	5	10371	0.850	13.24
0A06051-CAL7	10	22199	0.909	13.24
0A06051-CAL8	20	48617	1.008	13.23
0A06051-CAL9	50	136960	1.076	13.23
0A06051-CALA	100	294426	1.114	13.23
0A06051-CALB	200	622345	1.119	13.23

AVE RF **0.951** RF RSD **13.61** AVE RT **13.23**

1,2,3-Trichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.2~~	~~236~~	~~0.507~~	~~13.67~~
0A06051-CAL3	0.4	740	0.768	13.67
0A06051-CAL4	1	1898	0.825	13.67
0A06051-CAL5	2	4030	0.833	13.67
0A06051-CAL6	5	10894	0.893	13.67
0A06051-CAL7	10	23796	0.974	13.67
0A06051-CAL8	20	51239	1.062	13.67
0A06051-CAL9	50	140414	1.103	13.67
0A06051-CALA	100	293236	1.110	13.67
0A06051-CALB	200	618452	1.112	13.67

AVE RF **0.964** RF RSD **14.31** AVE RT **13.67**

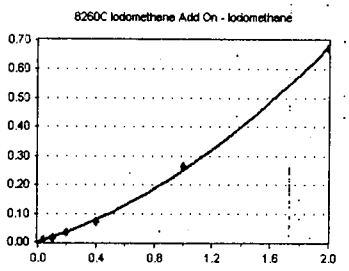
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Iodomethane Add On** Instrument Cal ID: **VJ200106S VJ200106G**

Iodomethane

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

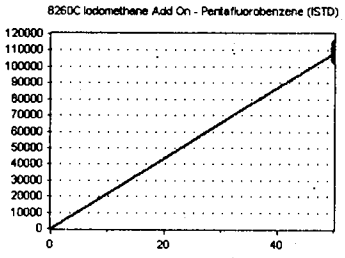


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.1~~	~~696~~	~~3.271~~	~~3.29~~
~~0A06051-CAL2~~	~~0.2~~	~~695~~	~~1.555~~	~~3.30~~
~~0A06051-CAL3~~	~~0.4~~	~~505~~	~~0.589~~	~~3.28~~
~~0A06051-CAL4~~	~~1~~	~~631~~	~~0.302~~	~~3.29~~
0A06051-CAL5	2	879	0.204	3.29
0A06051-CAL6	5	1801	0.165	3.29
0A06051-CAL7	10	3523	0.168	3.29
0A06051-CAL8	20	7988	0.184	3.29
0A06051-CAL9	50	29149	0.265	3.29
0A06051-CALA	100	74685	0.337	3.30
~~0A06051-CALB~~	~~200~~	~~71908~~	~~0.158~~	~~3.28~~

AVE RF **0.220** RF RSD **30.79** AVE RT **3.29**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	106379	2127.580	6.08
0A06051-CAL2	50	111744	2234.880	6.09
0A06051-CAL3	50	107259	2145.180	6.08
0A06051-CAL4	50	104320	2086.400	6.08
0A06051-CAL5	50	107612	2152.240	6.08
0A06051-CAL6	50	109312	2186.240	6.08
0A06051-CAL7	50	105104	2102.080	6.08
0A06051-CAL8	50	108585	2171.700	6.08
0A06051-CAL9	50	109944	2198.880	6.08
0A06051-CALA	50	110868	2217.360	6.08
0A06051-CALB	50	113880	2277.600	6.08

AVE RF **2172.740** RF RSD **2.66** AVE RT **6.08**

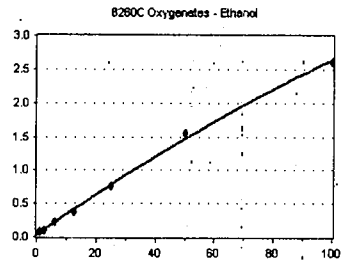
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VJ200106S VJ200106G**

Ethanol

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

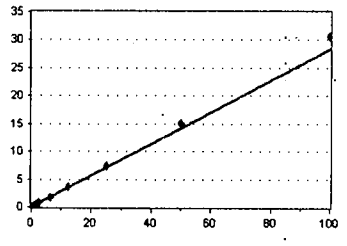


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~6.25~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~12.5~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~25~~	~~4984~~	~~9.293~~	~~3.28~~
0A06051-CAL4	62.5	7706	5.910	3.29
0A06051-CAL5	125	11257	4.184	3.27
0A06051-CAL6	312	25232	3.699	3.29
0A06051-CAL7	625	40033	3.047	3.26
0A06051-CAL8	1250	82383	3.035	3.27
0A06051-CAL9	2500	170551	3.103	3.27
0A06051-CALA	5000	289845	2.614	3.26

AVE RF **3.656** RF RSD **30.60** AVE RT **3.27**

tert-Butanol (TBA)

Curve Fit: **AVERAGE RF**

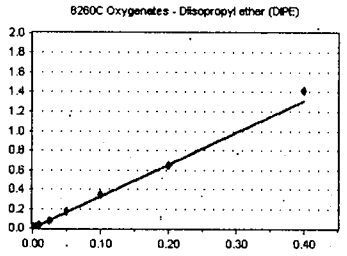


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~6.25~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~12.5~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	25	13587	0.253	4.27
0A06051-CAL4	62.5	34787	0.267	4.27
0A06051-CAL5	125	71300	0.265	4.26
0A06051-CAL6	312	191781	0.281	4.27
0A06051-CAL7	625	380675	0.290	4.25
0A06051-CAL8	1250	810615	0.299	4.25
0A06051-CAL9	2500	1662623	0.302	4.25
0A06051-CALA	5000	3395354	0.306	4.25

AVE RF **0.283** RF RSD **6.91** AVE RT **4.26**

Diisopropyl ether (DIPE)

Curve Fit: **AVERAGE RF**

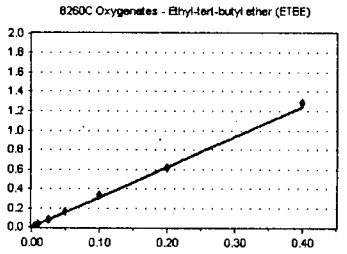


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL3	0.1	678	3.161	4.50
0A06051-CAL4	0.25	1629	3.123	4.50
0A06051-CAL5	0.5	3346	3.109	4.50
0A06051-CAL6	1.25	8433	3.086	4.50
0A06051-CAL7	2.5	17671	3.363	4.50
0A06051-CAL8	5	37517	3.455	4.50
0A06051-CAL9	10	71778	3.264	4.50
0A06051-CALA	20	157347	3.548	4.50

AVE RF **3.264** RF RSD **5.35** AVE RT **4.50**

Ethyl-tert-butyl ether (ETBE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL4	0.25	1510	2.895	4.87
0A06051-CAL5	0.5	3087	2.869	4.87
0A06051-CAL6	1.25	8258	3.022	4.87
0A06051-CAL7	2.5	17105	3.255	4.87
0A06051-CAL8	5	36823	3.391	4.86
0A06051-CAL9	10	67581	3.073	4.87
0A06051-CALA	20	143062	3.226	4.87

AVE RF **3.104** RF RSD **6.26** AVE RT **4.87**

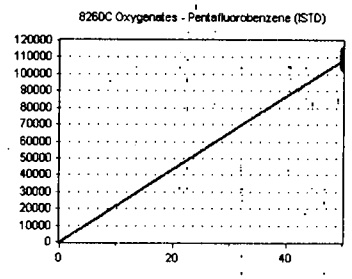
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VJ200106S VJ200106G**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

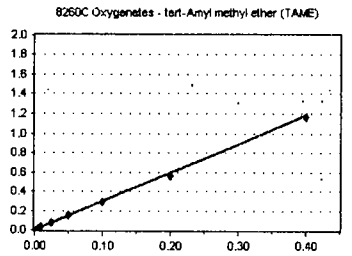


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	106379	2127.580	6.08
0A06051-CAL2	50	111744	2234.880	6.09
0A06051-CAL3	50	107259	2145.180	6.08
0A06051-CAL4	50	104320	2086.400	6.08
0A06051-CAL5	50	107612	2152.240	6.08
0A06051-CAL6	50	109312	2186.240	6.08
0A06051-CAL7	50	105104	2102.080	6.08
0A06051-CAL8	50	108585	2171.700	6.08
0A06051-CAL9	50	109944	2198.880	6.08
0A06051-CALA	50	110868	2217.360	6.08
0A06051-CALB	50	113880	2277.600	6.08

AVE RF **2172.740** RF RSD **2.66** AVE RT **6.08**

tert-Amyl methyl ether (TAME)

Curve Fit: **AVERAGE RF**

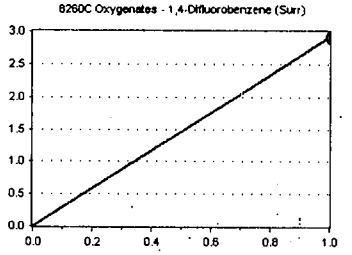


Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
0A06051-CAL4	0.25	1634	3.133	6.14
0A06051-CAL5	0.5	3505	3.257	6.15
0A06051-CAL6	1.25	7869	2.879	6.14
0A06051-CAL7	2.5	15488	2.947	6.14
0A06051-CAL8	5	31171	2.871	6.15
0A06051-CAL9	10	61806	2.811	6.14
0A06051-CALA	20	129917	2.930	6.14

AVE RF **2.975** RF RSD **5.39** AVE RT **6.14**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

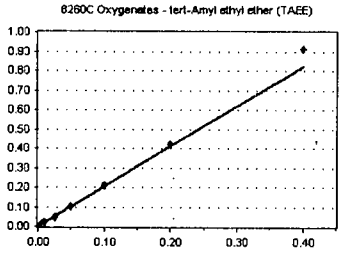


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	313857	2.950	6.64
0A06051-CAL2	50	320717	2.870	6.65
0A06051-CAL3	50	317056	2.956	6.64
0A06051-CAL4	50	303345	2.908	6.64
0A06051-CAL5	50	312825	2.907	6.65
0A06051-CAL6	50	319667	2.924	6.64
0A06051-CAL7	50	303283	2.886	6.65
0A06051-CAL8	50	312074	2.874	6.64
0A06051-CAL9	50	323337	2.941	6.64
0A06051-CALA	50	322488	2.909	6.65
0A06051-CALB	50	336999	2.959	6.64

AVE RF **2.917** RF RSD **1.10** AVE RT **6.65**

tert-Amyl ethyl ether (TAEE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~0A06051-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
~~0A06051-CAL3~~	~~0.1~~	~~355~~	~~1.655~~	~~0.00~~
0A06051-CAL4	0.25	996	1.910	6.90
0A06051-CAL5	0.5	2192	2.037	6.90
0A06051-CAL6	1.25	5290	1.936	6.90
0A06051-CAL7	2.5	10793	2.054	6.89
0A06051-CAL8	5	22830	2.103	6.90
0A06051-CAL9	10	46132	2.098	6.90
0A06051-CALA	20	101352	2.285	6.90

AVE RF **2.060** RF RSD **6.03** AVE RT **6.90**

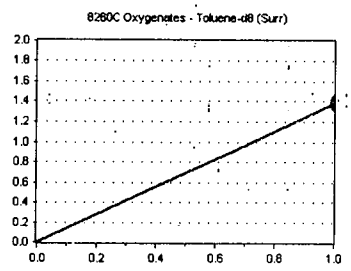
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VJ200106S VJ200106G**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**

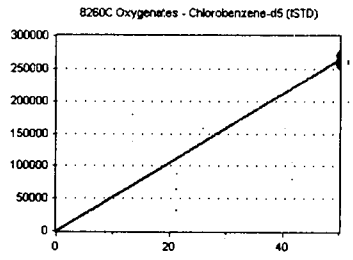


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	365118	1.396	8.16
0A06051-CAL2	50	371366	1.429	8.16
0A06051-CAL3	50	372287	1.366	8.16
0A06051-CAL4	50	353415	1.352	8.16
0A06051-CAL5	50	366801	1.356	8.16
0A06051-CAL6	50	371403	1.375	8.16
0A06051-CAL7	50	357128	1.391	8.16
0A06051-CAL8	50	363051	1.409	8.16
0A06051-CAL9	50	366647	1.392	8.16
0A06051-CALA	50	366947	1.387	8.16
0A06051-CALB	50	377155	1.393	8.16

AVE RF **1.386** RF RSD **1.65** AVE RT **8.16**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

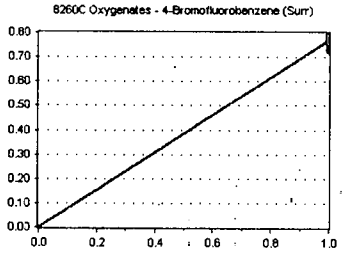


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	261559	5231.180	9.80
0A06051-CAL2	50	259849	5196.980	9.80
0A06051-CAL3	50	272623	5452.460	9.80
0A06051-CAL4	50	261444	5228.880	9.80
0A06051-CAL5	50	270452	5409.040	9.80
0A06051-CAL6	50	270091	5401.820	9.80
0A06051-CAL7	50	256667	5133.340	9.80
0A06051-CAL8	50	257589	5151.780	9.80
0A06051-CAL9	50	263462	5269.240	9.80
0A06051-CALA	50	264522	5290.440	9.80
0A06051-CALB	50	270707	5414.140	9.80

AVE RF **5289.027** RF RSD **2.14** AVE RT **9.80**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

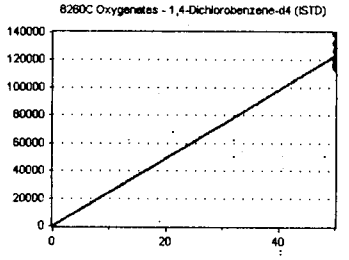


Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	91026	0.776	10.88
0A06051-CAL2	50	90060	0.774	10.88
0A06051-CAL3	50	95713	0.794	10.87
0A06051-CAL4	50	91612	0.797	10.88
0A06051-CAL5	50	95258	0.787	10.88
0A06051-CAL6	50	95713	0.784	10.88
0A06051-CAL7	50	91761	0.751	10.88
0A06051-CAL8	50	93096	0.772	10.88
0A06051-CAL9	50	98126	0.771	10.88
0A06051-CALA	50	99383	0.752	10.88
0A06051-CALB	50	101679	0.732	10.88

AVE RF **0.772** RF RSD **2.58** AVE RT **10.88**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CAL1	50	117300	2346.000	11.76
0A06051-CAL2	50	116376	2327.520	11.76
0A06051-CAL3	50	120513	2410.260	11.76
0A06051-CAL4	50	114999	2299.980	11.76
0A06051-CAL5	50	120966	2419.320	11.76
0A06051-CAL6	50	122018	2440.360	11.76
0A06051-CAL7	50	122138	2442.760	11.76
0A06051-CAL8	50	120591	2411.820	11.76
0A06051-CAL9	50	127339	2546.780	11.76
0A06051-CALA	50	132141	2642.820	11.76
0A06051-CALB	50	138986	2779.720	11.76

AVE RF **2460.667** RF RSD **5.84** AVE RT **11.76**

Calibration Status Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200106G.M
Title : NWTPH-Gx by GC/MS
Last Update : Tue Jan 07 15:45:42 2020
Response Via : Initial Calibration

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1	50	50	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010634.D
2	100	100	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010635.D
3	250	250	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010636.D
4	500	500	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010637.D
5	1000	1000	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010638.D
6	2500	2500	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010639.D
7	5000	5000	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010640.D
8	10K	10000	50	C:\msdchem\1\data\2020-01\0A06051\VJ20010641.D

#	ID	Update Time	Quant Time	Acquisition Time
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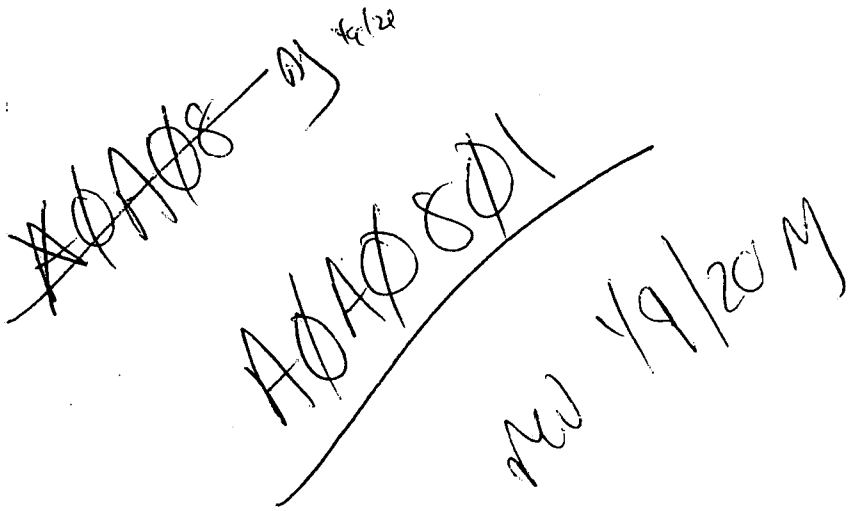
2	100	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 2:36 am
3	250	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 3:03 am
4	500	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 3:30 am
5	1000	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 3:57 am
6	2500	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 4:24 am
7	5000	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 4:50 am
8	10K	Jan 07 15:45 2020	Jan 07 15:41 2020	7 Jan 2020 5:17 am

VJ200106G.M Wed Jan 08 12:21:21 2020



Response Factor Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ200106G.M
Title : NWTPH-Gx by GC/MS
Last Update : Tue Jan 07 15:45:42 2020
Response Via : Initial Calibration

Calibration Files
50 =VJ20010634.D 100 =VJ20010635.D 250 =VJ20010636.D 500 =VJ20010637.D 1000=VJ20010638.D 2500=VJ20010639.D
5000=VJ20010640.D 10K =VJ20010641.D

		Compound	50	100	250	500	1000	2500	5000	10K	Avg	%RSD
1)	I	Pentafluorobenzene...	----------	----------	----------	ISTD	----------	----------	----------	----------		
2)	S	1,4-Difluorobe...	1.641	1.609	1.622	1.616	1.607	1.601	1.603	1.598	1.612	0.87
3)	S	4-Bromofluorob...	0.474	0.456	0.470	0.467	0.467	0.481	0.489	0.484	0.474	2.29
4)	H	NWTPH-Gx (TPH)	1.482	1.482	1.618	1.713	1.780	2.021	1.898	1.996	1.749	12.22
5)	H	TPHg (C5-C9)	4.605	3.482	2.711	2.394	2.363	2.519	2.289	2.350	2.839	28.60
6)	H	TPHg (C6-C10)	3.055	2.376	2.114	2.042	2.023	2.162	1.964	2.021	2.220	16.26
7)	H	CA-LUFT (C5-C12)	4.933	3.808	3.085	2.811	2.806	3.039	2.795	2.874	3.269	22.98
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

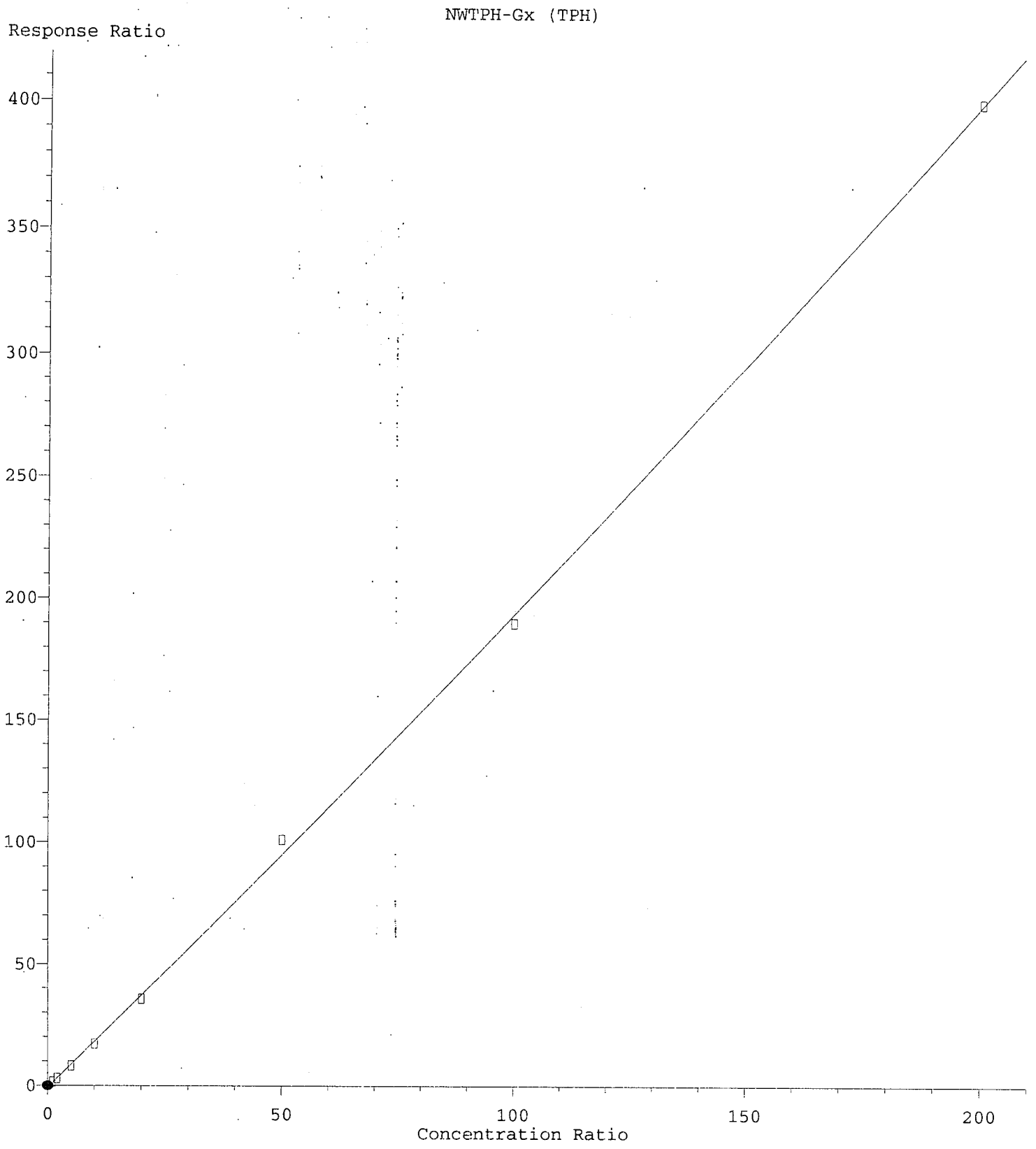
Method Path : C:\msdchem\1\methods\
Method File : VJ200106G.M
Title : NWTPH-Gx by GC/MS
Last Update : Tue Jan 07 15:45:42 2020
Response Via : Initial Calibration

Total Cpnds : 13

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Pentafluorobenzene (IS)	168	6.095	1.000	A	2	A	B
2	S	1,4-Difluorobenzene (Sur)	114	6.655	1.092	A	2	A	B
3	S	4-Bromofluorobenzene (Sur)	174	10.883	1.785	A	2	A	B
4	H	NWTPH-Gx (TPH)	TIC	8.739	1.434	Q	0	A	B
5	H	TPHg (C5-C9)	TIC	9.239	1.516	Q	0	A	B
6	H	TPHg (C6-C10)	TIC	9.239	1.516	Q	0	A	B
7	H	CA-LUFT (C5-C12)	TIC	9.239	1.516	Q	0	A	B
8		Benzene (NR)	78	6.004	0.985	A	2	A	B
9	S	Toluene-d8 (NR)	98	8.170	1.340	A	2	A	B
10		Toluene (NR)	91	8.231	1.350	A	2	A	B
11	S	Chlorobenzene-d5 (NR)	117	9.806	1.609	A	2	A	B
12	S	1,4-Dichlorobenzene-d4 (NR)	150	11.765	1.930	A	2	A	B
13		Naphthalene (NR)	128	13.517	2.218	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

VJ200106G.M Wed Jan 08 12:20:52 2020



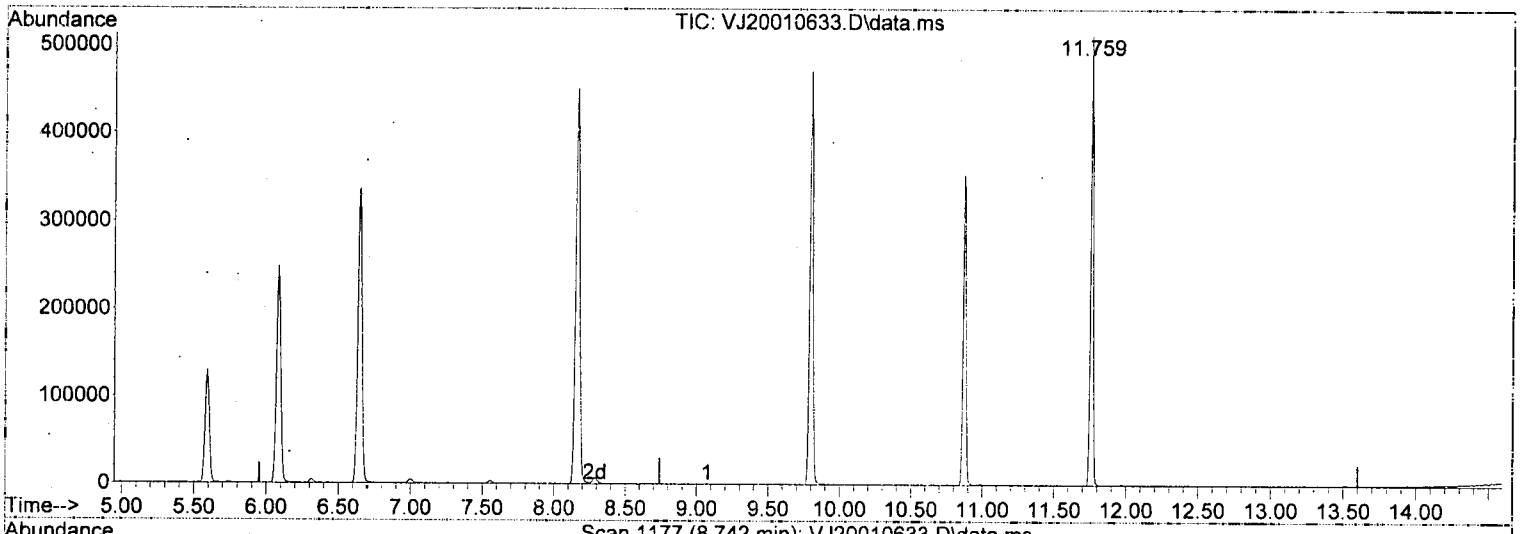
Int = 32.73

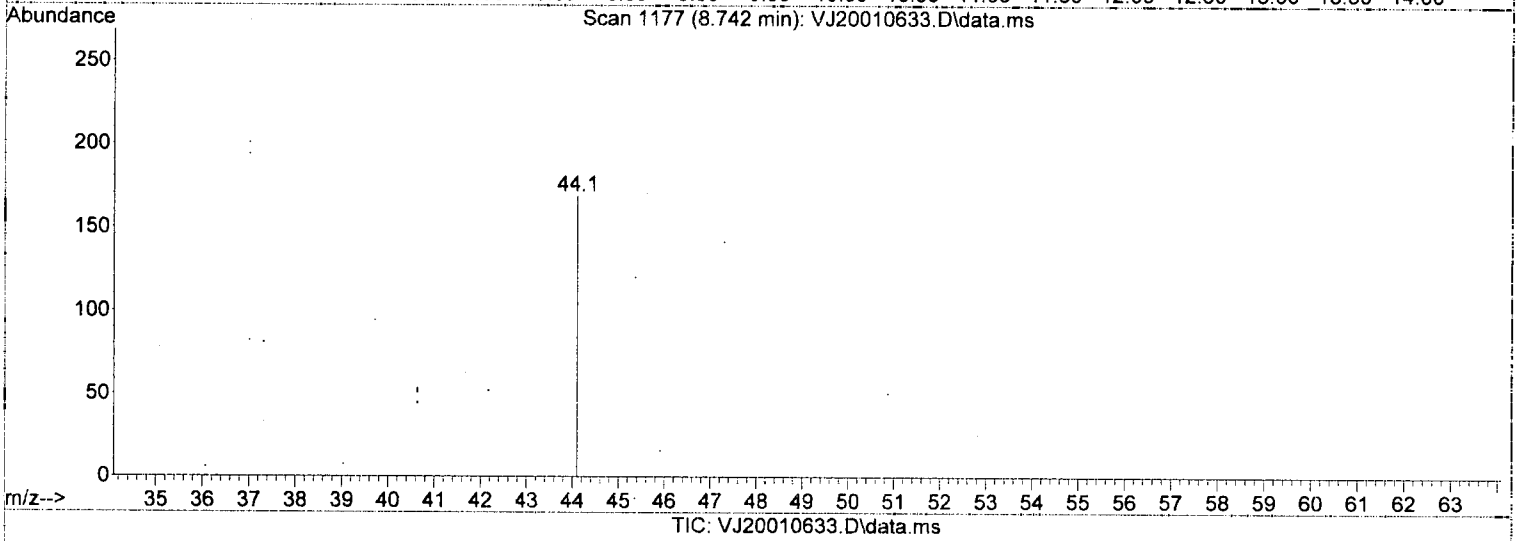
R = 5.73e-004 A*A + 1.88e+000 A - 6.85e-001
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ2001066.M
Calibration Table Last Updated: Tue Jan 07 15:46:27 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





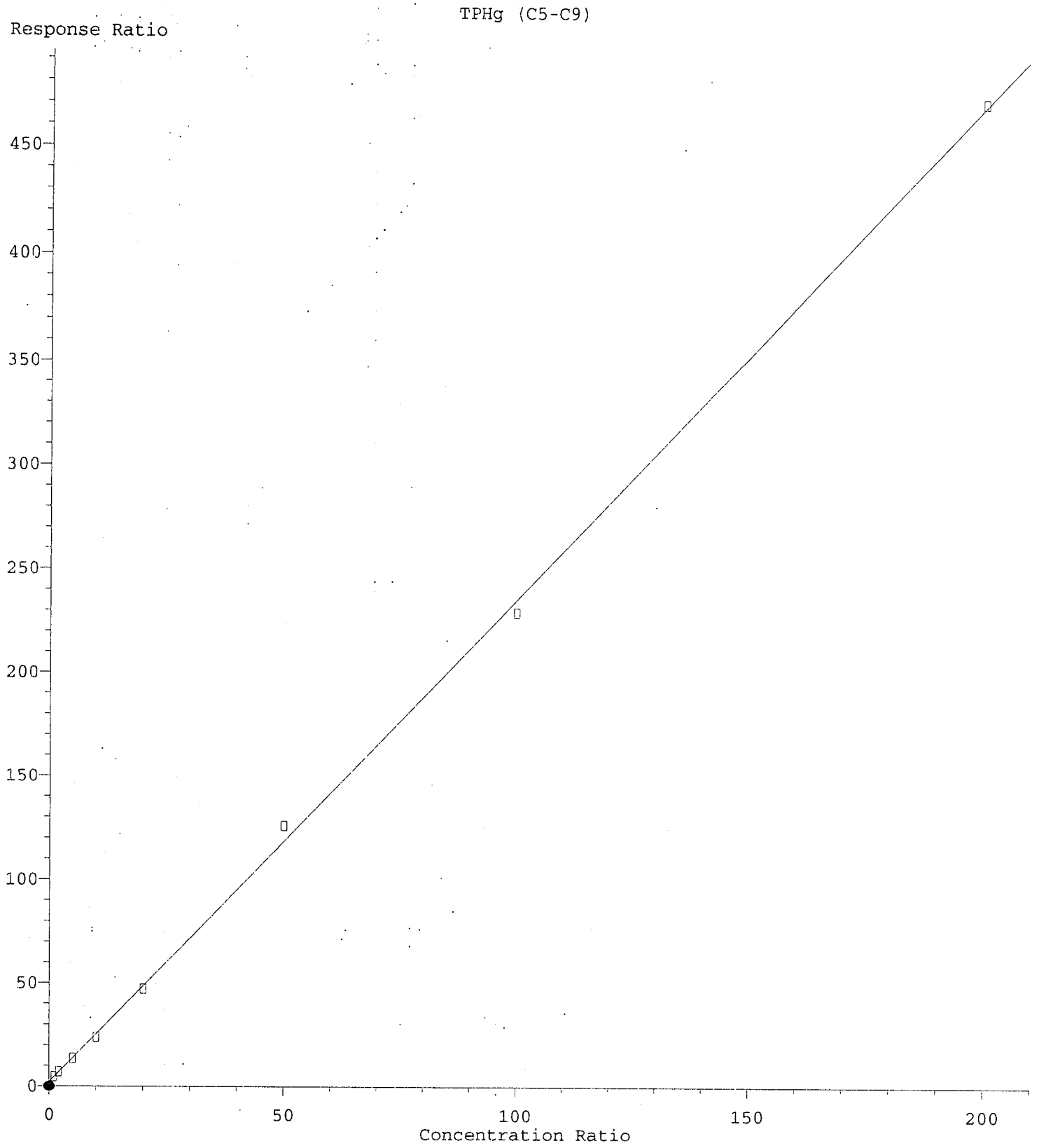
TIC: VJ20010633.D\data.ms

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

8.739min (0.000) 32.73 ug/L m

response 99460

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



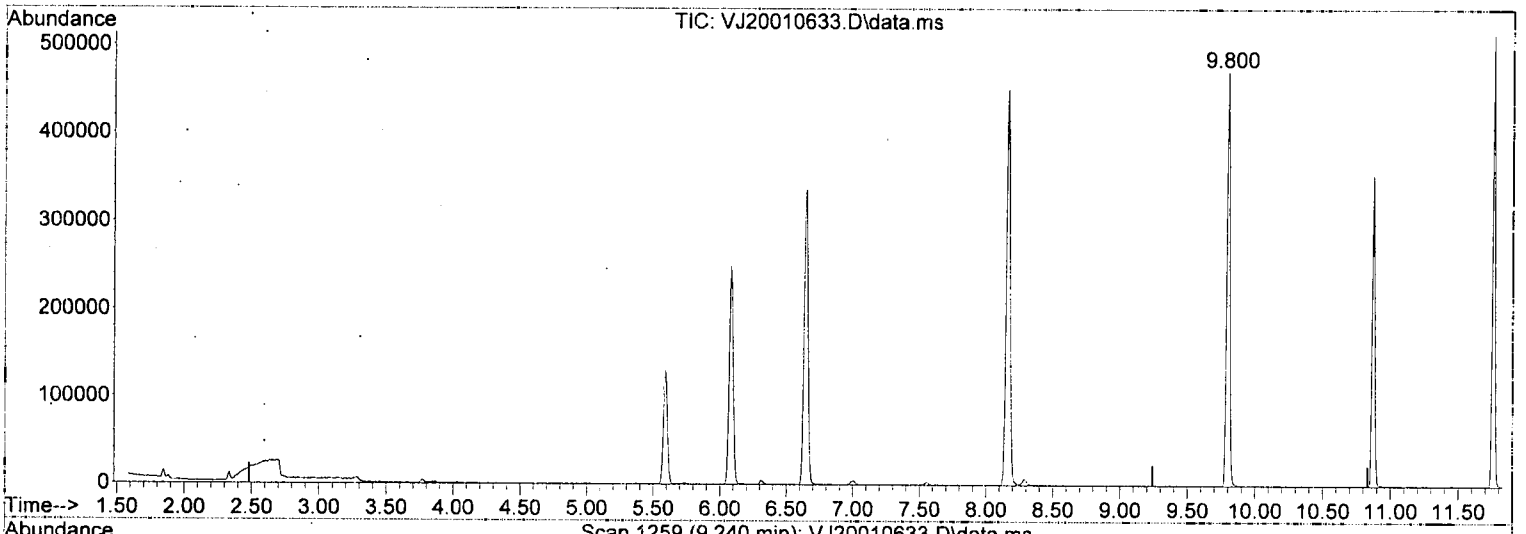
Int= (-)

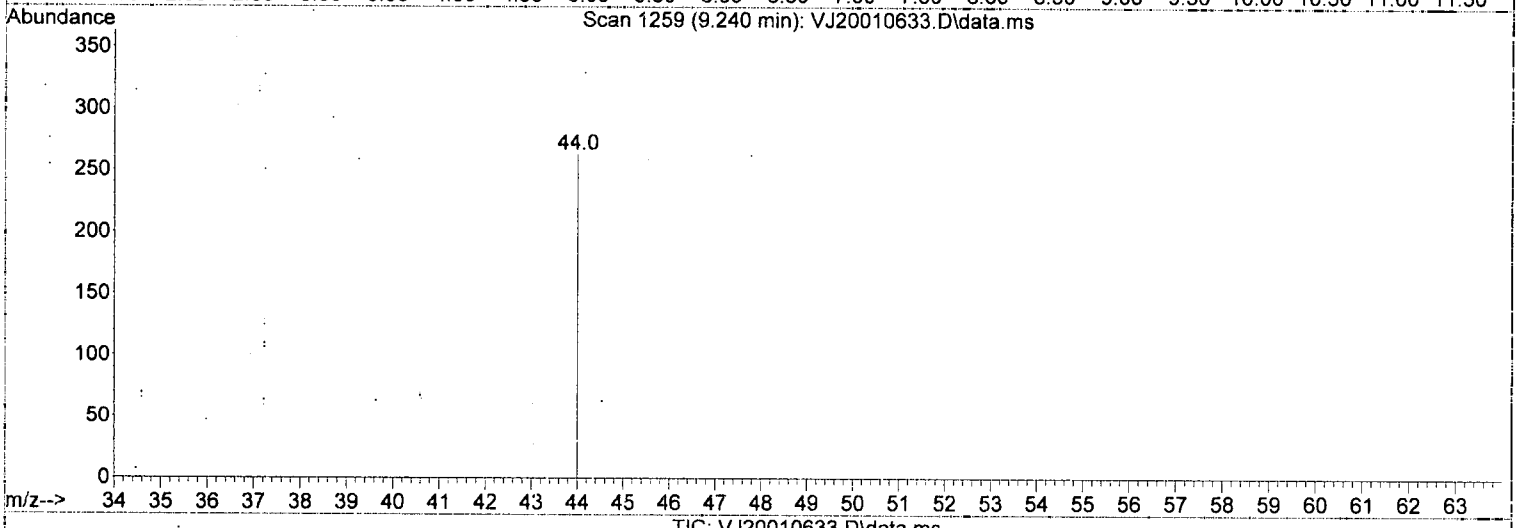
R = 5.23e-005 A*A + 2.32e+000 A + 2.18e+000
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vJ2001066.M
Calibration Table Last Updated: Tue Jan 07 15:46:27 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL : DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





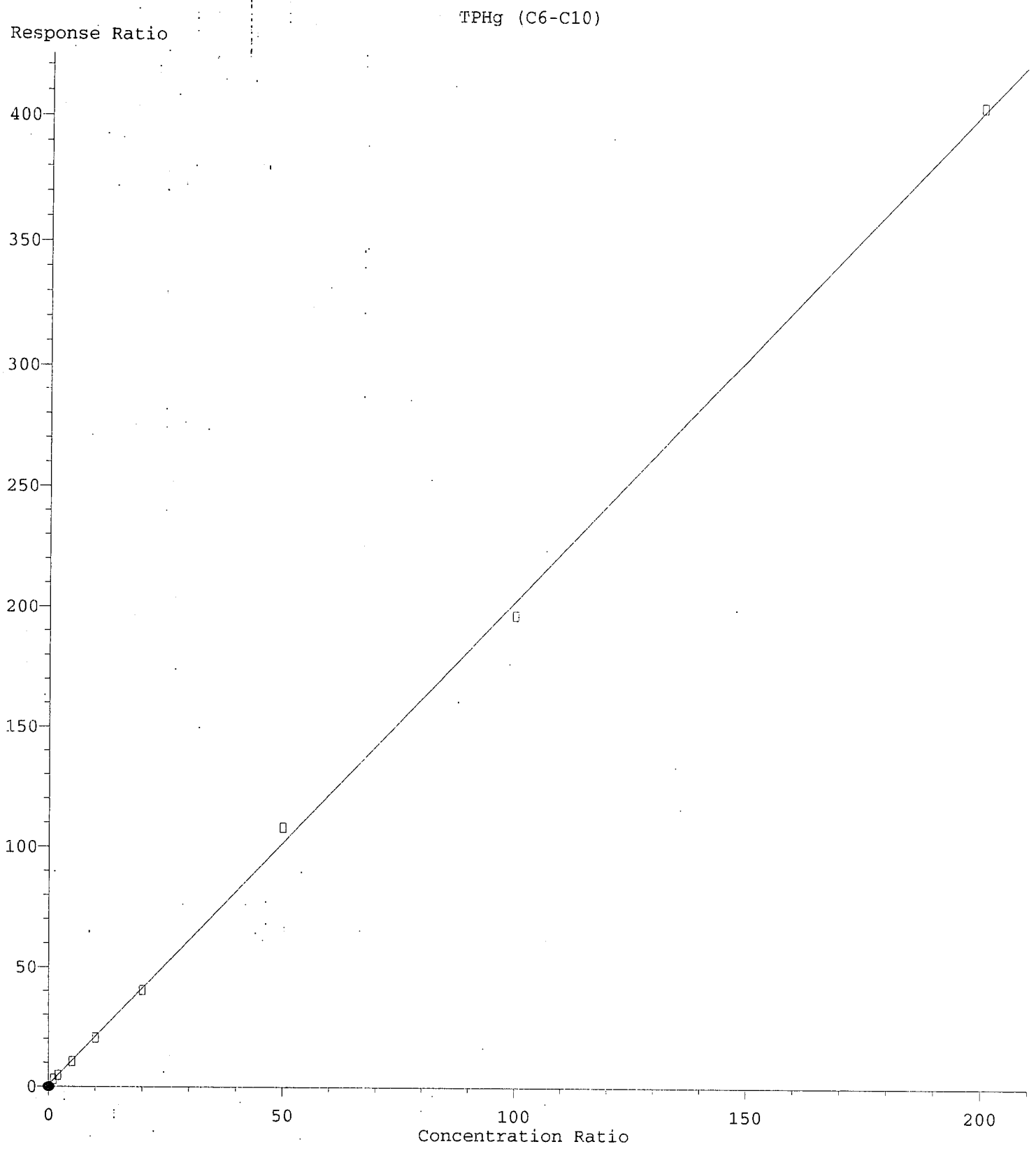
TIC: VJ20010633.D\data.ms

(5) TPHg (C5-C9) (H)

9.239min (0.000) -1.00 ug/L m

response 360890

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



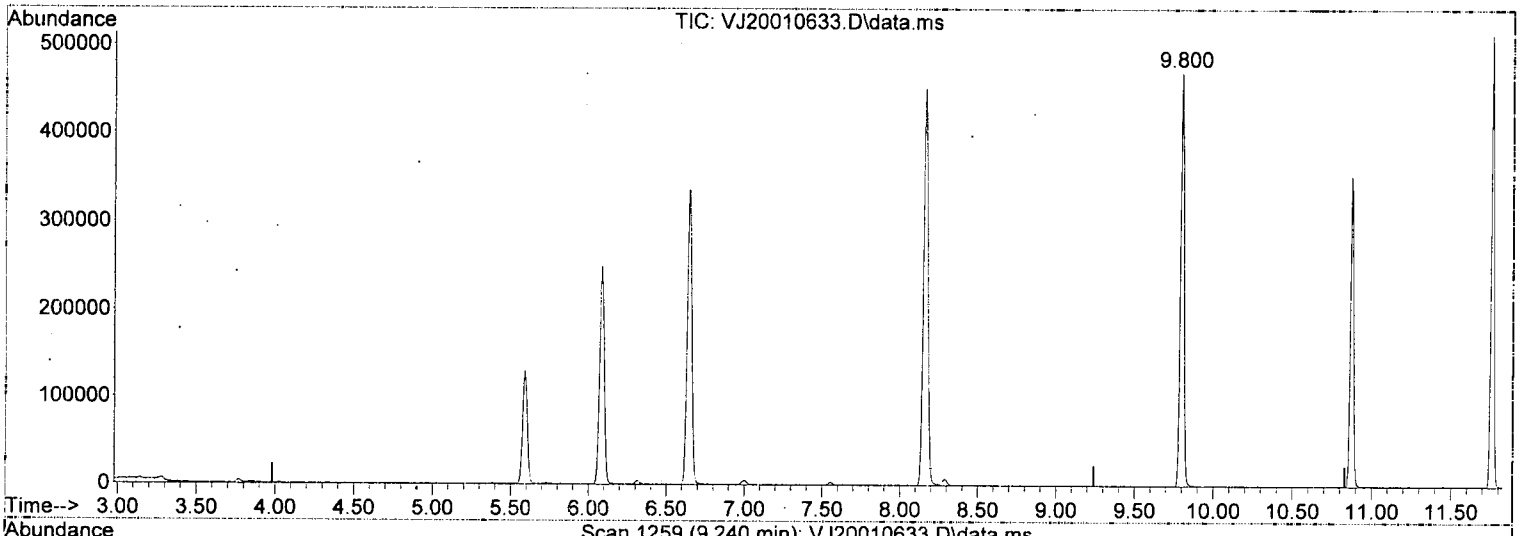
Int = 26.04

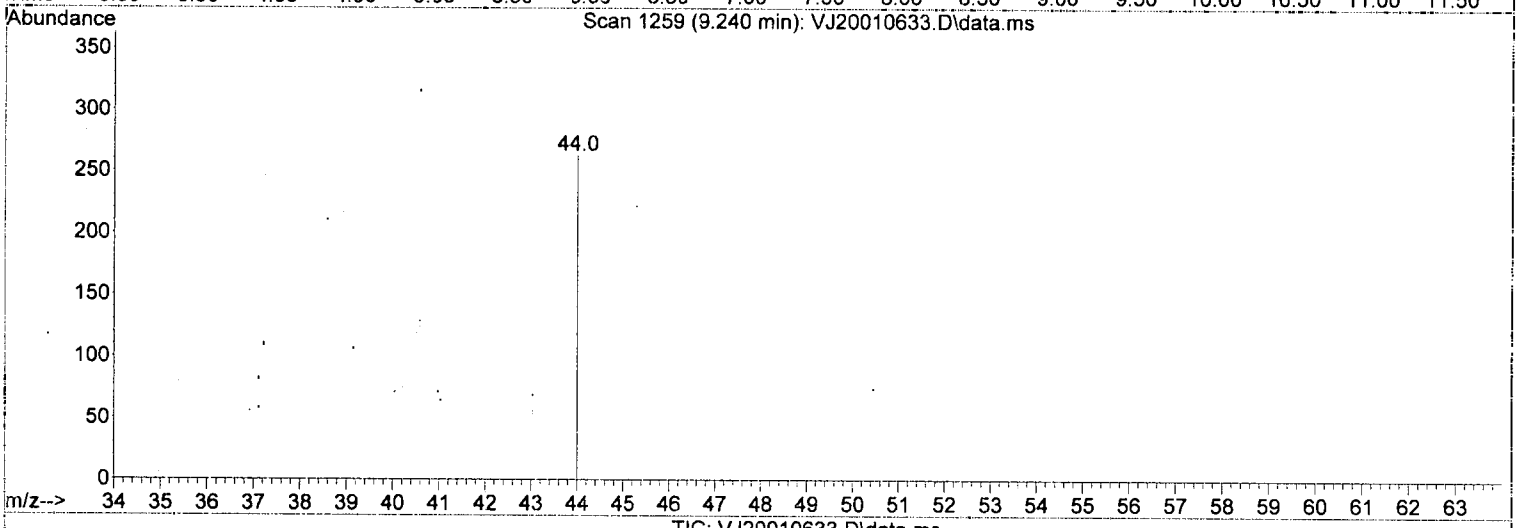
R = -6.65e-005 A*A + 2.02e+000 A + 8.51e-001
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj200106.m
Calibration Table Last Updated: Tue Jan 07 15:46:27 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





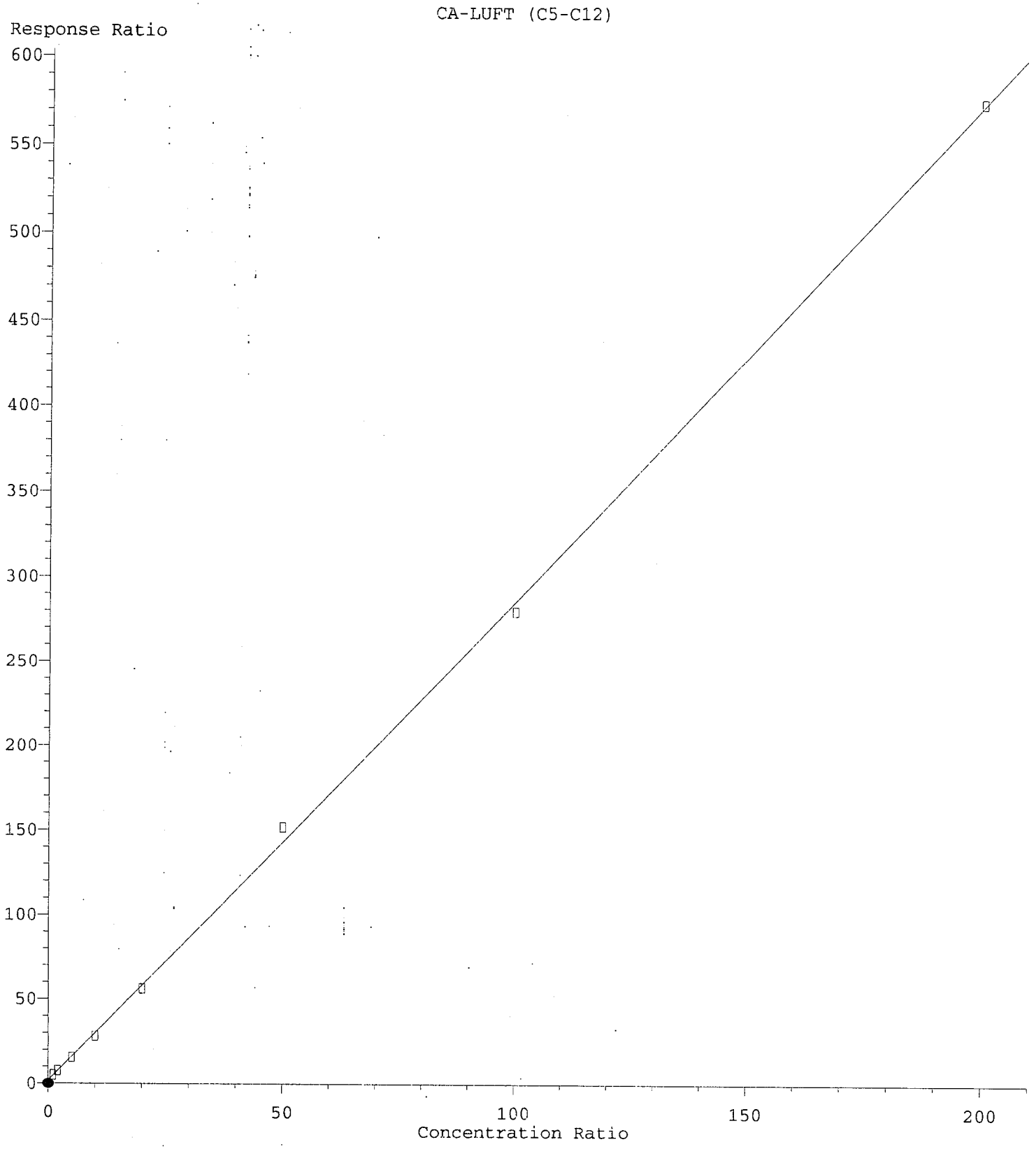
TIC: VJ20010633.D\data.ms

(6) TPHg (C6-C10) (H)

9.239min (0.000) 26.04 ug/L m

response 345915

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



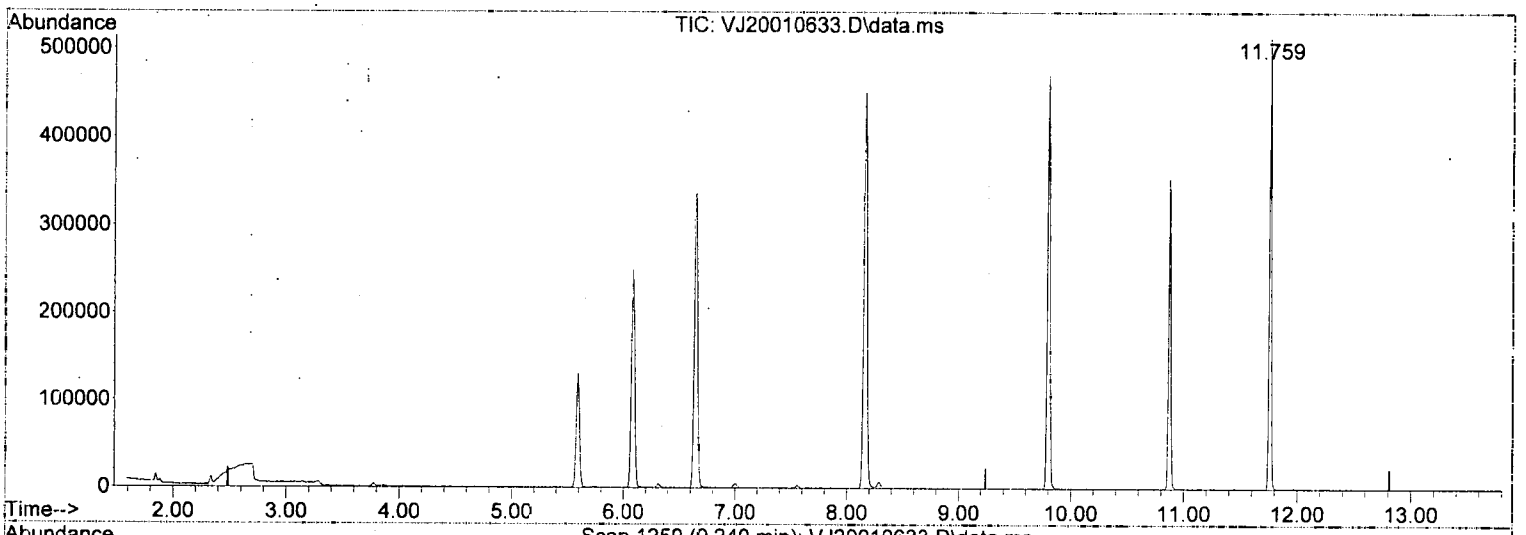
Int = 4.98

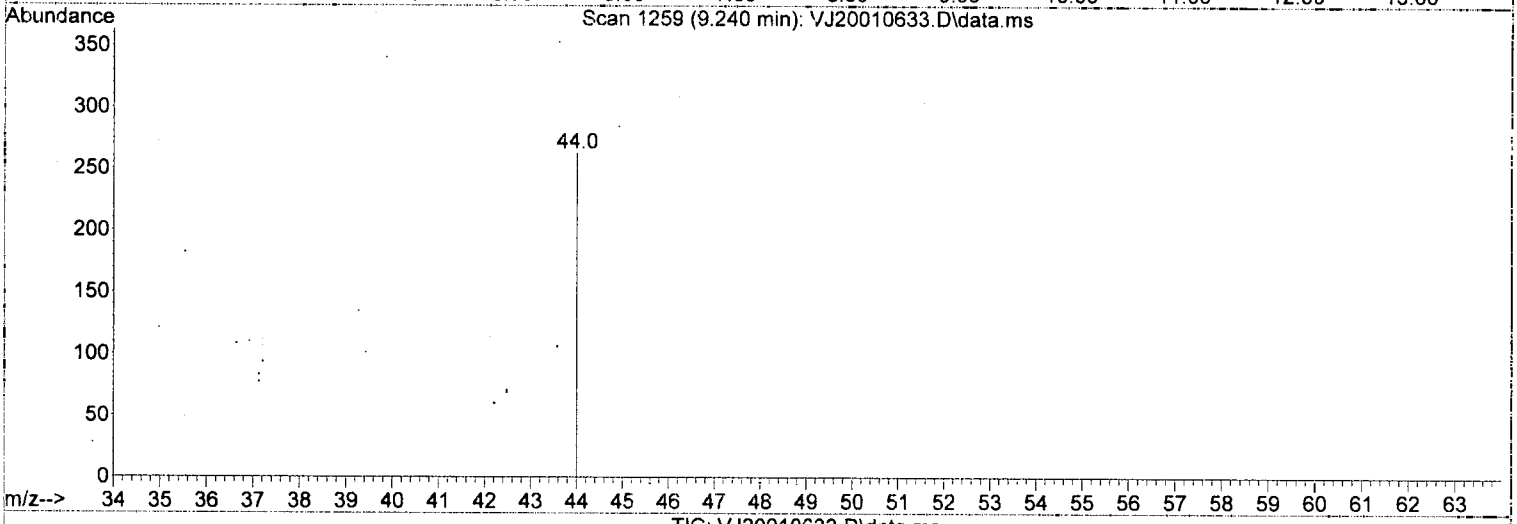
R = 2.58e-004 A*A + 2.81e+000 A + 1.90e+000
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj2001066.m
Calibration Table Last Updated: Tue Jan 07 15:46:27 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20010633.D\data.ms

(7) CA-LUFT (C5-C12) (H)

9.239min (0.000) 4.98 ug/L m

response 396221

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: 0A06051 **Seq. Date: 1/7/2020**

SEQUENCE LOG

SampleID	Analysis	Matrix	STDID	Analyzed
0A06051-TUN2	8015D-Mod Gasoline (C6-C10) by	Soil		1/7/2020 12:49:00AM
"	+CA LUFT GRO	"		"
"	+NWTPH-Gx	"		"
0A06051-ICB2	8015D-Mod Gasoline (C6-C10) by	Soil		1/7/2020 1:43:00AM
"	+CA LUFT GRO	"		"
"	+NWTPH-Gx	"		"
0A06051-CALC	8015D-Mod Gasoline (C6-C10) by	Soil	A20A115	1/7/2020 2:09:00AM
"	+CA LUFT GRO	"	A20A115	"
"	+NWTPH-Gx	"	A20A115	"
0A06051-CALD	8015D-Mod Gasoline (C6-C10) by	Soil	A20A116	1/7/2020 2:36:00AM
"	+CA LUFT GRO	"	A20A116	"
"	+NWTPH-Gx	"	A20A116	"
0A06051-CALE	8015D-Mod Gasoline (C6-C10) by	Soil	A20A117	1/7/2020 3:03:00AM
"	+CA LUFT GRO	"	A20A117	"
"	+NWTPH-Gx	"	A20A117	"
0A06051-CALF	8015D-Mod Gasoline (C6-C10) by	Soil	A20A118	1/7/2020 3:30:00AM
"	+CA LUFT GRO	"	A20A118	"
"	+NWTPH-Gx	"	A20A118	"
0A06051-CALG	8015D-Mod Gasoline (C6-C10) by	Soil	A20A119	1/7/2020 3:57:00AM
"	+CA LUFT GRO	"	A20A119	"
"	+NWTPH-Gx	"	A20A119	"
0A06051-CALH	8015D-Mod Gasoline (C6-C10) by	Soil	A20A120	1/7/2020 4:24:00AM
"	+CA LUFT GRO	"	A20A120	"
"	+NWTPH-Gx	"	A20A120	"
0A06051-CALI	8015D-Mod Gasoline (C6-C10) by	Soil	A20A121	1/7/2020 4:50:00AM
"	+CA LUFT GRO	"	A20A121	"
"	+NWTPH-Gx	"	A20A121	"
0A06051-CALJ	8015D-Mod Gasoline (C6-C10) by	Soil	A20A122	1/7/2020 5:17:00AM
"	+CA LUFT GRO	"	A20A122	"
"	+NWTPH-Gx	"	A20A122	"
0A06051-ICV2	8015D-Mod Gasoline (C6-C10) by	Soil	A19G350	1/7/2020 6:38:00AM
"	+CA LUFT GRO	"	A19G350	"
"	+NWTPH-Gx	"	A19G350	"

CALIBRATION STANDARD RECOVERIES

Calibration: **A0A0801** Instrument: **VOA-GCMS10**

8015D-Mod Gasoline (C6-C1(Sequence: **0A06051** Matrix: **Soil**

0A06051-CALC	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
0A06051-CALD	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A06051-CALE	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A06051-CALF	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 0A06051 **Seq. Date: 1/7/2020**

0A06051-CALG	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A06051-CALH	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A06051-CALI	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
0A06051-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: **A0A0801** Instrument: **VOA-GCMS10**

NWTPH-Gx Sequence: **0A06051** Matrix: **Soil**

0A06051-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\2020-01\0A06051\
Data File : VJ20010644.D
Acq On : 7 Jan 2020 6:38 am
Operator : tb
Sample : 0A06051-ICV2
Misc : 1X 5mL 500ppb GX DI+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 08 10:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

1/8/20

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 (IS)	50.000	50.000	0.0	116	-0.01
2	S	1,4-Difluorobenzene (Sur)	50.000	49.286	1.4	114	-0.01
3	S	4-Bromofluorobenzene (Sur)	50.000	48.553	2.9	114	0.00
4	H	NWTPH-Gx (TPH)	500.000	443.329	11.3	109	0.00
5	H	TPHg (C5-C9)	500.000	421.345	15.7	105	0.00
6	H	TPHg (C6-C10)	500.000	445.097	11.0	107	0.00
7	H	CA-LUFT (C5-C12)	500.000	424.734	15.1	106	0.00
8		Benzene (NR)	-1.000	0.000	0.0	110	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	112	0.00
10		Toluene (NR)	-1.000	0.000	0.0	112	-0.01
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	113	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	112	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	113	-0.01

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

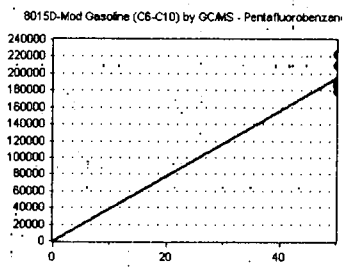
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **8015D-Mod Gasoline (C6-C1** Instrument Cal ID: **VJ200106S VJ200106G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

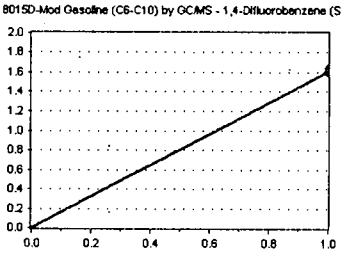


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	189886	3797.720	6.09
0A06051-CALD	50	179443	3588.860	6.09
0A06051-CALE	50	186189	3723.780	6.09
0A06051-CALF	50	192629	3852.580	6.09
0A06051-CALG	50	191267	3825.340	6.08
0A06051-CALH	50	186048	3720.960	6.08
0A06051-CALI	50	209694	4193.880	6.09
0A06051-CALJ	50	222960	4459.200	6.09

AVE RF **3895.290** RF RSD **7.37** AVE RT **6.09**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

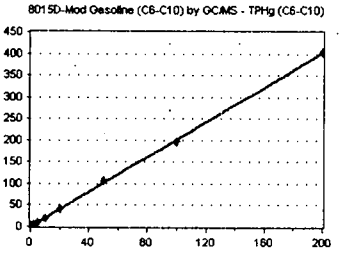


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	311513	1.641	6.65
0A06051-CALD	50	288672	1.609	6.65
0A06051-CALE	50	302044	1.622	6.65
0A06051-CALF	50	311330	1.616	6.65
0A06051-CALG	50	307334	1.607	6.65
0A06051-CALH	50	297873	1.601	6.65
0A06051-CALI	50	336080	1.603	6.65
0A06051-CALJ	50	356334	1.598	6.65

AVE RF **1.612** RF RSD **0.87** AVE RT **6.65**

TPHg (C6-C10)

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

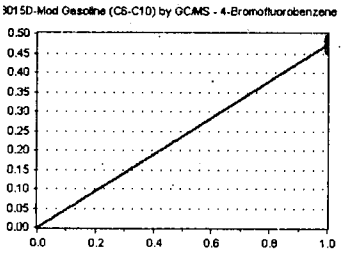


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	580106	3.055	9.24
0A06051-CALD	100	852839	2.376	9.24
0A06051-CALE	250	1968325	2.114	9.24
0A06051-CALF	500	3933470	2.042	9.24
0A06051-CALG	1000	7738058	2.023	9.24
0A06051-CALH	2500	2.010977E+07	2.162	9.24
0A06051-CALI	5000	4.117868E+07	1.964	9.24
0A06051-CALJ	10000	9.013048E+07	2.021	9.24

AVE RF **2.220** RF RSD **16.26** AVE RT **9.24**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	89937	0.474	10.88
0A06051-CALD	50	81750	0.456	10.88
0A06051-CALE	50	87530	0.470	10.88
0A06051-CALF	50	90026	0.467	10.88
0A06051-CALG	50	89389	0.467	10.88
0A06051-CALH	50	89534	0.481	10.88
0A06051-CALI	50	102563	0.489	10.88
0A06051-CALJ	50	107899	0.484	10.88

AVE RF **0.474** RF RSD **2.29** AVE RT **10.88**

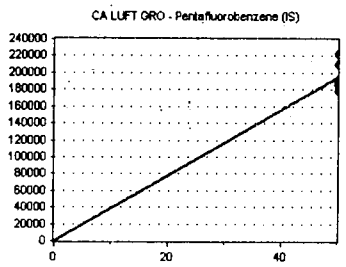
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **CA LUFT GRO** Instrument Cal ID: **VJ200106S VJ200106G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

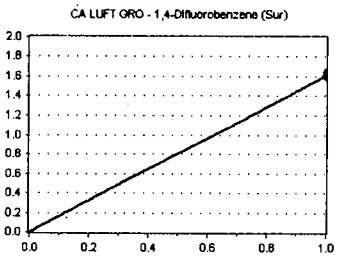


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	189886	3797.720	6.09
0A06051-CALD	50	179443	3588.860	6.09
0A06051-CALE	50	186189	3723.780	6.09
0A06051-CALF	50	192629	3852.580	6.09
0A06051-CALG	50	191267	3825.340	6.08
0A06051-CALH	50	186048	3720.960	6.08
0A06051-CALI	50	209694	4193.880	6.09
0A06051-CALJ	50	222960	4459.200	6.09

AVE RF **3895.290** RF RSD **7.37** AVE RT **6.09**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

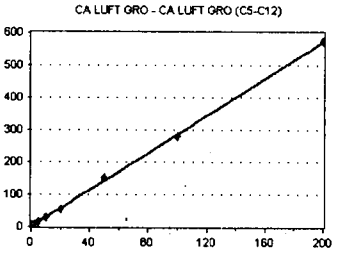


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	311513	1.641	6.65
0A06051-CALD	50	288672	1.609	6.65
0A06051-CALE	50	302044	1.622	6.65
0A06051-CALF	50	311330	1.616	6.65
0A06051-CALG	50	307334	1.607	6.65
0A06051-CALH	50	297873	1.601	6.65
0A06051-CALI	50	336080	1.603	6.65
0A06051-CALJ	50	356334	1.598	6.65

AVE RF **1.612** RF RSD **0.87** AVE RT **6.65**

CA LUFT GRO (C5-C12)

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

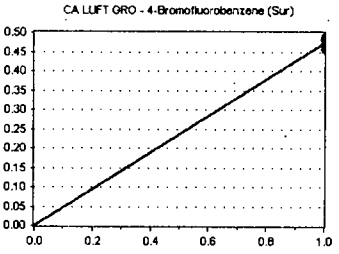


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	936641	4.933	9.24
0A06051-CALD	100	1366640	3.808	9.24
0A06051-CALE	250	2871923	3.085	9.24
0A06051-CALF	500	5414996	2.811	9.24
0A06051-CALG	1000	1.073255E+07	2.806	9.24
0A06051-CALH	2500	2.827339E+07	3.039	9.24
0A06051-CALI	5000	5.861624E+07	2.795	9.24
0A06051-CALJ	10000	1.281721E+08	2.874	9.24

AVE RF **3.269** RF RSD **22.98** AVE RT **9.24**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	89937	0.474	10.88
0A06051-CALD	50	81750	0.456	10.88
0A06051-CALE	50	87530	0.470	10.88
0A06051-CALF	50	90026	0.467	10.88
0A06051-CALG	50	89389	0.467	10.88
0A06051-CALH	50	89534	0.481	10.88
0A06051-CALI	50	102563	0.489	10.88
0A06051-CALJ	50	107899	0.484	10.88

AVE RF **0.474** RF RSD **2.29** AVE RT **10.88**

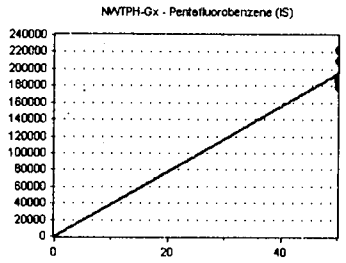
Element Calibration Review Sheet

Calibration ID: **A0A0801** Instrument: **VOA-GCMS10** Calibration Date: **01/08/2020**

Analysis: **NWTPH-Gx** Instrument Cal ID: **VJ200106S VJ200106G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

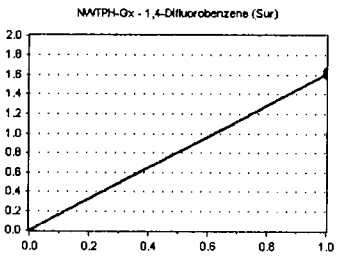


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	189886	3797.720	6.09
0A06051-CALD	50	179443	3588.860	6.09
0A06051-CALE	50	186189	3723.780	6.09
0A06051-CALF	50	192629	3852.580	6.09
0A06051-CALG	50	191267	3825.340	6.08
0A06051-CALH	50	186048	3720.960	6.08
0A06051-CALI	50	209694	4193.880	6.09
0A06051-CALJ	50	222960	4459.200	6.09

AVE RF **3895.290** RF RSD **7.37** AVE RT **6.09**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

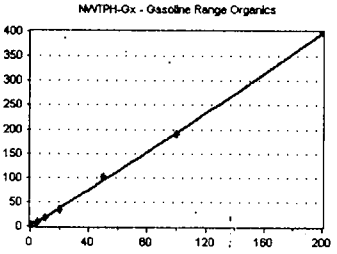


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	311513	1.641	6.65
0A06051-CALD	50	288672	1.609	6.65
0A06051-CALE	50	302044	1.622	6.65
0A06051-CALF	50	311330	1.616	6.65
0A06051-CALG	50	307334	1.607	6.65
0A06051-CALH	50	297873	1.601	6.65
0A06051-CALI	50	336080	1.603	6.65
0A06051-CALJ	50	356334	1.598	6.65

AVE RF **1.612** RF RSD **0.87** AVE RT **6.65**

Gasoline Range Organics

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

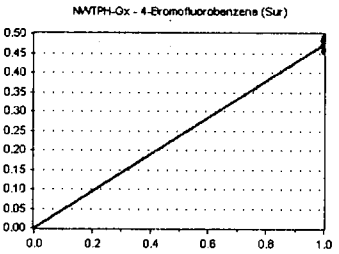


Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	281399	1.482	8.74
0A06051-CALD	100	531697	1.482	8.74
0A06051-CALE	250	1506348	1.618	8.74
0A06051-CALF	500	3298839	1.713	8.74
0A06051-CALG	1000	6810936	1.780	8.74
0A06051-CALH	2500	1.880355E+07	2.021	8.74
0A06051-CALI	5000	3.97933E+07	1.898	8.74
0A06051-CALJ	10000	8.898816E+07	1.996	8.74

AVE RF **1.749** RF RSD **12.22** AVE RT **8.74**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
0A06051-CALC	50	89937	0.474	10.88
0A06051-CALD	50	81750	0.456	10.88
0A06051-CALE	50	87530	0.470	10.88
0A06051-CALF	50	90026	0.467	10.88
0A06051-CALG	50	89389	0.467	10.88
0A06051-CALH	50	89534	0.481	10.88
0A06051-CALI	50	102563	0.489	10.88
0A06051-CALJ	50	107899	0.484	10.88

AVE RF **0.474** RF RSD **2.29** AVE RT **10.88**

Injection Log

Directory: W:\DATA\2020-01\0A06051

Line	Vial	FileName	Multiplier	SampleName		Misc Info	Injected
1	1	Vj20010611.d	1.	0A06051-IBL1		1X 5mL DI+MeOH	6 Jan 2020 15:51
2	2	Vj20010612.d	1.	0A06051-TUN1		1X 5mL DI+MeOH	6 Jan 2020 16:18
3	3	Vj20010613.d	1.	0A06051-ICB1		1X 5mL DI+MeOH	6 Jan 2020 16:45
4	4	Vj20010614.d	1.	0A06051-CAL1		1X 5mL 0.1ppb ...	6 Jan 2020 17:12
5	5	Vj20010615.d	1.	0A06051-CAL2		1X 5mL 0.2ppb ...	6 Jan 2020 17:39
6	6	Vj20010616.d	1.	0A06051-CAL3		1X 5mL 0.4ppb ...	6 Jan 2020 18:05
7	7	Vj20010617.d	1.	0A06051-CAL4		1X 5mL 1ppb D...	6 Jan 2020 18:32
8	8	Vj20010618.d	1.	0A06051-CAL5		1X 5mL 2ppb D...	6 Jan 2020 18:59
9	9	Vj20010619.d	1.	0A06051-CAL6		1X 5mL 5ppb D...	6 Jan 2020 19:26
10	10	Vj20010620.d	1.	0A06051-CAL7		1X 5mL 10ppb ...	6 Jan 2020 19:53
11	11	Vj20010621.d	1.	0A06051-CAL8		1X 5mL 20ppb ...	6 Jan 2020 20:20
12	12	Vj20010622.d	1.	0A06051-CAL9		1X 5mL 50ppb ...	6 Jan 2020 20:47
13	13	Vj20010623.d	1.	0A06051-IBL2		1X 5mL DI+MeOH	6 Jan 2020 21:14
14	14	Vj20010624.d	1.	0A06051-CALA		1X 5mL 50ppb ...	6 Jan 2020 21:41
15	15	Vj20010625.d	1.	0A06051-IBL3		1X 5mL DI+MeOH	6 Jan 2020 22:08
16	16	Vj20010626.d	1.	0A06051-CALB		1X 5mL 50ppb ...	6 Jan 2020 22:34
17	17	Vj20010627.d	1.	0A06051-IBL4		1X 5mL DI+MeOH	6 Jan 2020 23:01
18	18	Vj20010628.d	1.	0A06051-IBL5		1X 5mL DI+MeOH	6 Jan 2020 23:28
19	19	Vj20010629.d	1.	0A06051-ICV1		1X 5mL 20ppb ...	6 Jan 2020 23:55
20	20	Vj20010630.d	1.	0A06051-IBL6		1X 5mL DI+MeOH	7 Jan 2020 00:22
21	21	Vj20010631.d	1.	0A06051-TUN2	RT	1X 5mL DI+MeOH	7 Jan 2020 00:49
22	22	Vj20010632.d	1.	0A06051-IBL7		1X 5mL DI+MeOH	7 Jan 2020 01:16
23	23	Vj20010633.d	1.	0A06051-ICB2		1X 5mL DI+MeOH	7 Jan 2020 01:43
24	24	Vj20010634.d	1.	0A06051-CALC		1X 5mL 50ppb G...	7 Jan 2020 02:09
25	25	Vj20010635.d	1.	0A06051-CALD		1X 5mL 100ppb ...	7 Jan 2020 02:36
26	26	Vj20010636.d	1.	0A06051-CALE		1X 5mL 250ppb ...	7 Jan 2020 03:03
27	27	Vj20010637.d	1.	0A06051-CALF		1X 5mL 500ppb ...	7 Jan 2020 03:30
28	28	Vj20010638.d	1.	0A06051-CALG		1X 5mL 1000ppb...	7 Jan 2020 03:57
29	29	Vj20010639.d	1.	0A06051-CALH		1X 5mL 2500ppb...	7 Jan 2020 04:24
30	30	Vj20010640.d	1.	0A06051-CALI		1X 5mL 5000ppb...	7 Jan 2020 04:50
31	31	Vj20010641.d	1.	0A06051-CALJ		1X 5mL 10000pp...	7 Jan 2020 05:17
32	32	Vj20010642.d	1.	0A06051-IBL8		1X 5mL DI+MeOH	7 Jan 2020 05:44
33	33	Vj20010643.d	1.	0A06051-IBL9		1X 5mL DI+MeOH	7 Jan 2020 06:11
34	34	Vj20010644.d	1.	0A06051-ICV2		1X 5mL 500ppb ...	7 Jan 2020 06:38
35	35	Vj20010645.d	1.	0A06051-IBLA		1X 5mL DI+MeOH	7 Jan 2020 07:05

1/7/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010611.D
Acq On : 6 Jan 2020 3:51 pm
Operator : tb
Sample : 0A06051-IBL1
Misc : 1X 5mL DI+MeOH
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 08 10:50:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

NR

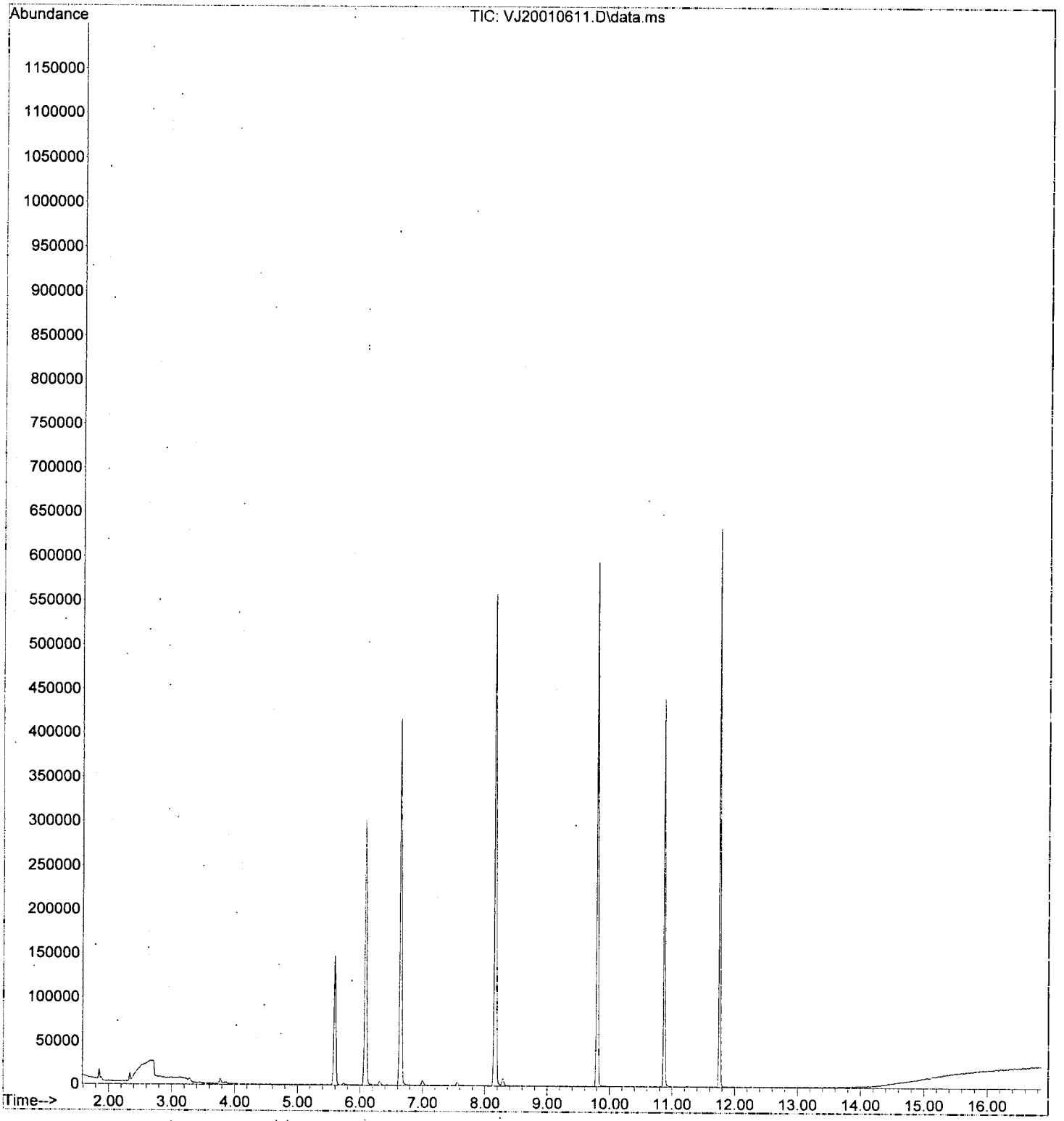
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	125357	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	310452	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	134853	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	100534	49.64	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	364737	49.88	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	430981	50.08	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	108954	52.34	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	2386	0.66	ug/L		99
5) Bromomethane	2.342	96	4048	0.13	ug/L		93
6) Chloroethane	2.476	64	61	0.09	ug/L	#	47
8) Ethanol	3.285	45	3406	Below Cal			87
12) Iodomethane	3.291	142	1127	2.57	ug/L		87
13) Methylene Chloride	3.771	84	3025	0.22	ug/L		87
14) Acetone	3.881	43	2201	1.39	ug/L		98
32) 2-Butanone (MEK)	5.742	43	3024	1.22	ug/L		81
34) tert-Amyl methyl ether...	6.077	73	600	0.08	ug/L	#	1
36) iso-Butyl Alcohol	6.314	43	2013	7.50	ug/L		88
84) Naphthalene	13.511	128	207	0.13	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010611.D
Acq On : 6 Jan 2020 3:51 pm
Operator : tb
Sample : 0A06051-IBL1
Misc : 1X 5mL DI+MeOH
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 08 10:50:33 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



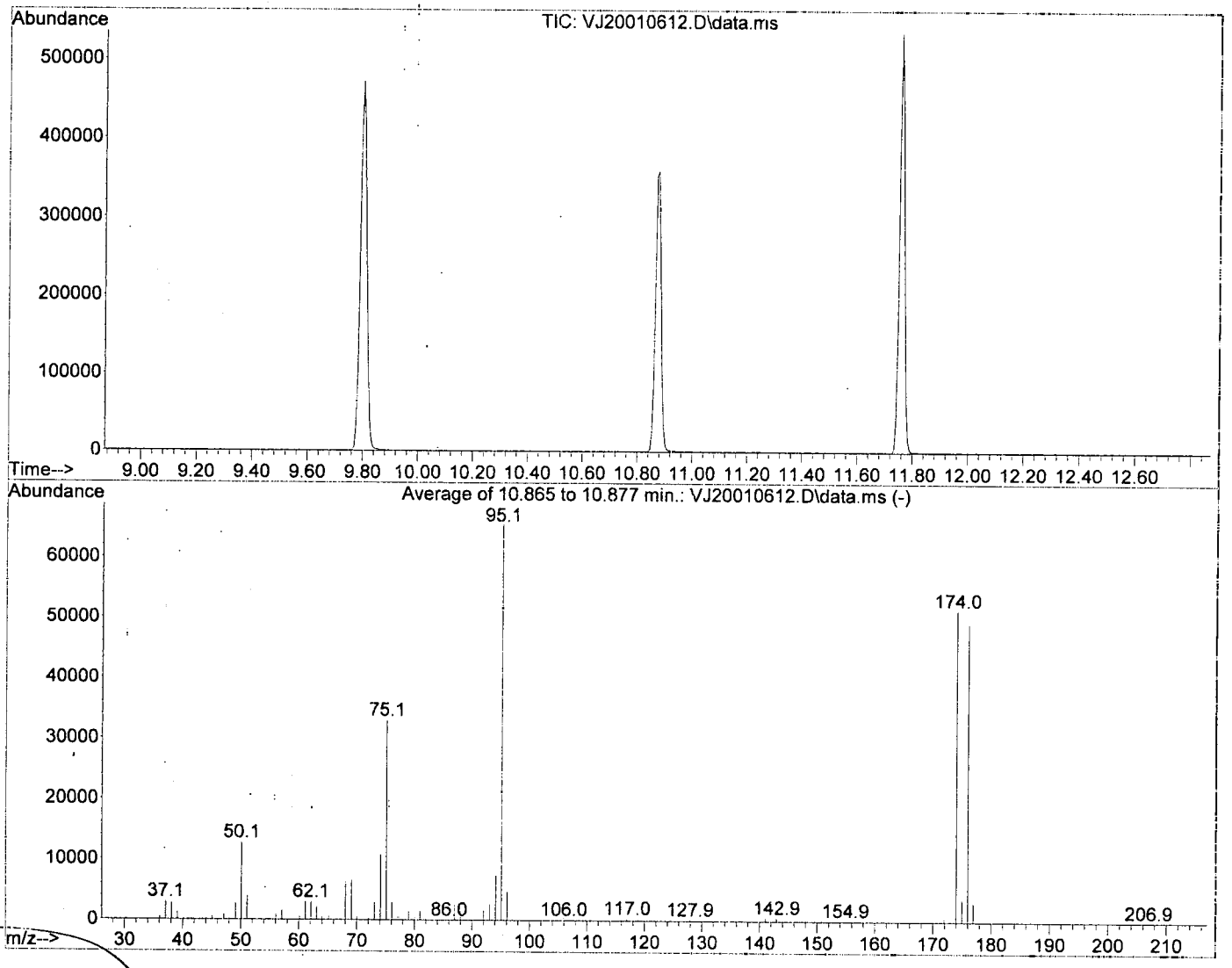
BFB

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010612.D
Acq On : 6 Jan 2020 4:18 pm
Operator : tb
Sample : 0A06051-TUN1
Misc : 1X 5mL DI+MeOH
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VJ200106S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Tue Jan 07 15:08:13 2020

1/8/20



AutoFind: Scans 1526, 1527, 1528; Background Corrected with Scan 1520

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	127.1	65499	PASS
96	95	5	9	7.2	4697	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	200	78.7	51547	PASS
175	174	5	9	7.4	3806	PASS
176	174	95	105	95.7	49328	PASS
177	176	5	10	6.8	3345	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010612.D
Acq On : 6 Jan 2020 4:18 pm
Operator : tb
Sample : 0A06051-TUN1
Misc : 1X 5mL DI+MeOH
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 08 10:50:52 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

1/8/20

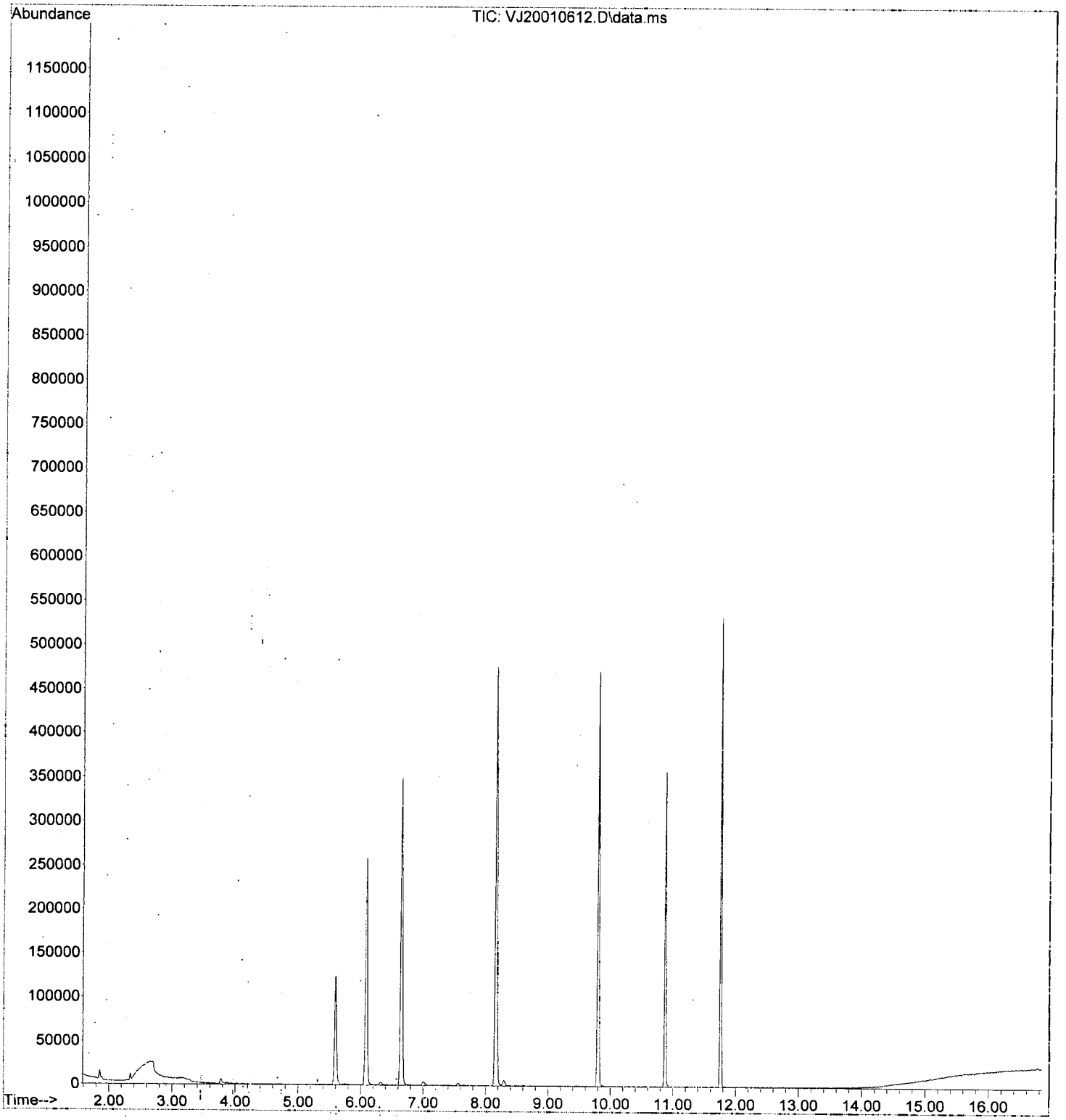
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	108485	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	259779	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	115149	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.597	111	86870	49.57	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	315553	49.86	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	369512	51.31	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	90129	50.70	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	1956	0.63	ug/L		98
5) Bromomethane	2.342	96	3958	0.54	ug/L		87
6) Chloroethane	2.506	64	57	0.10	ug/L	#	1
8) Ethanol	3.273	45	2404	Below Cal			82
12) Iodomethane	3.297	142	825	2.16	ug/L		77
13) Methylene Chloride	3.784	84	2952	0.37	ug/L		88
14) Acetone	3.875	43	1664	1.21	ug/L	#	42
18) tert-Butanol (TBA)	4.258	59	116	0.19	ug/L	#	46
32) 2-Butanone (MEK)	5.737	43	2720	1.26	ug/L		88
36) iso-Butyl Alcohol	6.314	43	1946	8.38	ug/L		94

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010612.D
Acq On : 6 Jan 2020 4:18 pm
Operator : tb
Sample : 0A06051-TUN1
Misc : 1X 5mL DI+MeOH
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 08 10:50:52 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010613.D
Acq On : 6 Jan 2020 4:45 pm
Operator : tb
Sample : 0A06051-ICB1
Misc : 1X 5mL DI+MeOH
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 08 10:51:13 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

1/8/20

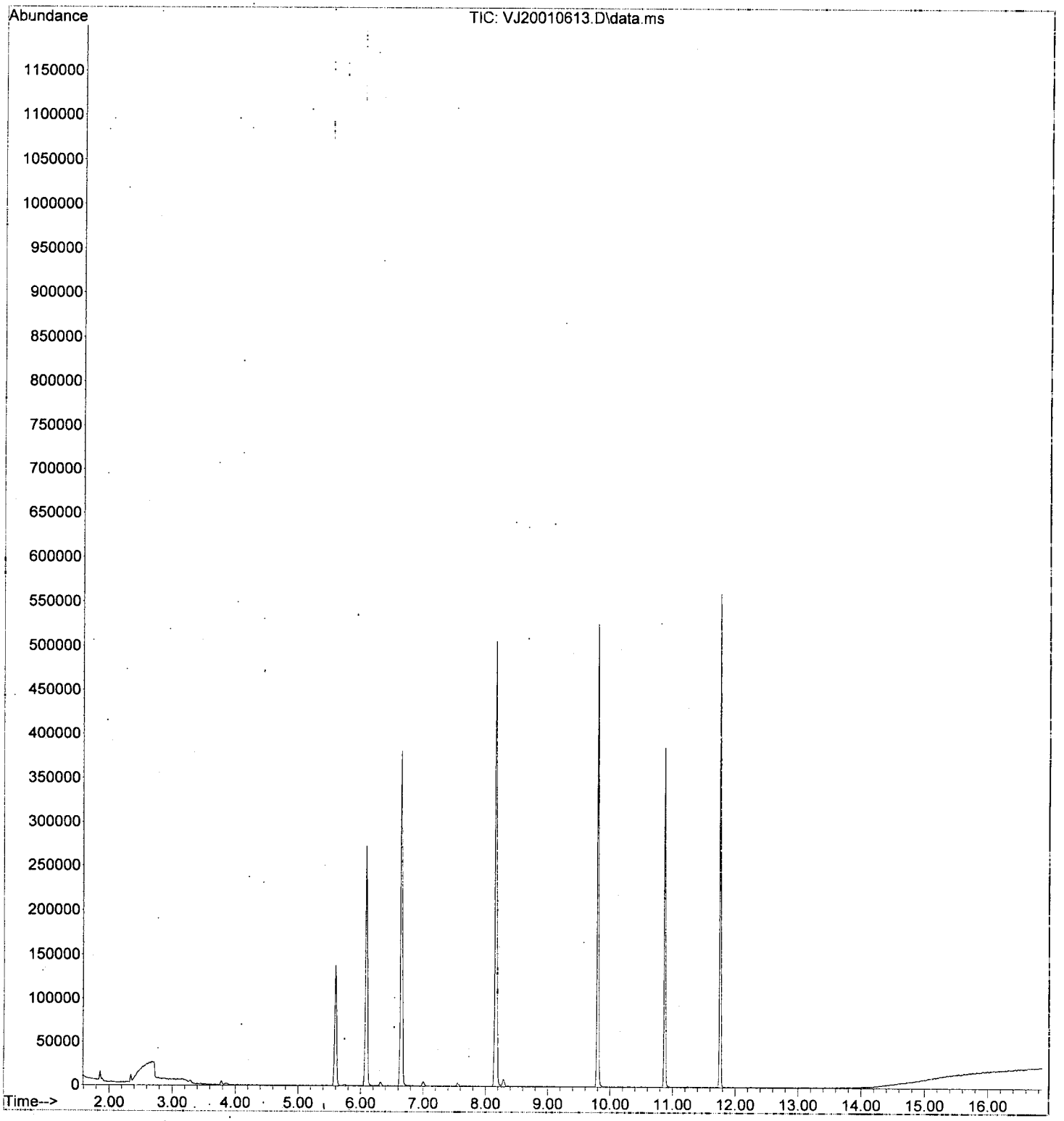
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.089	99	112751	50.00 ug/L	0.00
43) Chlorobenzene-d5 (I)	9.800	117	276522	50.00 ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	121375	50.00 ug/L	0.00
System Monitoring Compounds					
30) Dibromofluoromethane (S)	5.596	111	92840	50.97 ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.649	114	329156	50.04 ug/L	0.00
45) Toluene-d8 (S)	8.164	98	384807	50.20 ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.877	174	96050	51.26 ug/L	0.00
Target Compounds					Qvalue
3) Chloromethane	1.898	50	1900	0.59 ug/L	98 <MDL
5) Bromomethane	2.348	96	3762	0.24 ug/L	90
6) Chloroethane	2.451	64	65	0.11 ug/L #	1
8) Ethanol	3.291	45	3152	Below Cal	81
12) Iodomethane	3.297	142	876	2.21 ug/L	86
13) Methylene Chloride	3.784	84	2121	Below Cal	96
14) Acetone	3.869	43	1975	1.39 ug/L	84
32) 2-Butanone (MEK)	5.742	43	3077	1.38 ug/L	91
36) iso-Butyl Alcohol	6.314	43	1780	7.37 ug/L	82

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010613.D
Acq On : 6 Jan 2020 4:45 pm
Operator : tb
Sample : 0A06051-ICB1
Misc : 1X 5mL DI+MeOH
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 08 10:51:13 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 14:46:27 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.083	99	106379	50.00	ug/L	0.00
43) Chlorobenzene-d5 (I)	9.800	117	261559	50.00	ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	117300	50.00	ug/L	0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.590	111	85502	51.11	ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.643	114	313857	51.33	ug/L	0.00
45) Toluene-d8 (S)	8.164	98	365118	49.52	ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.877	174	91026	50.26	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	d	
3) Chloromethane	1.885	50	1721	0.61	ug/L	93
4) Vinyl Chloride	0.000		0	N.D.		
5) Bromomethane	2.336	96	3306	2.74	ug/L	99
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	0.000		0	N.D.	d	
11) Freon 113	0.000		0	N.D.		
12) Iodomethane	3.285	142	696	1.78	ug/L	63
13) Methylene Chloride	3.771	84	2558	1.20	ug/L	91
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	0.000		0	N.D.	d	
18) tert-Butanol (TBA)	0.000		0	N.D.	d	
19) Diisopropyl ether (DIPE)	0.000		0	N.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	0.000		0	N.D.	d	
25) Bromochloromethane	0.000		0	N.D.		
26) Chloroform	0.000		0	N.D.	d	
27) Carbon Tetrachloride	0.000		0	N.D.		
28) Tetrahydrofuran	0.000		0	N.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)	5.730	43	3330	1.69	ug/L	95
33) Benzene	6.004	78	964	0.10	ug/L	56
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	6.308	43	2064	9.49	ug/L	89
38) Trichloroethene (TCE)	0.000		0	N.D.	d	
39) tert-Amyl ethyl ether ...	0.000		0	N.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	8.225	91	1116	0.11	ug/L	82
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\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb. DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 14:46:27 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

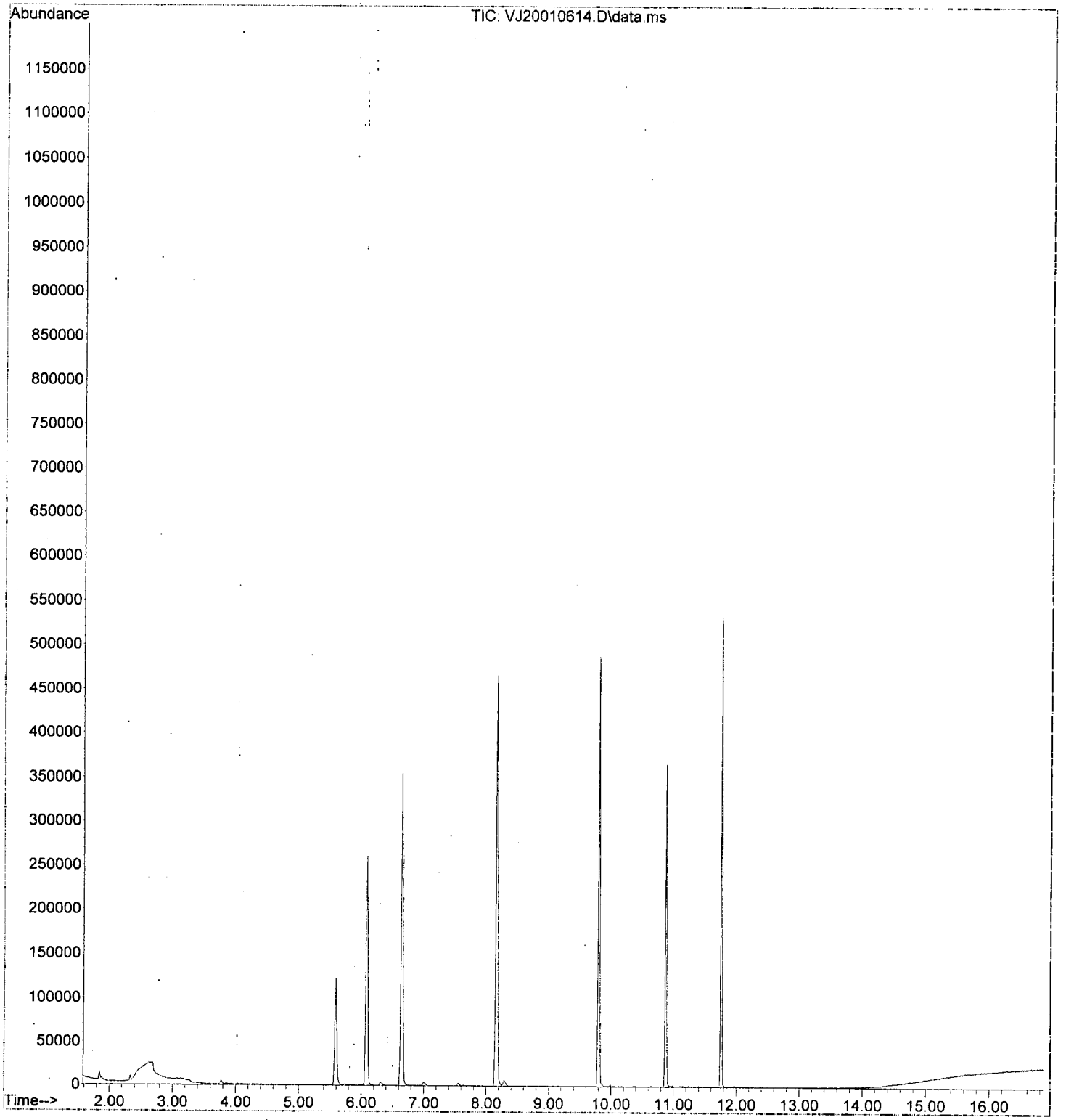
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	0.000		0	N.D.	d	
50) 1,1,2-Trichloroethane	0.000		0	N.D.		
51) Dibromochloromethane	0.000		0	N.D.		
52) 1,3-Dichloropropane	0.000		0	N.D.	d	
53) 1,2-Dibromoethane (EDB)	0.000		0	N.D.		
54) 2-Hexanone	0.000		0	N.D.		
55) Chlorobenzene	0.000		0	N.D.	d	
56) Ethylbenzene	9.849	91	1054	0.10	ug/L #	50
57) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	d	
58) m,p-Xylenes (2)	9.989	91	1299	0.16	ug/L	86
59) o-Xylene	10.372	91	564	0.07	ug/L	81
60) Styrene	0.000		0	N.D.	d	
61) Bromoform	0.000		0	N.D.		
62) Isopropylbenzene	10.646	105	735	0.08	ug/L	78
65) Bromobenzene	10.956	156	195	0.09	ug/L #	72
66) n-Propylbenzene	10.993	91	1066	0.10	ug/L	92
67) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
68) 2-Chlorotoluene	0.000		0	N.D.	d	
69) 1,3,5-Trimethylbenzene	11.151	105	645	0.08	ug/L	90
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	0.000		0	N.D.	d	
73) tert-Butylbenzene	0.000		0	N.D.	d	
74) 1,2,4-Trimethylbenzene	11.455	105	710	0.09	ug/L	94
75) sec-Butylbenzene	11.540	105	752	0.08	ug/L	58
76) 4-Isopropyltoluene	11.650	119	634	0.08	ug/L	79
77) 1,3-Dichlorobenzene	11.704	146	321	0.08	ug/L	82
78) 1,4-Dichlorobenzene	11.771	146	390	0.09	ug/L #	33
79) n-Butylbenzene	11.972	91	596	0.09	ug/L	94
80) 1,2-Dichlorobenzene	12.088	146	297	0.08	ug/L	92
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
82) Hexachlorobutadiene	0.000		0	N.D.		
83) 1,2,4-Trichlorobenzene	0.000		0	N.D.	d	
84) Naphthalene	13.511	128	645	0.08	ug/L	79
85) 1,2,3-Trichlorobenzene	0.000		0	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 14:46:27 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 11:53:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	106379	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	261559	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	117300	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	85502	51.11	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	313857	51.33	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	365118	49.52	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	91026	50.26	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	63	0.03	ug/L	#	51
3) Chloromethane	1.885	50	1721	0.61	ug/L		93
4) Vinyl Chloride	0.000		0	N.D.			
5) Bromomethane	2.336	96	3306	2.74	ug/L		99
6) Chloroethane	2.451	64	140	0.28	ug/L	#	1
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Ethanol	3.266	45	2356	36.51	ug/L		89
9) 1,1-Dichloroethene	3.133	61	339	0.14	ug/L	#	52
10) Carbon Disulfide	3.145	76	739	0.17	ug/L	#	35
11) Freon 113	0.000		0	N.D.			
12) Iodomethane	3.285	142	696	1.78	ug/L		63
13) Methylene Chloride	3.771	84	2558	1.20	ug/L		91
14) Acetone	3.857	43	1292	1.03	ug/L	#	42
15) t-1,2-Dichloroethene	3.936	61	345	0.11	ug/L	#	68
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.094	73	1150	0.15	ug/L		57
18) tert-Butanol (TBA)	4.264	59	1701	2.67	ug/L	#	73
19) Diisopropyl ether (DIPE)	0.000		0	N.D.			
20) 1,1-Dichloroethane	4.574	63	241	0.07	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	5.128	61	250	0.08	ug/L	#	18
24) 2,2-Dichloropropane	5.225	77	345	0.10	ug/L	#	32
25) Bromochloromethane	0.000		0	N.D.			
26) Chloroform	5.402	83	328	0.08	ug/L	#	25
27) Carbon Tetrachloride	0.000		0	N.D.			
28) Tetrahydrofuran	0.000		0	N.D.			
29) 1,1,1-Trichloroethane	5.621	97	267	0.07	ug/L	#	25
31) 1,1-Dichloropropene	5.736	75	260	0.08	ug/L	#	39
32) 2-Butanone (MEK)	5.730	43	3330	1.69	ug/L		95
33) Benzene	6.004	78	964	0.10	ug/L		56
34) tert-Amyl methyl ether...	6.138	73	55	0.01	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.199	62	198	0.06	ug/L	#	49
36) iso-Butyl Alcohol	6.308	43	2064	9.49	ug/L		89
38) Trichloroethene (TCE)	6.625	130	55	0.02	ug/L	#	1
39) tert-Amyl ethyl ether ...	0.000		0	N.D.			
40) Dibromomethane	0.000		0	N.D.			
41) 1,2-Dichloropropane	7.160	63	56	0.02	ug/L	#	40
42) Bromodichloromethane	0.000		0	N.D.			
44) c-1,3-Dichloropropene	7.933	75	180	0.05	ug/L	#	33
46) Toluene	8.225	91	1116	0.11	ug/L		82
47) Tetrachloroethene (PCE)	8.669	166	140	0.06	ug/L	#	24
48) 4-Methyl-2-Pentanone (...	8.681	43	257	0.08	ug/L	#	43

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 11:53:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

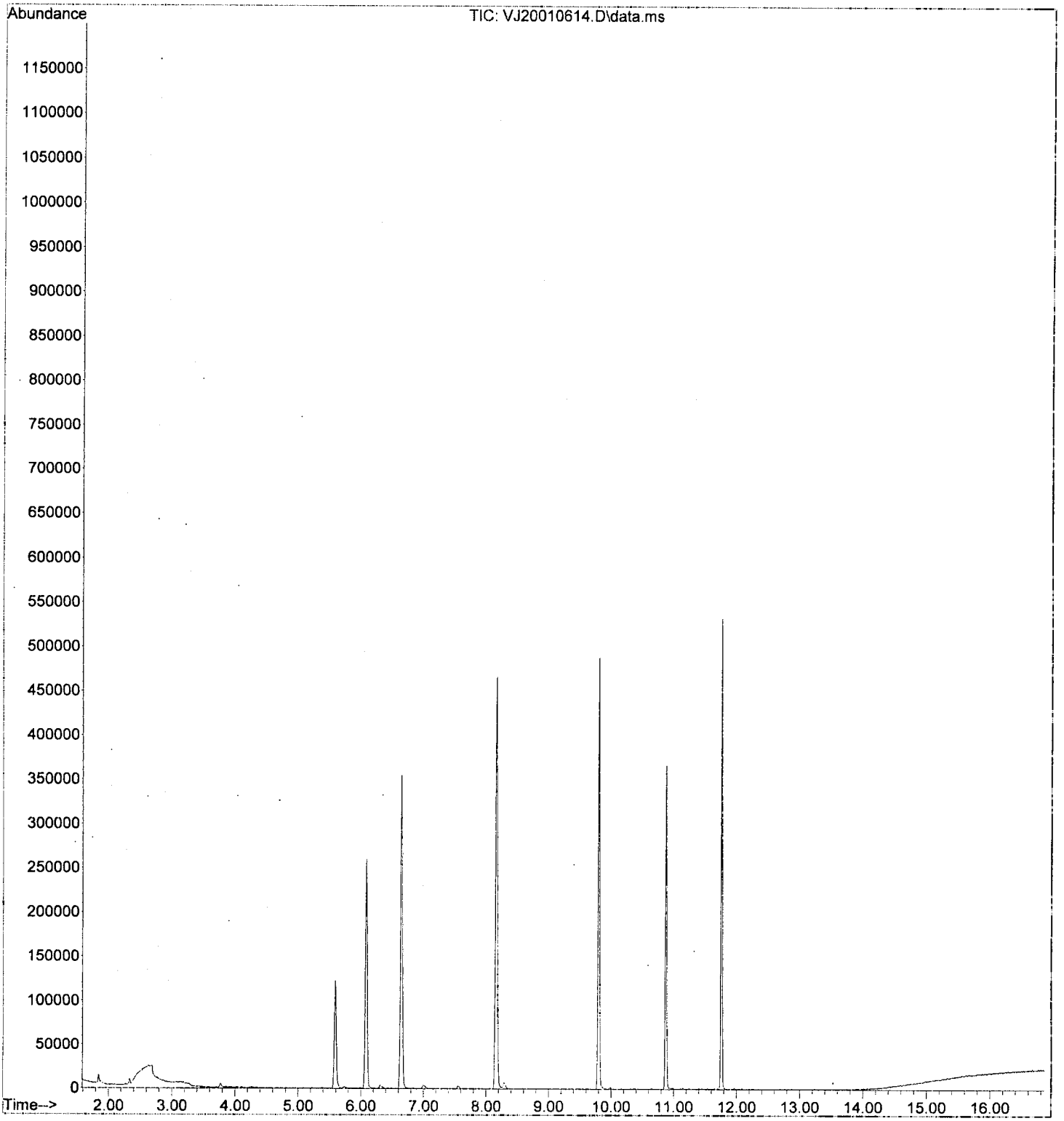
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	65	0.02	ug/L #	45
50) 1,1,2-Trichloroethane	0.000		0	N.D.		
51) Dibromochloromethane	0.000		0	N.D.		
52) 1,3-Dichloropropane	9.161	76	201	0.05	ug/L #	28
53) 1,2-Dibromoethane (EDB)	0.000		0	N.D.		
54) 2-Hexanone	0.000		0	N.D.		
55) Chlorobenzene	9.812	112	786	0.13	ug/L #	1
56) Ethylbenzene	9.849	91	1054	0.10	ug/L #	50
57) 1,1,1,2-Tetrachloroethane	9.873	131	55	0.03	ug/L #	36
58) m,p-Xylenes (2)	9.989	91	1299	0.16	ug/L	86
59) o-Xylene	10.372	91	564	0.07	ug/L	81
60) Styrene	10.415	104	311	0.06	ug/L #	40
61) Bromoform	0.000		0	N.D.		
62) Isopropylbenzene	10.646	105	735	0.08	ug/L	78
65) Bromobenzene	10.956	156	195	0.09	ug/L #	72
66) n-Propylbenzene	10.993	91	1066	0.10	ug/L	92
67) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
68) 2-Chlorotoluene	11.108	126	69	0.03	ug/L #	13
69) 1,3,5-Trimethylbenzene	11.151	105	645	0.08	ug/L	90
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	11.248	91	628	0.10	ug/L #	46
73) tert-Butylbenzene	11.400	91	310	0.07	ug/L #	58
74) 1,2,4-Trimethylbenzene	11.455	105	710	0.09	ug/L	94
75) sec-Butylbenzene	11.540	105	752	0.08	ug/L	58
76) 4-Isopropyltoluene	11.650	119	634	0.08	ug/L	79
77) 1,3-Dichlorobenzene	11.704	146	321	0.08	ug/L	82
78) 1,4-Dichlorobenzene	11.771	146	390	0.09	ug/L #	33
79) n-Butylbenzene	11.972	91	596	0.09	ug/L	94
80) 1,2-Dichlorobenzene	12.088	146	297	0.08	ug/L	92
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
82) Hexachlorobutadiene	0.000		0	N.D.		
83) 1,2,4-Trichlorobenzene	13.237	180	184	0.08	ug/L	80
84) Naphthalene	13.511	128	645	0.08	ug/L	79
85) 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\2020-01\0A06051\
Data File : VJ20010614.D
Acq On : 6 Jan 2020 5:12 pm
Operator : tb
Sample : 0A06051-CAL1
Misc : 1X 5mL 0.1ppb DI+MeOH
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 07 11:53:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 14:49:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.089	99	111744	50.00 ug/L	0.00
43) Chlorobenzene-d5 (I)	9.800	117	259849	50.00 ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	116376	50.00 ug/L	0.00
System Monitoring Compounds					
30) Dibromofluoromethane (S)	5.597	111	86345	49.14 ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.649	114	320717	49.93 ug/L	0.00
45) Toluene-d8 (S)	8.164	98	371366	50.70 ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.877	174	90060	50.12 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D. d	
3) Chloromethane	1.898	50	2258	0.76 ug/L	99
4) Vinyl Chloride	0.000		0	N.D. d	
5) Bromomethane	2.342	96	4152	3.27 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	3.145	61	573	0.22 ug/L	76
10) Carbon Disulfide	3.151	76	1049	0.23 ug/L	40
11) Freon 113	0.000		0	N.D. d	
12) Iodomethane	3.297	142	695	1.69 ug/L	85
13) Methylene Chloride	3.778	84	2700	1.21 ug/L	94
14) Acetone	0.000		0	N.D. d	
15) t-1,2-Dichloroethene	3.942	61	676	0.21 ug/L #	70
16) n-Hexane	0.000		0	N.D.	
17) Methyl-tert-butyl-ether	4.112	73	1683	0.21 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	4.574	63	614	0.16 ug/L	75
21) Acrylonitrile	0.000		0	N.D.	
22) Ethyl-tert-butyl ether...	0.000		0	N.D. d	
23) c-1,2-Dichloroethene	5.128	61	459	0.14 ug/L	96
24) 2,2-Dichloropropane	5.238	77	710	0.20 ug/L	67
25) Bromochloromethane	0.000		0	N.D. d	
26) Chloroform	5.414	83	750	0.18 ug/L	84
27) Carbon Tetrachloride	0.000		0	N.D.	
28) Tetrahydrofuran	0.000		0	N.D.	
29) 1,1,1-Trichloroethane	5.621	97	641	0.16 ug/L	85
31) 1,1-Dichloropropene	0.000		0	N.D. d	
32) 2-Butanone (MEK)	0.000		0	N.D. d	
33) Benzene	5.998	78	2055	0.20 ug/L	72
34) tert-Amyl methyl ether...	0.000		0	N.D. d	
35) 1,2-Dichloroethane (EDC)	6.205	62	601	0.16 ug/L	81
36) iso-Butyl Alcohol	6.320	43	2421	10.60 ug/L	94
38) Trichloroethene (TCE)	6.612	130	325	0.13 ug/L #	74
39) tert-Amyl ethyl ether ...	0.000		0	N.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. d	
44) c-1,3-Dichloropropene	0.000		0	N.D. d	
46) Toluene	8.225	91	2095	0.20 ug/L	89
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\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL . 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 14:49:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

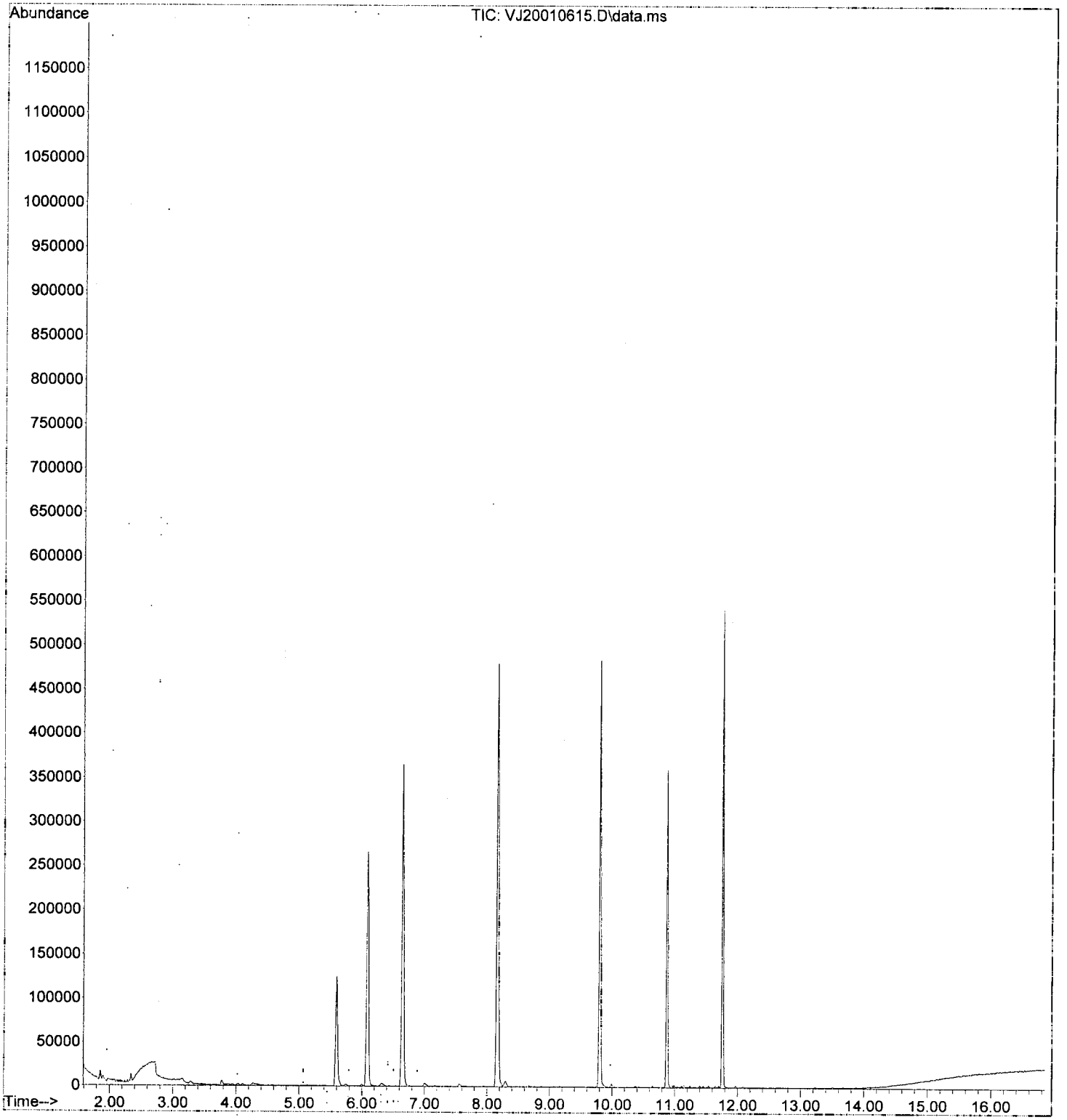
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	527	0.15	ug/L	#	45
50) 1,1,2-Trichloroethane	0.000		0	N.D.	d		
51) Dibromochloromethane	0.000		0	N.D.	d		
52) 1,3-Dichloropropane	9.155	76	587	0.16	ug/L	#	59
53) 1,2-Dibromoethane (EDB)	9.295	107	83	0.04	ug/L		79
54) 2-Hexanone	9.545	43	368	0.17	ug/L		79
55) Chlorobenzene	9.819	112	1202	0.19	ug/L		73
56) Ethylbenzene	9.855	91	1865	0.17	ug/L		93
57) 1,1,1,2-Tetrachloroethane	9.885	131	233	0.11	ug/L	#	81
58) m,p-Xylenes (2)	9.989	91	2624	0.33	ug/L		98
59) o-Xylene	10.372	91	1119	0.15	ug/L		92
60) Styrene	10.421	104	584	0.11	ug/L		75
61) Bromoform	0.000		0	N.D.	d		
62) Isopropylbenzene	10.646	105	1389	0.15	ug/L		93
65) Bromobenzene	10.962	156	376	0.17	ug/L		88
66) n-Propylbenzene	10.993	91	1899	0.18	ug/L		83
67) 1,1,2,2-Tetrachloroethane	11.041	83	402	0.14	ug/L		94
68) 2-Chlorotoluene	0.000		0	N.D.	d		
69) 1,3,5-Trimethylbenzene	11.145	105	1117	0.14	ug/L		86
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	11.248	91	877	0.14	ug/L		86
73) tert-Butylbenzene	11.400	91	702	0.17	ug/L	#	73
74) 1,2,4-Trimethylbenzene	11.455	105	1050	0.13	ug/L		95
75) sec-Butylbenzene	11.540	105	1319	0.14	ug/L		87
76) 4-Isopropyltoluene	11.650	119	1120	0.15	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	734	0.17	ug/L		82
78) 1,4-Dichlorobenzene	11.771	146	971	0.23	ug/L	#	64
79) n-Butylbenzene	11.972	91	1286	0.19	ug/L		93
80) 1,2-Dichlorobenzene	12.082	146	602	0.16	ug/L	#	60
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
82) Hexachlorobutadiene	0.000		0	N.D.			
83) 1,2,4-Trichlorobenzene	13.237	180	366	0.16	ug/L		74
84) Naphthalene	13.511	128	1083	0.13	ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	236	0.10	ug/L	#	63

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 14:49:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 11:53:29 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

TB 1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	111744	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	259849	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	116376	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.597	111	86345	49.14	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	320717	49.93	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	371366	50.70	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	90060	50.12	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	303	0.15	ug/L	#	51
3) Chloromethane	1.898	50	2258	0.76	ug/L		99
4) Vinyl Chloride	2.007	62	402	0.17	ug/L	#	46
5) Bromomethane	2.342	96	4152	3.27	ug/L		93
6) Chloroethane	2.463	64	126	0.24	ug/L	#	27
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Ethanol	3.279	45	3210	47.36	ug/L		93
9) 1,1-Dichloroethene	3.145	61	573	0.22	ug/L		76
10) Carbon Disulfide	3.151	76	1049	0.23	ug/L		40
11) Freon 113	3.200	101	135	0.07	ug/L	#	73
12) Iodomethane	3.297	142	695	1.69	ug/L		85
13) Methylene Chloride	3.778	84	2700	1.21	ug/L		94
14) Acetone	3.863	43	1833	1.39	ug/L	#	42
15) t-1,2-Dichloroethene	3.942	61	676	0.21	ug/L	#	70
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.112	73	1683	0.21	ug/L		57
18) tert-Butanol (TBA)	4.270	59	3892	5.82	ug/L	#	67
19) Diisopropyl ether (DIPE)	4.501	45	172	0.02	ug/L	#	44
20) 1,1-Dichloroethane	4.574	63	614	0.16	ug/L		75
21) Acrylonitrile	0.000		0	N.D.			
22) Ethyl-tert-butyl ether...	4.873	59	125	0.02	ug/L	#	38
23) c-1,2-Dichloroethene	5.128	61	459	0.14	ug/L		96
24) 2,2-Dichloropropane	5.238	77	710	0.20	ug/L		67
25) Bromochloromethane	5.323	49	220	0.11	ug/L	#	14
26) Chloroform	5.414	83	750	0.18	ug/L		84
27) Carbon Tetrachloride	0.000		0	N.D.			
28) Tetrahydrofuran	0.000		0	N.D.			
29) 1,1,1-Trichloroethane	5.621	97	641	0.16	ug/L		85
31) 1,1-Dichloropropene	5.743	75	560	0.17	ug/L	#	54
32) 2-Butanone (MEK)	5.743	43	2809	1.36	ug/L		89
33) Benzene	5.998	78	2055	0.20	ug/L		72
34) tert-Amyl methyl ether...	6.144	73	385	0.06	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.205	62	601	0.16	ug/L		81
36) iso-Butyl Alcohol	6.320	43	2421	10.60	ug/L		94
38) Trichloroethene (TCE)	6.612	130	325	0.13	ug/L	#	74
39) tert-Amyl ethyl ether ...	0.000		0	N.D.			
40) Dibromomethane	0.000		0	N.D.			
41) 1,2-Dichloropropane	7.166	63	360	0.15	ug/L	#	40
42) Bromodichloromethane	7.245	83	221	0.08	ug/L	#	26
44) c-1,3-Dichloropropene	7.945	75	507	0.14	ug/L	#	67
46) Toluene	8.225	91	2095	0.20	ug/L		89
47) Tetrachloroethene (PCE)	8.675	166	420	0.17	ug/L	#	77
48) 4-Methyl-2-Pentanone (...	8.675	43	699	0.23	ug/L	#	43

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 11:53:29 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

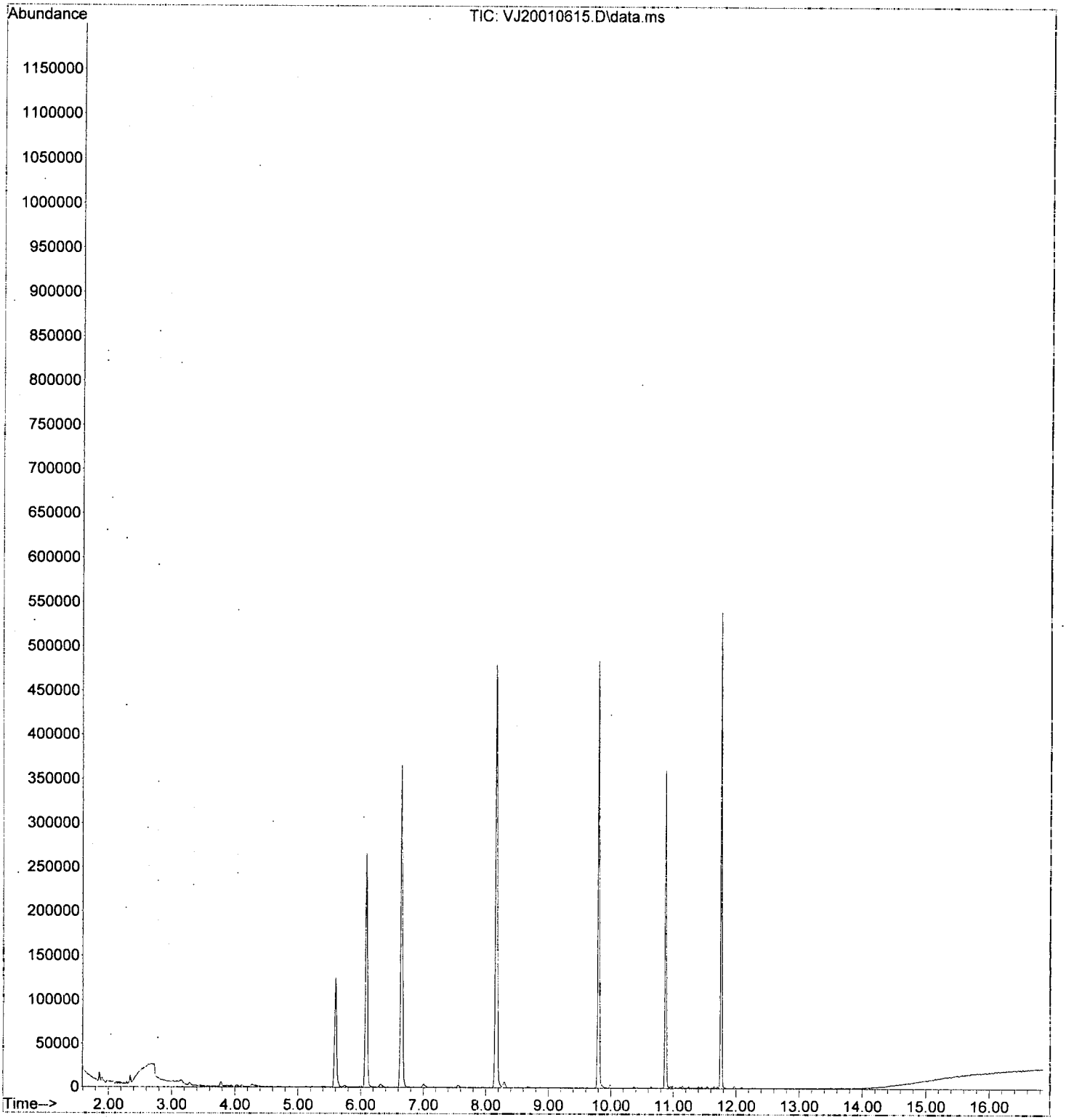
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	527	0.15	ug/L	#	45
50) 1,1,2-Trichloroethane	8.869	97	230	0.11	ug/L	#	63
51) Dibromochloromethane	9.058	129	61	0.03	ug/L	#	17
52) 1,3-Dichloropropane	9.155	76	587	0.16	ug/L	#	59
53) 1,2-Dibromoethane (EDB)	9.295	107	83	0.04	ug/L		79
54) 2-Hexanone	9.545	43	368	0.17	ug/L		79
55) Chlorobenzene	9.819	112	1202	0.19	ug/L		73
56) Ethylbenzene	9.855	91	1865	0.17	ug/L		93
57) 1,1,1,2-Tetrachloroethane	9.885	131	233	0.11	ug/L	#	81
58) m,p-Xylenes (2)	9.989	91	2624	0.38	ug/L		98
59) o-Xylene	10.372	91	1119	0.15	ug/L		92
60) Styrene	10.421	104	584	0.11	ug/L		75
61) Bromoform	10.433	173	57	0.04	ug/L	#	37
62) Isopropylbenzene	10.646	105	1389	0.15	ug/L		93
65) Bromobenzene	10.962	156	376	0.17	ug/L		88
66) n-Propylbenzene	10.993	91	1899	0.18	ug/L		83
67) 1,1,2,2-Tetrachloroethane	11.041	83	402	0.14	ug/L		94
68) 2-Chlorotoluene	11.114	126	227	0.11	ug/L	#	74
69) 1,3,5-Trimethylbenzene	11.145	105	1117	0.14	ug/L		86
70) 1,2,3-Trichloropropane	11.151	110	60	0.06	ug/L	#	7
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
72) 4-Chlorotoluene	11.248	91	877	0.14	ug/L		86
73) tert-Butylbenzene	11.400	91	702	0.17	ug/L	#	73
74) 1,2,4-Trimethylbenzene	11.455	105	1050	0.13	ug/L		95
75) sec-Butylbenzene	11.540	105	1319	0.14	ug/L		87
76) 4-Isopropyltoluene	11.650	119	1120	0.15	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	734	0.17	ug/L		82
78) 1,4-Dichlorobenzene	11.771	146	971	0.23	ug/L	#	64
79) n-Butylbenzene	11.972	91	1286	0.19	ug/L		93
80) 1,2-Dichlorobenzene	12.082	146	602	0.16	ug/L	#	60
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
82) Hexachlorobutadiene	0.000		0	N.D.			
83) 1,2,4-Trichlorobenzene	13.237	180	366	0.16	ug/L		74
84) Naphthalene	13.511	128	1083	0.13	ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	236	0.10	ug/L	#	63

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010615.D
Acq On : 6 Jan 2020 5:39 pm
Operator : tb
Sample : 0A06051-CAL2
Misc : 1X 5mL 0.2ppb DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 07 11:53:29 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

1/7/20

Quant Time: Jan 07 14:51:51 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	107259	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	272623	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	120513	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88521	52.48	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	317056	51.43	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	372287	48.44	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	95713	51.44	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	732	0.38	ug/L	#	51
3) Chloromethane	1.886	50	2494	0.87	ug/L		94
4) Vinyl Chloride	1.989	62	831	0.36	ug/L	#	46
5) Bromomethane	2.336	96	3494	2.87	ug/L		88
6) Chloroethane	0.000		0	N.D.	d		
7) Trichlorofluoromethane	2.579	101	277	0.35	ug/L	#	62
8) Ethanol	3.279	45	4984	76.61	ug/L		86
9) 1,1-Dichloroethene	3.133	61	1094	0.44	ug/L		82
10) Carbon Disulfide	3.145	76	2024	0.46	ug/L		83
11) Freon 113	3.194	101	716	0.37	ug/L		84
12) Iodomethane	3.279	142	505	1.28	ug/L	#	47
13) Methylene Chloride	3.772	84	3164	1.47	ug/L		96
14) Acetone	3.869	43	3011	2.38	ug/L		97
15) t-1,2-Dichloroethene	3.930	61	1275	0.41	ug/L		88
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.100	73	3201	0.41	ug/L		97
18) tert-Butanol (TBA)	4.270	59	13587	21.18	ug/L	#	89
19) Diisopropyl ether (DIPE)	4.495	45	678	0.09	ug/L		70
20) 1,1-Dichloroethane	4.575	63	1475	0.40	ug/L		89
21) Acrylonitrile	4.635	53	267	0.19	ug/L	#	14
22) Ethyl-tert-butyl ether...	0.000		0	N.D.	d		
23) c-1,2-Dichloroethene	5.122	61	1160	0.38	ug/L		94
24) 2,2-Dichloropropane	5.225	77	1342	0.39	ug/L		85
25) Bromochloromethane	5.323	49	685	0.37	ug/L		88
26) Chloroform	5.408	83	1637	0.41	ug/L		87
27) Carbon Tetrachloride	5.548	117	762	0.26	ug/L		89
28) Tetrahydrofuran	5.584	42	455	0.35	ug/L	#	72
29) 1,1,1-Trichloroethane	5.615	97	1303	0.34	ug/L		79
31) 1,1-Dichloropropene	5.737	75	1041	0.32	ug/L		93
32) 2-Butanone (MEK)	5.730	43	4185	2.11	ug/L		97
33) Benzene	5.998	78	3949	0.40	ug/L		98
34) tert-Amyl methyl ether...	0.000		0	N.D.	d		
35) 1,2-Dichloroethane (EDC)	6.199	62	1395	0.40	ug/L		93
36) iso-Butyl Alcohol	6.302	43	3703	16.89	ug/L		88
38) Trichloroethene (TCE)	6.613	130	861	0.36	ug/L	#	81
39) tert-Amyl ethyl ether ...	6.898	59	355	0.08	ug/L	#	32
40) Dibromomethane	7.051	93	440	0.31	ug/L		84
41) 1,2-Dichloropropane	7.166	63	812	0.35	ug/L		95
42) Bromodichloromethane	7.233	83	837	0.30	ug/L		76
44) c-1,3-Dichloropropene	7.939	75	1184	0.32	ug/L		98
46) Toluene	8.219	91	4056	0.38	ug/L		93
47) Tetrachloroethene (PCE)	8.663	166	769	0.29	ug/L		90
48) 4-Methyl-2-Pentanone (...	8.669	43	1816	0.57	ug/L		80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb; DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 14:51:51 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

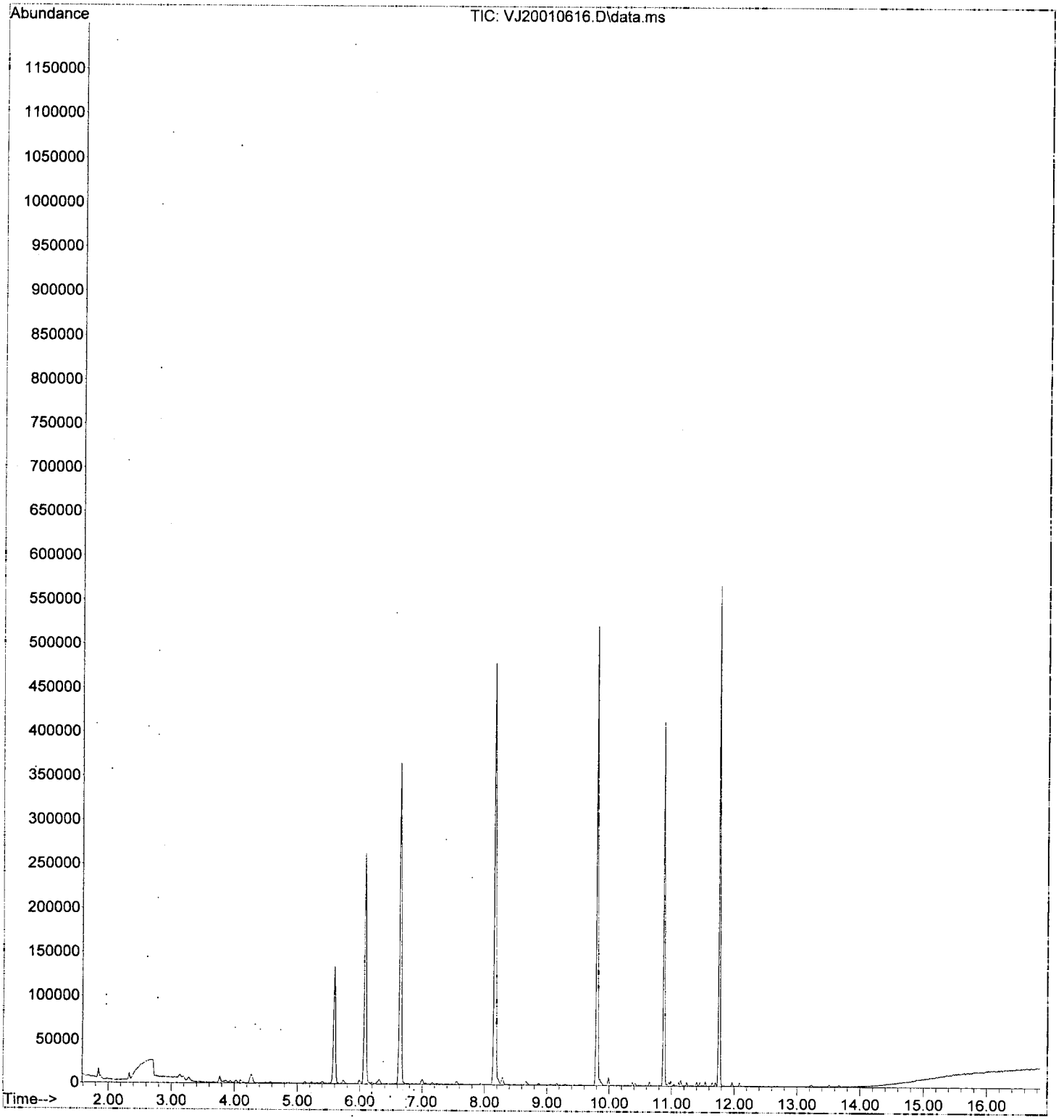
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	1069	0.30	ug/L		75
50) 1,1,2-Trichloroethane	8.863	97	835	0.37	ug/L		95
51) Dibromochloromethane	9.064	129	513	0.25	ug/L		94
52) 1,3-Dichloropropane	9.149	76	1360	0.35	ug/L		83
53) 1,2-Dibromoethane (EDB)	9.295	107	831	0.37	ug/L		97
54) 2-Hexanone	9.545	43	948	0.41	ug/L		84
55) Chlorobenzene	9.819	112	2570	0.40	ug/L		83
56) Ethylbenzene	9.849	91	4047	0.36	ug/L		90
57) 1,1,1,2-Tetrachloroethane	9.879	131	777	0.36	ug/L		98
58) m,p-Xylenes (2)	9.989	91	5235	0.62	ug/L		93
59) o-Xylene	10.366	91	2230	0.28	ug/L		91
60) Styrene	10.421	104	1339	0.24	ug/L		95
61) Bromoform	0.000		0	N.D.	d		
62) Isopropylbenzene	10.646	105	2678	0.27	ug/L		95
65) Bromobenzene	10.962	156	871	0.37	ug/L		83
66) n-Propylbenzene	10.987	91	3877	0.35	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.041	83	972	0.34	ug/L		93
68) 2-Chlorotoluene	11.114	126	612	0.29	ug/L		89
69) 1,3,5-Trimethylbenzene	11.145	105	2466	0.31	ug/L		87
70) 1,2,3-Trichloropropane	11.151	110	291	0.27	ug/L		87
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
72) 4-Chlorotoluene	11.242	91	2122	0.32	ug/L		91
73) tert-Butylbenzene	11.400	91	1366	0.32	ug/L	#	73
74) 1,2,4-Trimethylbenzene	11.455	105	2349	0.29	ug/L		94
75) sec-Butylbenzene	11.540	105	3028	0.32	ug/L		94
76) 4-Isopropyltoluene	11.650	119	2257	0.28	ug/L		91
77) 1,3-Dichlorobenzene	11.704	146	1584	0.36	ug/L		94
78) 1,4-Dichlorobenzene	11.771	146	1905	0.44	ug/L	#	80
79) n-Butylbenzene	11.966	91	2410	0.35	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	1511	0.38	ug/L		92
81) 1,2-Dibromo-3-Chloropr...	12.684	157	62	0.09	ug/L	#	19
82) Hexachlorobutadiene	13.207	223	179	0.28	ug/L	#	70
83) 1,2,4-Trichlorobenzene	13.238	180	777	0.32	ug/L		96
84) Naphthalene	13.505	128	2141	0.25	ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	740	0.29	ug/L		80

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 14:51:51 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 11:53:32 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S~~.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	107259	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	272623	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	120513	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88521	52.43	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	317056	51.43	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	372287	48.44	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.871	174	95713	51.44	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	732	0.38	ug/L	#	51
3) Chloromethane	1.886	50	2494	0.87	ug/L		94
4) Vinyl Chloride	1.989	62	831	0.36	ug/L	#	46
5) Bromomethane	2.336	96	3494	2.87	ug/L		88
6) Chloroethane	2.451	64	307	0.61	ug/L	#	50
7) Trichlorofluoromethane	2.579	101	277	0.35	ug/L	#	62
8) Ethanol	3.279	45	4984	76.61	ug/L		86
9) 1,1-Dichloroethene	3.133	61	1094	0.44	ug/L		82
10) Carbon Disulfide	3.145	76	2024	0.46	ug/L		83
11) Freon 113	3.194	101	716	0.37	ug/L		84
12) Iodomethane	3.279	142	505	1.28	ug/L	#	47
13) Methylene Chloride	3.772	84	3164	1.47	ug/L		96
14) Acetone	3.869	43	3011	2.38	ug/L		97
15) t-1,2-Dichloroethene	3.930	61	1275	0.41	ug/L		88
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.100	73	3201	0.41	ug/L		97
18) tert-Butanol (TBA)	4.270	59	13587	21.18	ug/L	#	89
19) Diisopropyl ether (DIPE)	4.495	45	678	0.09	ug/L		70
20) 1,1-Dichloroethane	4.575	63	1475	0.40	ug/L		89
21) Acrylonitrile	4.635	53	267	0.19	ug/L	#	14
22) Ethyl-tert-butyl ether...	4.873	59	472	0.06	ug/L	#	38
23) c-1,2-Dichloroethene	5.122	61	1160	0.38	ug/L		94
24) 2,2-Dichloropropane	5.225	77	1342	0.39	ug/L		85
25) Bromochloromethane	5.323	49	685	0.37	ug/L		88
26) Chloroform	5.408	83	1637	0.41	ug/L		87
27) Carbon Tetrachloride	5.548	117	762	0.26	ug/L		89
28) Tetrahydrofuran	5.584	42	455	0.35	ug/L	#	72
29) 1,1,1-Trichloroethane	5.615	97	1303	0.34	ug/L		79
31) 1,1-Dichloropropene	5.737	75	1041	0.32	ug/L		93
32) 2-Butanone (MEK)	5.730	43	4185	2.11	ug/L		97
33) Benzene	5.998	78	3949	0.40	ug/L		98
34) tert-Amyl methyl ether...	6.144	73	876	0.14	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.199	62	1395	0.40	ug/L		93
36) iso-Butyl Alcohol	6.302	43	3703	16.89	ug/L		88
38) Trichloroethene (TCE)	6.613	130	861	0.36	ug/L	#	81
39) tert-Amyl ethyl ether ...	6.898	59	355	0.08	ug/L	#	32
40) Dibromomethane	7.051	93	440	0.31	ug/L		84
41) 1,2-Dichloropropane	7.166	63	812	0.35	ug/L		95
42) Bromodichloromethane	7.233	83	837	0.30	ug/L		76
44) c-1,3-Dichloropropene	7.939	75	1184	0.32	ug/L		98
46) Toluene	8.219	91	4056	0.38	ug/L		93
47) Tetrachloroethene (PCE)	8.663	166	769	0.29	ug/L		90
48) 4-Methyl-2-Pentanone (...	8.669	43	1816	0.57	ug/L		80

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 11:53:32 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

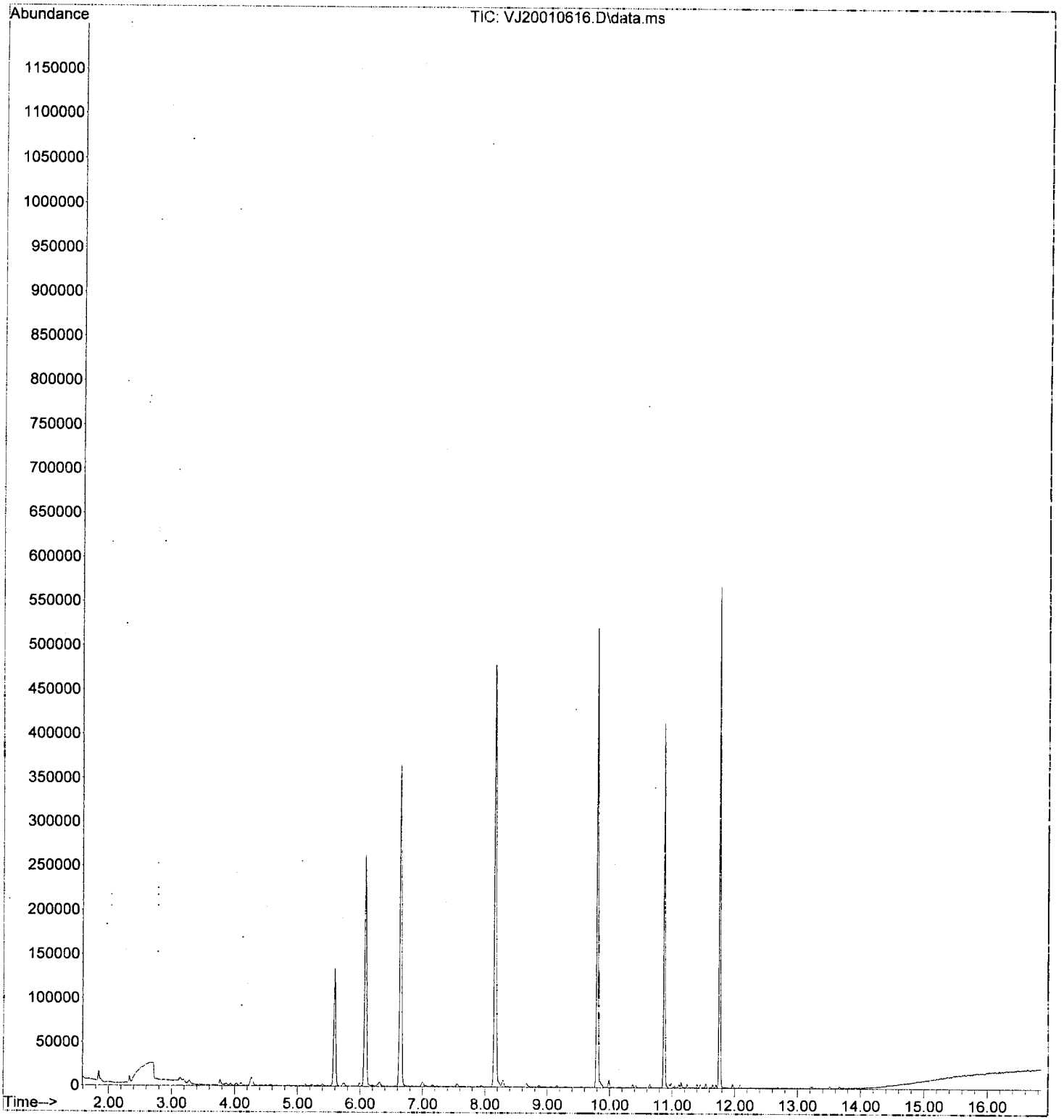
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	1069	0.30	ug/L		75
50) 1,1,2-Trichloroethane	8.863	97	835	0.37	ug/L		95
51) Dibromochloromethane	9.064	129	513	0.25	ug/L		94
52) 1,3-Dichloropropane	9.149	76	1360	0.35	ug/L		83
53) 1,2-Dibromoethane (EDB)	9.295	107	831	0.37	ug/L		97
54) 2-Hexanone	9.545	43	948	0.41	ug/L		84
55) Chlorobenzene	9.819	112	2570	0.40	ug/L		83
56) Ethylbenzene	9.849	91	4047	0.36	ug/L		90
57) 1,1,1,2-Tetrachloroethane	9.879	131	777	0.36	ug/L		98
58) m,p-Xylenes (2)	9.989	91	5235	0.62	ug/L		93
59) o-Xylene	10.366	91	2230	0.28	ug/L		91
60) Styrene	10.421	104	1339	0.24	ug/L		95
61) Bromoform	10.433	173	331	0.23	ug/L	#	37
62) Isopropylbenzene	10.646	105	2678	0.27	ug/L		95
65) Bromobenzene	10.962	156	871	0.37	ug/L		83
66) n-Propylbenzene	10.987	91	3877	0.35	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.041	83	972	0.34	ug/L		93
68) 2-Chlorotoluene	11.114	126	612	0.29	ug/L		89
69) 1,3,5-Trimethylbenzene	11.145	105	2466	0.31	ug/L		87
70) 1,2,3-Trichloropropane	11.151	110	291	0.27	ug/L		87
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
72) 4-Chlorotoluene	11.242	91	2122	0.32	ug/L		91
73) tert-Butylbenzene	11.400	91	1366	0.32	ug/L	#	73
74) 1,2,4-Trimethylbenzene	11.455	105	2349	0.29	ug/L		94
75) sec-Butylbenzene	11.540	105	3028	0.32	ug/L		94
76) 4-Isopropyltoluene	11.650	119	2257	0.28	ug/L		91
77) 1,3-Dichlorobenzene	11.704	146	1584	0.36	ug/L		94
78) 1,4-Dichlorobenzene	11.771	146	1905	0.44	ug/L	#	80
79) n-Butylbenzene	11.966	91	2410	0.35	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	1511	0.38	ug/L		92
81) 1,2-Dibromo-3-Chloropr...	12.684	157	62	0.09	ug/L	#	19
82) Hexachlorobutadiene	13.207	223	179	0.28	ug/L	#	70
83) 1,2,4-Trichlorobenzene	13.238	180	777	0.32	ug/L		96
84) Naphthalene	13.505	128	2141	0.25	ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	740	0.29	ug/L		80

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010616.D
Acq On : 6 Jan 2020 6:05 pm
Operator : tb
Sample : 0A06051-CAL3
Misc : 1X 5mL 0.4ppb DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 11:53:32 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 14:52:52 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	104320	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	261444	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	114999	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	85866	52.34	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	303345	50.59	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	353415	47.96	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	91612	51.60	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	2002	1.08	ug/L		93
3) Chloromethane	1.885	50	4191	1.50	ug/L		95
4) Vinyl Chloride	1.989	62	2198	0.98	ug/L		90
5) Bromomethane	2.336	96	4342	3.67	ug/L		97
6) Chloroethane	0.000		0	N.D.	d		
7) Trichlorofluoromethane	2.591	101	841	1.08	ug/L		73
8) Ethanol	3.285	45	7706	121.79	ug/L		88
9) 1,1-Dichloroethene	3.133	61	2590	1.06	ug/L		91
10) Carbon Disulfide	3.145	76	4740	1.11	ug/L		93
11) Freon 113	3.187	101	1843	0.97	ug/L		95
12) Iodomethane	3.291	142	631	1.64	ug/L		74
13) Methylene Chloride	3.771	84	4182	2.00	ug/L		93
14) Acetone	3.863	43	4711	3.82	ug/L		85
15) t-1,2-Dichloroethene	3.942	61	3238	1.06	ug/L		96
16) n-Hexane	4.033	86	401	0.81	ug/L	#	70
17) Methyl-tert-butyl-ether	4.100	73	7733	1.02	ug/L		98
18) tert-Butanol (TBA)	4.270	59	34787	55.75	ug/L	#	100
19) Diisopropyl ether (DIPE)	4.495	45	1629	0.23	ug/L		96
20) 1,1-Dichloroethane	4.568	63	3757	1.05	ug/L		93
21) Acrylonitrile	4.629	53	1215	0.87	ug/L		76
22) Ethyl-tert-butyl ether...	4.872	59	1510	0.21	ug/L		98
23) c-1,2-Dichloroethene	5.122	61	2879	0.96	ug/L		86
24) 2,2-Dichloropropane	5.231	77	3369	1.02	ug/L		91
25) Bromochloromethane	5.323	49	1832	1.02	ug/L		88
26) Chloroform	5.408	83	4167	1.06	ug/L		96
27) Carbon Tetrachloride	5.548	117	2362	0.83	ug/L		90
28) Tetrahydrofuran	5.590	42	1286	1.00	ug/L		76
29) 1,1,1-Trichloroethane	5.609	97	3658	0.98	ug/L		97
31) 1,1-Dichloropropene	5.742	75	2751	0.88	ug/L		89
32) 2-Butanone (MEK)	5.736	43	6120	3.17	ug/L		87
33) Benzene	5.992	78	9450	0.98	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	1634	0.27	ug/L		91
35) 1,2-Dichloroethane (EDC)	6.205	62	3535	1.03	ug/L		89
36) iso-Butyl Alcohol	6.296	43	6310	29.60	ug/L		90
38) Trichloroethene (TCE)	6.618	130	2393	1.03	ug/L		88
39) tert-Amyl ethyl ether ...	6.904	59	996	0.23	ug/L		81
40) Dibromomethane	7.050	93	1401	1.02	ug/L		84
41) 1,2-Dichloropropane	7.166	63	2329	1.04	ug/L		98
42) Bromodichloromethane	7.239	83	2358	0.86	ug/L		94
44) c-1,3-Dichloropropene	7.939	75	2826	0.80	ug/L		95
46) Toluene	8.218	91	10340	1.00	ug/L		93
47) Tetrachloroethene (PCE)	8.669	166	2425	0.97	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.656	43	4709	1.54	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 14:52:52 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

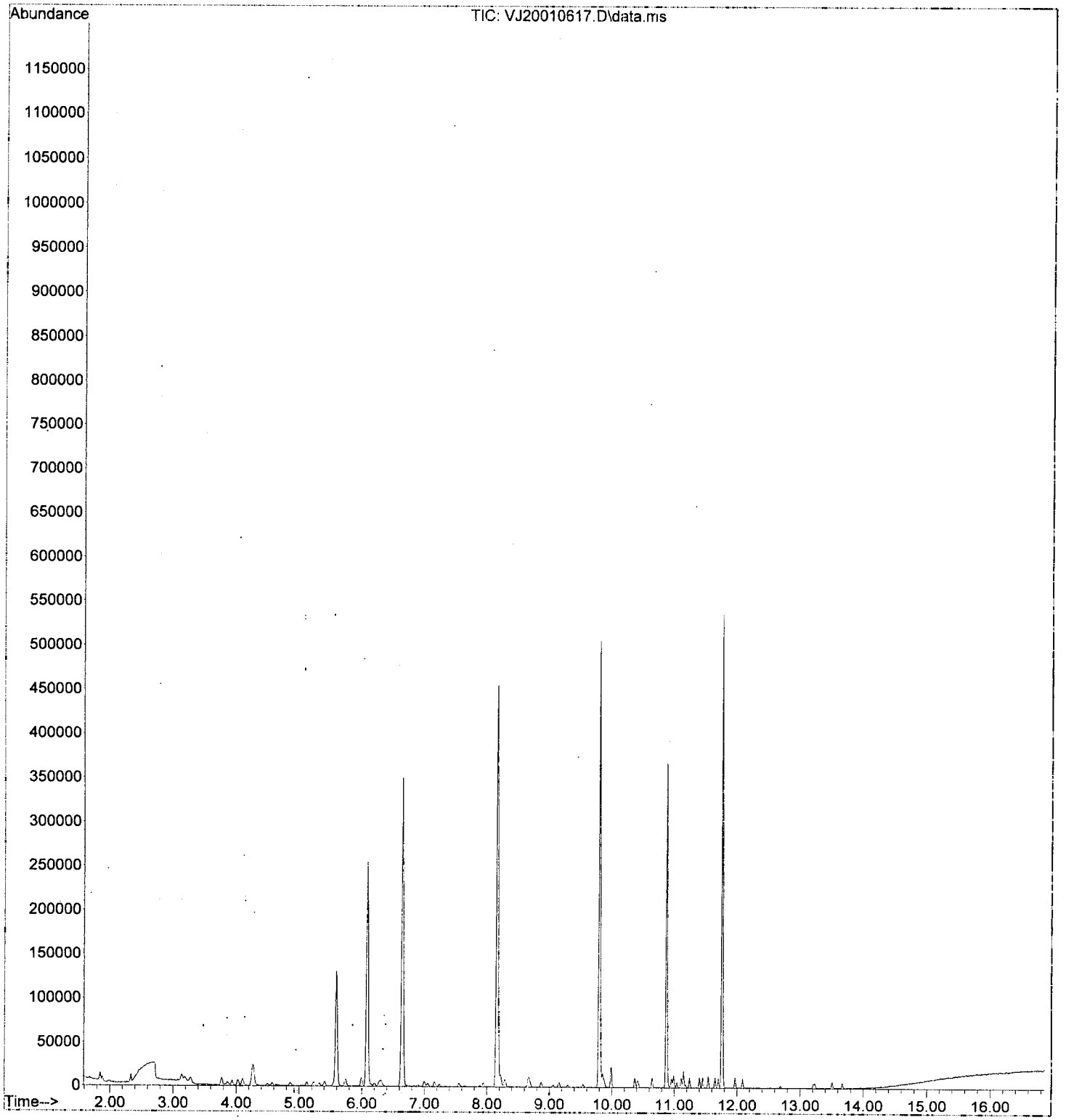
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	2806	0.81	ug/L		88
50) 1,1,2-Trichloroethane	8.863	97	2116	0.99	ug/L		91
51) Dibromochloromethane	9.052	129	1661	0.85	ug/L		82
52) 1,3-Dichloropropane	9.155	76	3556	0.95	ug/L		98
53) 1,2-Dibromoethane (EDB)	9.295	107	1817	0.85	ug/L		92
54) 2-Hexanone	9.539	43	2805	1.27	ug/L		92
55) Chlorobenzene	9.818	112	6584	1.06	ug/L		97
56) Ethylbenzene	9.849	91	9882	0.91	ug/L		93
57) 1,1,1,2-Tetrachloroethane	9.879	131	2058	0.98	ug/L		98
58) m,p-Xylenes (2)	9.989	91	12904	1.61	ug/L		97
59) o-Xylene	10.366	91	5891	0.78	ug/L		92
60) Styrene	10.415	104	3632	0.68	ug/L		96
61) Bromoform	10.433	173	1194	0.85	ug/L		84
62) Isopropylbenzene	10.646	105	6863	0.72	ug/L		99
65) Bromobenzene	10.956	156	2415	1.08	ug/L	#	83
66) n-Propylbenzene	10.986	91	10018	0.94	ug/L		91
67) 1,1,2,2-Tetrachloroethane	11.041	83	2649	0.97	ug/L		99
68) 2-Chlorotoluene	11.114	126	1802	0.88	ug/L		98
69) 1,3,5-Trimethylbenzene	11.151	105	6230	0.81	ug/L		94
70) 1,2,3-Trichloropropane	11.151	110	1090	1.08	ug/L	#	44
71) t-1,4-Dichloro-2-butene	11.181	88	226	0.54	ug/L	#	89
72) 4-Chlorotoluene	11.242	91	5536	0.88	ug/L		94
73) tert-Butylbenzene	11.400	91	3477	0.85	ug/L		90
74) 1,2,4-Trimethylbenzene	11.455	105	6016	0.78	ug/L		94
75) sec-Butylbenzene	11.540	105	7491	0.82	ug/L		96
76) 4-Isopropyltoluene	11.650	119	5556	0.73	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	3963	0.95	ug/L		91
78) 1,4-Dichlorobenzene	11.771	146	4395	1.07	ug/L		84
79) n-Butylbenzene	11.972	91	5772	0.88	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	3619	0.95	ug/L		95
81) 1,2-Dibromo-3-Chloropr...	12.690	157	499	0.73	ug/L	#	71
82) Hexachlorobutadiene	13.213	223	511	0.84	ug/L		86
83) 1,2,4-Trichlorobenzene	13.237	180	1974	0.85	ug/L		82
84) Naphthalene	13.511	128	5528	0.68	ug/L		99
85) 1,2,3-Trichlorobenzene	13.669	180	1898	0.78	ug/L		87

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 14:52:52 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 11:53:35 2020
Quant Method : C:\msdchem\1\methods\~~VJ200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	104320	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	261444	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	114999	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	85866	52.34	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	303345	50.59	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	353415	47.96	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	91612	51.60	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	2002	1.08	ug/L		93
3) Chloromethane	1.885	50	4191	1.50	ug/L		95
4) Vinyl Chloride	1.989	62	2198	0.98	ug/L		90
5) Bromomethane	2.336	96	4342	3.67	ug/L		97
6) Chloroethane	2.457	64	750	1.53	ug/L	#	32
7) Trichlorofluoromethane	2.591	101	841	1.08	ug/L		73
8) Ethanol	3.285	45	7706	121.79	ug/L		88
9) 1,1-Dichloroethene	3.133	61	2590	1.06	ug/L		91
10) Carbon Disulfide	3.145	76	4740	1.11	ug/L		93
11) Freon 113	3.187	101	1843	0.97	ug/L		95
12) Iodomethane	3.291	142	631	1.64	ug/L		74
13) Methylene Chloride	3.771	84	4182	2.00	ug/L		93
14) Acetone	3.863	43	4711	3.82	ug/L		85
15) t-1,2-Dichloroethene	3.942	61	3238	1.06	ug/L		96
16) n-Hexane	4.033	86	401	0.81	ug/L	#	70
17) Methyl-tert-butyl-ether	4.100	73	7733	1.02	ug/L		98
18) tert-Butanol (TBA)	4.270	59	34787	55.75	ug/L	#	100
19) Diisopropyl ether (DIPE)	4.495	45	1629	0.23	ug/L		96
20) 1,1-Dichloroethane	4.568	63	3757	1.05	ug/L		93
21) Acrylonitrile	4.629	53	1215	0.87	ug/L		76
22) Ethyl-tert-butyl ether...	4.872	59	1510	0.21	ug/L		98
23) c-1,2-Dichloroethene	5.122	61	2879	0.96	ug/L		86
24) 2,2-Dichloropropane	5.231	77	3369	1.02	ug/L		91
25) Bromochloromethane	5.323	49	1832	1.02	ug/L		88
26) Chloroform	5.408	83	4167	1.06	ug/L		96
27) Carbon Tetrachloride	5.548	117	2362	0.83	ug/L		90
28) Tetrahydrofuran	5.590	42	1286	1.00	ug/L		76
29) 1,1,1-Trichloroethane	5.609	97	3658	0.98	ug/L		97
31) 1,1-Dichloropropene	5.742	75	2751	0.88	ug/L		89
32) 2-Butanone (MEK)	5.736	43	6120	3.17	ug/L		87
33) Benzene	5.992	78	9450	0.98	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	1634	0.27	ug/L		91
35) 1,2-Dichloroethane (EDC)	6.205	62	3535	1.03	ug/L		89
36) iso-Butyl Alcohol	6.296	43	6310	29.60	ug/L		90
38) Trichloroethene (TCE)	6.618	130	2393	1.03	ug/L		88
39) tert-Amyl ethyl ether ...	6.904	59	996	0.23	ug/L		81
40) Dibromomethane	7.050	93	1401	1.02	ug/L		84
41) 1,2-Dichloropropane	7.166	63	2329	1.04	ug/L		98
42) Bromodichloromethane	7.239	83	2358	0.86	ug/L		94
44) c-1,3-Dichloropropene	7.939	75	2826	0.80	ug/L		95
46) Toluene	8.218	91	10340	1.00	ug/L		93
47) Tetrachloroethene (PCE)	8.669	166	2425	0.97	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.656	43	4709	1.54	ug/L		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 11:53:35 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

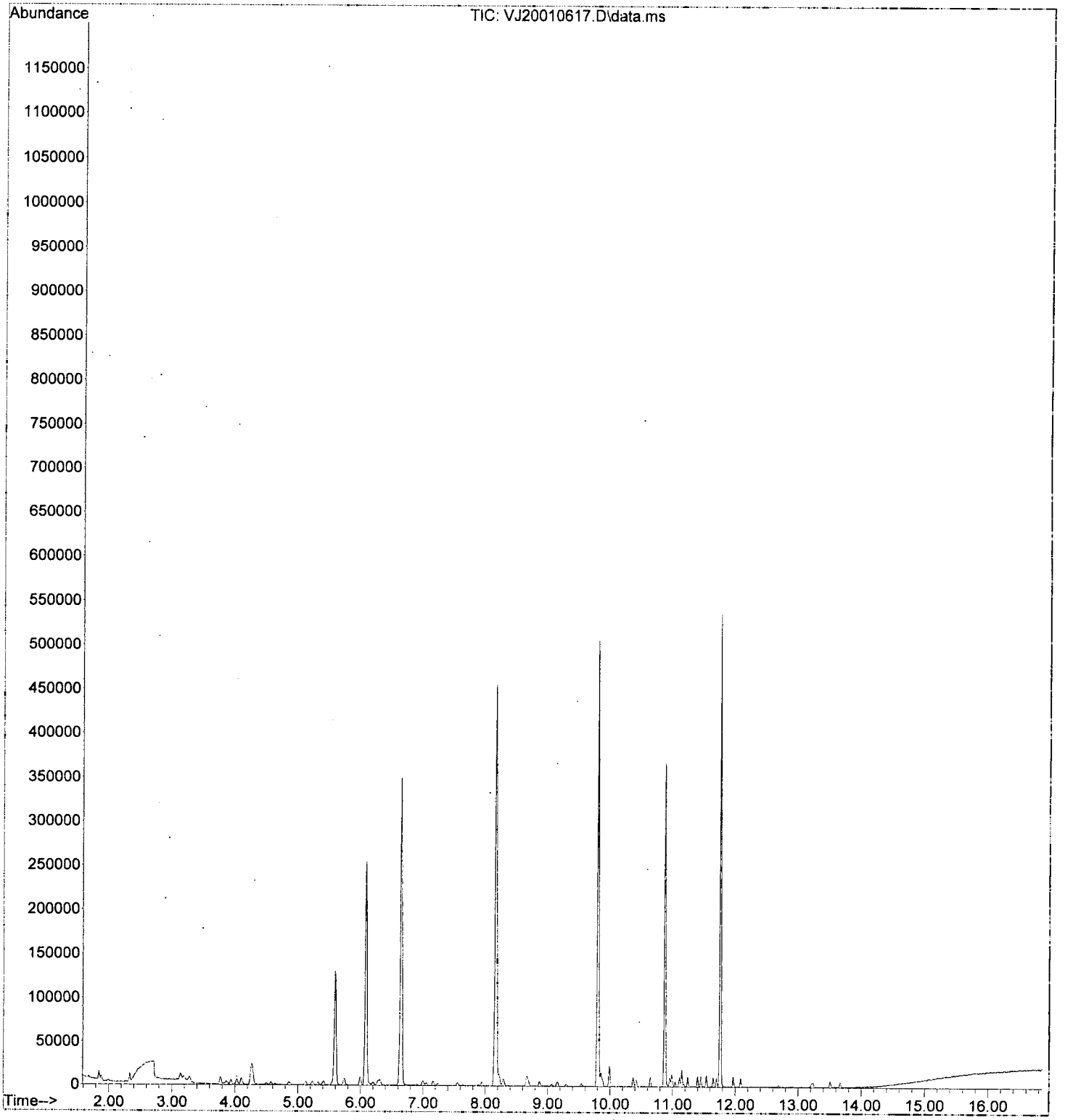
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	2806	0.81	ug/L		88
50) 1,1,2-Trichloroethane	8.863	97	2116	0.99	ug/L		91
51) Dibromochloromethane	9.052	129	1661	0.85	ug/L		82
52) 1,3-Dichloropropane	9.155	76	3556	0.95	ug/L		98
53) 1,2-Dibromoethane (EDB)	9.295	107	1817	0.85	ug/L		92
54) 2-Hexanone	9.539	43	2805	1.27	ug/L		92
55) Chlorobenzene	9.818	112	6584	1.06	ug/L		97
56) Ethylbenzene	9.849	91	9882	0.91	ug/L		93
57) 1,1,1,2-Tetrachloroethane	9.879	131	2058	0.98	ug/L		98
58) m,p-Xylenes (2)	9.989	91	12904	1.51	ug/L		97
59) o-Xylene	10.366	91	5891	0.78	ug/L		92
60) Styrene	10.415	104	3632	0.68	ug/L		96
61) Bromoform	10.433	173	1194	0.85	ug/L		84
62) Isopropylbenzene	10.646	105	6863	0.72	ug/L		99
65) Bromobenzene	10.956	156	2415	1.08	ug/L	#	83
66) n-Propylbenzene	10.986	91	10018	0.94	ug/L		91
67) 1,1,2,2-Tetrachloroethane	11.041	83	2649	0.97	ug/L		99
68) 2-Chlorotoluene	11.114	126	1802	0.88	ug/L		98
69) 1,3,5-Trimethylbenzene	11.151	105	6230	0.81	ug/L		94
70) 1,2,3-Trichloropropane	11.151	110	1090	1.08	ug/L	#	44
71) t-1,4-Dichloro-2-butene	11.181	88	226	0.54	ug/L	#	89
72) 4-Chlorotoluene	11.242	91	5536	0.88	ug/L		94
73) tert-Butylbenzene	11.400	91	3477	0.85	ug/L		90
74) 1,2,4-Trimethylbenzene	11.455	105	6016	0.78	ug/L		94
75) sec-Butylbenzene	11.540	105	7491	0.82	ug/L		96
76) 4-Isopropyltoluene	11.650	119	5556	0.73	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	3963	0.95	ug/L		91
78) 1,4-Dichlorobenzene	11.771	146	4395	1.07	ug/L		84
79) n-Butylbenzene	11.972	91	5772	0.88	ug/L		98
80) 1,2-Dichlorobenzene	12.088	146	3619	0.95	ug/L		95
81) 1,2-Dibromo-3-Chloropr...	12.690	157	499	0.73	ug/L	#	71
82) Hexachlorobutadiene	13.213	223	511	0.84	ug/L		86
83) 1,2,4-Trichlorobenzene	13.237	180	1974	0.85	ug/L		82
84) Naphthalene	13.511	128	5528	0.68	ug/L		99
85) 1,2,3-Trichlorobenzene	13.669	180	1898	0.78	ug/L		87

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010617.D
Acq On : 6 Jan 2020 6:32 pm
Operator : tb
Sample : 0A06051-CAL4
Misc : 1X 5mL 1ppb DI+MeOH
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 07 11:53:35 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	107612	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	270452	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	120966	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88362	52.22	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	312825	50.57	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366801	48.11	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	95258	51.00	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	3864	2.02	ug/L		94
3) Chloromethane	1.892	50	6640	2.31	ug/L		94
4) Vinyl Chloride	1.995	62	4540	1.97	ug/L		96
5) Bromomethane	2.336	96	5274	4.32	ug/L		96
6) Chloroethane	2.463	64	1133	2.24	ug/L	#	36
7) Trichlorofluoromethane	2.585	101	1611	2.01	ug/L		93
8) Ethanol	3.273	45	11257	172.47	ug/L		89
9) 1,1-Dichloroethene	3.139	61	5315	2.11	ug/L		95
10) Carbon Disulfide	3.151	76	9078	2.06	ug/L		97
11) Freon 113	3.193	101	3954	2.02	ug/L		95
12) Iodomethane	3.291	142	879	2.22	ug/L		84
13) Methylene Chloride	3.777	84	6338	2.94	ug/L		96
14) Acetone	3.869	43	7670	6.03	ug/L		99
15) t-1,2-Dichloroethene	3.942	61	6284	2.00	ug/L		89
16) n-Hexane	4.039	86	894	1.76	ug/L	#	87
17) Methyl-tert-butyl-ether	4.106	73	14619	1.87	ug/L		98
18) tert-Butanol (TBA)	4.264	59	71300	110.77	ug/L	#	99
19) Diisopropyl ether (DIPE)	4.501	45	3346	0.45	ug/L		88
20) 1,1-Dichloroethane	4.574	63	7524	2.04	ug/L		98
21) Acrylonitrile	4.629	53	2393	1.67	ug/L		96
22) Ethyl-tert-butyl ether...	4.866	59	3087	0.42	ug/L		90
23) c-1,2-Dichloroethene	5.122	61	5912	1.91	ug/L		93
24) 2,2-Dichloropropane	5.237	77	6612	1.94	ug/L		89
25) Bromochloromethane	5.323	49	3877	2.09	ug/L		95
26) Chloroform	5.408	83	8134	2.01	ug/L		95
27) Carbon Tetrachloride	5.542	117	5361	1.82	ug/L		93
28) Tetrahydrofuran	5.590	42	2587	1.96	ug/L		84
29) 1,1,1-Trichloroethane	5.615	97	7608	1.97	ug/L		90
31) 1,1-Dichloropropene	5.749	75	5753	1.79	ug/L		92
32) 2-Butanone (MEK)	5.730	43	10497	5.27	ug/L		91
33) Benzene	5.998	78	19123	1.93	ug/L		98
34) tert-Amyl methyl ether...	6.150	73	3505	0.57	ug/L		94
35) 1,2-Dichloroethane (EDC)	6.205	62	7281	2.06	ug/L		98
36) iso-Butyl Alcohol	6.278	43	10497	47.73	ug/L		79
38) Trichloroethene (TCE)	6.618	130	4651	1.94	ug/L		91
39) tert-Amyl ethyl ether ...	6.898	59	2192	0.48	ug/L		93
40) Dibromomethane	7.056	93	2722	1.92	ug/L	#	81
41) 1,2-Dichloropropane	7.166	63	4450	1.93	ug/L		81
42) Bromodichloromethane	7.239	83	5147	1.82	ug/L		90
44) c-1,3-Dichloropropene	7.945	75	5846	1.60	ug/L		88
46) Toluene	8.218	91	20173	1.89	ug/L		99
47) Tetrachloroethene (PCE)	8.675	166	4547	1.76	ug/L		96
48) 4-Methyl-2-Pentanone (...	8.663	43	9202	2.91	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

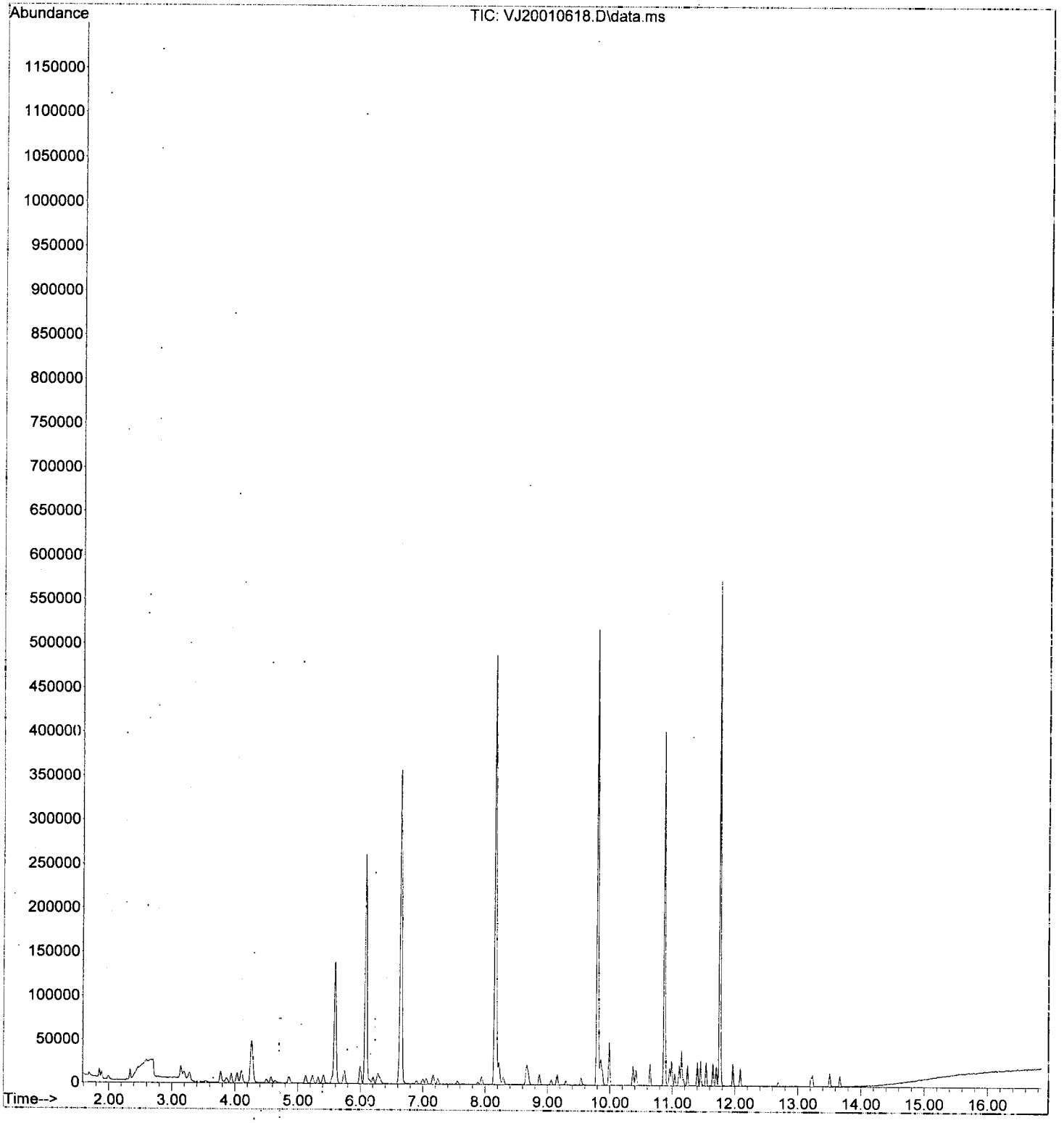
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	5629	1.58	ug/L		96
50) 1,1,2-Trichloroethane	8.869	97	4369	1.97	ug/L		92
51) Dibromochloromethane	9.058	129	3651	1.80	ug/L		99
52) 1,3-Dichloropropane	9.155	76	7539	1.95	ug/L		94
53) 1,2-Dibromoethane (EDB)	9.295	107	4035	1.81	ug/L		81
54) 2-Hexanone	9.539	43	5771	2.53	ug/L		95
55) Chlorobenzene	9.812	112	12552	1.95	ug/L		91
56) Ethylbenzene	9.849	91	19761	1.76	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	3933	1.81	ug/L		87
58) m,p-Xylenes (2)	9.989	91	26834	3.23	ug/L		95
59) o-Xylene	10.372	91	12494	1.60	ug/L		99
60) Styrene	10.415	104	7538	1.36	ug/L		96
61) Bromoform	10.433	173	2340	1.61	ug/L		88
62) Isopropylbenzene	10.646	105	14392	1.46	ug/L		95
65) Bromobenzene	10.956	156	4846	2.06	ug/L		88
66) n-Propylbenzene	10.993	91	19804	1.76	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	5532	1.92	ug/L		94
68) 2-Chlorotoluene	11.114	126	3844	1.79	ug/L		93
69) 1,3,5-Trimethylbenzene	11.151	105	12985	1.60	ug/L		91
70) 1,2,3-Trichloropropane	11.145	110	2114	1.98	ug/L	#	67
71) t-1,4-Dichloro-2-butene	11.175	88	619	1.42	ug/L	#	76
72) 4-Chlorotoluene	11.242	91	12109	1.82	ug/L		90
73) tert-Butylbenzene	11.400	91	7227	1.68	ug/L		92
74) 1,2,4-Trimethylbenzene	11.455	105	12691	1.56	ug/L		96
75) sec-Butylbenzene	11.540	105	15694	1.63	ug/L		96
76) 4-Isopropyltoluene	11.650	119	12340	1.54	ug/L		95
77) 1,3-Dichlorobenzene	11.704	146	8234	1.88	ug/L		97
78) 1,4-Dichlorobenzene	11.771	146	8741	2.02	ug/L		94
79) n-Butylbenzene	11.966	91	12089	1.75	ug/L		91
80) 1,2-Dichlorobenzene	12.088	146	7435	1.85	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	1165	1.63	ug/L		68
82) Hexachlorobutadiene	13.213	223	1281	1.99	ug/L		91
83) 1,2,4-Trichlorobenzene	13.237	180	3943	1.62	ug/L		96
84) Naphthalene	13.511	128	11317	1.33	ug/L		96
85) 1,2,3-Trichlorobenzene	13.669	180	4030	1.57	ug/L		95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	107612	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	270452	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	120966	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88362	52.22	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	312825	50.57	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366801	48.11	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	95258	51.00	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	3864	2.02	ug/L		94
3) Chloromethane	1.892	50	6640	2.31	ug/L		94
4) Vinyl Chloride	1.995	62	4540	1.97	ug/L		96
5) Bromomethane	2.336	96	5274	4.32	ug/L		96
6) Chloroethane	2.463	64	1133	2.24	ug/L	#	36
7) Trichlorofluoromethane	2.585	101	1611	2.01	ug/L		93
8) Ethanol	3.273	45	11257	172.47	ug/L		89
9) 1,1-Dichloroethene	3.139	61	5315	2.11	ug/L		95
10) Carbon Disulfide	3.151	76	9078	2.06	ug/L		97
11) Freon 113	3.193	101	3954	2.02	ug/L		95
12) Iodomethane	3.291	142	879	2.22	ug/L		84
13) Methylene Chloride	3.777	84	6338	2.94	ug/L		96
14) Acetone	3.869	43	7670	6.03	ug/L		99
15) t-1,2-Dichloroethene	3.942	61	6284	2.00	ug/L		89
16) n-Hexane	4.039	86	894	1.76	ug/L	#	87
17) Methyl-tert-butyl-ether	4.106	73	14619	1.87	ug/L		98
18) tert-Butanol (TBA)	4.264	59	71300	110.77	ug/L	#	99
19) Diisopropyl ether (DIPE)	4.501	45	3346	0.45	ug/L		88
20) 1,1-Dichloroethane	4.574	63	7524	2.04	ug/L		98
21) Acrylonitrile	4.629	53	2393	1.67	ug/L		96
22) Ethyl-tert-butyl ether...	4.866	59	3087	0.42	ug/L		90
23) c-1,2-Dichloroethene	5.122	61	5912	1.91	ug/L		93
24) 2,2-Dichloropropane	5.237	77	6612	1.94	ug/L		89
25) Bromochloromethane	5.323	49	3877	2.09	ug/L		95
26) Chloroform	5.408	83	8134	2.01	ug/L		95
27) Carbon Tetrachloride	5.542	117	5361	1.82	ug/L		93
28) Tetrahydrofuran	5.590	42	2587	1.96	ug/L		84
29) 1,1,1-Trichloroethane	5.615	97	7608	1.97	ug/L		90
31) 1,1-Dichloropropene	5.749	75	5753	1.79	ug/L		92
32) 2-Butanone (MEK)	5.730	43	10497	5.27	ug/L		91
33) Benzene	5.998	78	19123	1.93	ug/L		98
34) tert-Amyl methyl ether...	6.150	73	3505	0.57	ug/L		94
35) 1,2-Dichloroethane (EDC)	6.205	62	7281	2.06	ug/L		98
36) iso-Butyl Alcohol	6.278	43	10497	47.73	ug/L		79
38) Trichloroethene (TCE)	6.618	130	4651	1.94	ug/L		91
39) tert-Amyl ethyl ether ...	6.898	59	2192	0.48	ug/L		93
40) Dibromomethane	7.056	93	2722	1.92	ug/L	#	81
41) 1,2-Dichloropropane	7.166	63	4450	1.93	ug/L		81
42) Bromodichloromethane	7.239	83	5147	1.82	ug/L		90
44) c-1,3-Dichloropropene	7.945	75	5846	1.60	ug/L		88
46) Toluene	8.218	91	20173	1.89	ug/L		99
47) Tetrachloroethene (PCE)	8.675	166	4547	1.76	ug/L		96
48) 4-Methyl-2-Pentanone (...	8.663	43	9202	2.91	ug/L		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

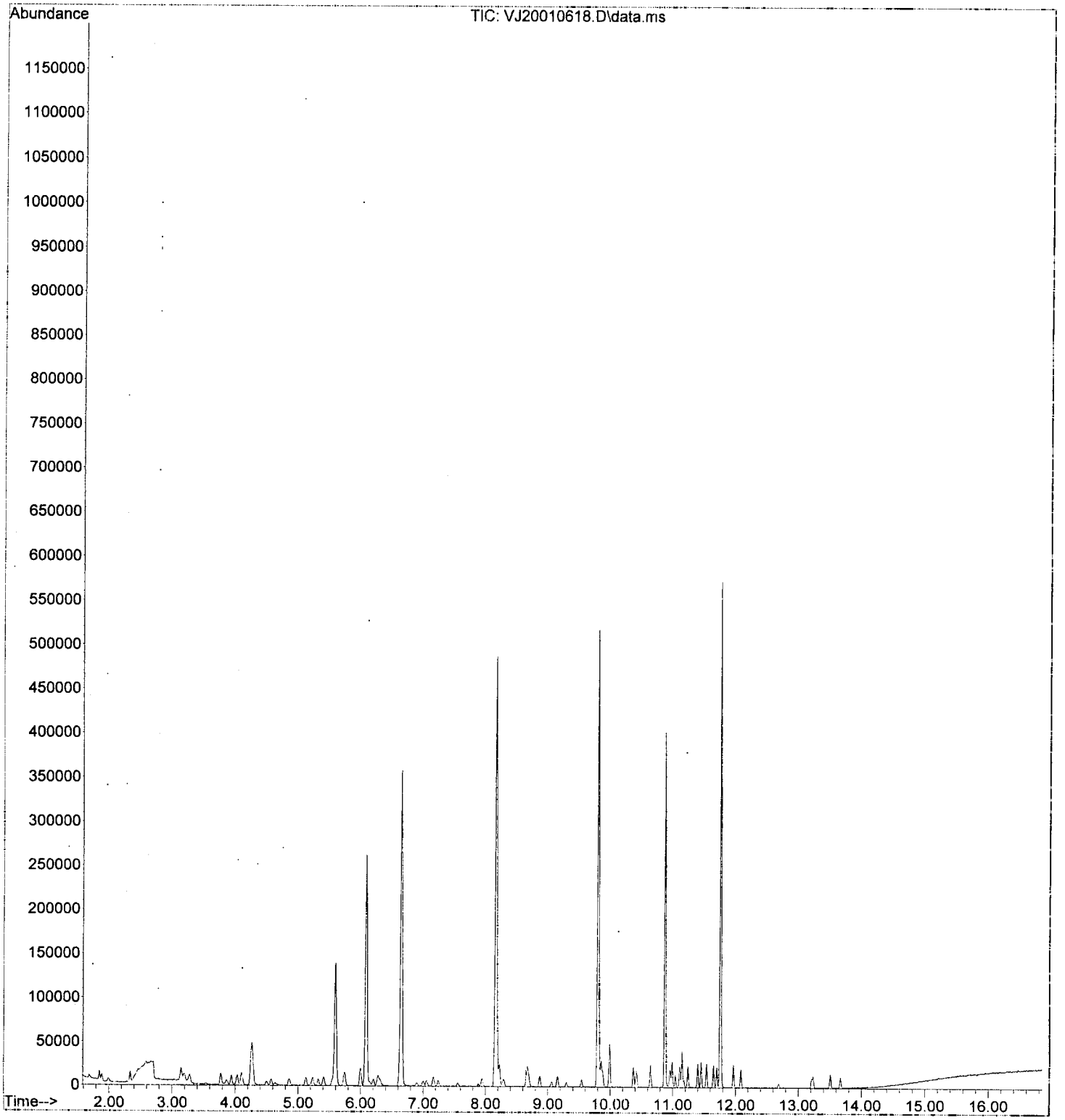
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	5629	1.58	ug/L		96
50) 1,1,2-Trichloroethane	8.869	97	4369	1.97	ug/L		92
51) Dibromochloromethane	9.058	129	3651	1.80	ug/L		99
52) 1,3-Dichloropropane	9.155	76	7539	1.95	ug/L		94
53) 1,2-Dibromoethane (EDB)	9.295	107	4035	1.81	ug/L		81
54) 2-Hexanone	9.539	43	5771	2.53	ug/L		95
55) Chlorobenzene	9.812	112	12552	1.95	ug/L		91
56) Ethylbenzene	9.849	91	19761	1.76	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	3933	1.81	ug/L		87
58) m,p-Xylenes (2)	9.989	91	26834	3.23	ug/L		95
59) o-Xylene	10.372	91	12494	1.60	ug/L		99
60) Styrene	10.415	104	7538	1.36	ug/L		96
61) Bromoform	10.433	173	2340	1.51	ug/L		88
62) Isopropylbenzene	10.646	105	14392	1.46	ug/L		95
65) Bromobenzene	10.956	156	4846	2.06	ug/L		88
66) n-Propylbenzene	10.993	91	19804	1.76	ug/L		98
67) 1,1,2,2-Tetrachloroethane	11.041	83	5532	1.92	ug/L		94
68) 2-Chlorotoluene	11.114	126	3844	1.79	ug/L		93
69) 1,3,5-Trimethylbenzene	11.151	105	12985	1.60	ug/L		91
70) 1,2,3-Trichloropropane	11.145	110	2114	1.98	ug/L	#	67
71) t-1,4-Dichloro-2-butene	11.175	88	619	1.42	ug/L	#	76
72) 4-Chlorotoluene	11.242	91	12109	1.82	ug/L		90
73) tert-Butylbenzene	11.400	91	7227	1.68	ug/L		92
74) 1,2,4-Trimethylbenzene	11.455	105	12691	1.56	ug/L		96
75) sec-Butylbenzene	11.540	105	15694	1.63	ug/L		96
76) 4-Isopropyltoluene	11.650	119	12340	1.54	ug/L		95
77) 1,3-Dichlorobenzene	11.704	146	8234	1.88	ug/L		97
78) 1,4-Dichlorobenzene	11.771	146	8741	2.02	ug/L		94
79) n-Butylbenzene	11.966	91	12089	1.75	ug/L		91
80) 1,2-Dichlorobenzene	12.088	146	7435	1.85	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	1165	1.63	ug/L		68
82) Hexachlorobutadiene	13.213	223	1281	1.99	ug/L		91
83) 1,2,4-Trichlorobenzene	13.237	180	3943	1.62	ug/L		96
84) Naphthalene	13.511	128	11317	1.33	ug/L		96
85) 1,2,3-Trichlorobenzene	13.669	180	4030	1.57	ug/L		95

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010618.D
Acq On : 6 Jan 2020 6:59 pm
Operator : tb
Sample : 0A06051-CAL5
Misc : 1X 5mL 2ppb DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 07 11:53:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	109312	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	270091	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	122018	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	89267	51.93	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	319667	50.88	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	371403	48.78	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	95713	50.80	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	9676	4.99	ug/L		95
3) Chloromethane	1.886	50	15325	5.25	ug/L		97
4) Vinyl Chloride	1.989	62	11467	4.90	ug/L		99
5) Bromomethane	2.336	96	9353	7.53	ug/L		98
6) Chloroethane	2.457	64	2663	5.18	ug/L		79
7) Trichlorofluoromethane	2.585	101	4190	5.15	ug/L		94
8) Ethanol	3.285	45	25232	380.57	ug/L		87
9) 1,1-Dichloroethene	3.133	61	12989	5.08	ug/L		98
10) Carbon Disulfide	3.145	76	22304	4.98	ug/L		98
11) Freon 113	3.187	101	9807	4.92	ug/L		97
12) Iodomethane	3.285	142	1801	4.48	ug/L		68
13) Methylene Chloride	3.771	84	12754	5.83	ug/L		97
14) Acetone	3.863	43	16091	12.46	ug/L		96
15) t-1,2-Dichloroethene	3.936	61	15967	4.99	ug/L		97
16) n-Hexane	4.027	86	2157	4.18	ug/L	#	81
17) Methyl-tert-butyl-ether	4.100	73	37490	4.72	ug/L		99
18) tert-Butanol (TBA)	4.270	59	191781	293.31	ug/L	#	94
19) Diisopropyl ether (DIPE)	4.501	45	8433	1.12	ug/L		98
20) 1,1-Dichloroethane	4.568	63	18804	5.01	ug/L		97
21) Acrylonitrile	4.629	53	6774	4.65	ug/L		97
22) Ethyl-tert-butyl ether...	4.867	59	8258	1.11	ug/L		93
23) c-1,2-Dichloroethene	5.122	61	15089	4.81	ug/L		96
24) 2,2-Dichloropropane	5.231	77	16923	4.88	ug/L		93
25) Bromochloromethane	5.323	49	9397	4.98	ug/L		90
26) Chloroform	5.408	83	20786	5.05	ug/L		95
27) Carbon Tetrachloride	5.542	117	13736	4.60	ug/L		97
28) Tetrahydrofuran	5.584	42	6459	4.81	ug/L		91
29) 1,1,1-Trichloroethane	5.615	97	19285	4.92	ug/L		98
31) 1,1-Dichloropropene	5.743	75	14954	4.57	ug/L		97
32) 2-Butanone (MEK)	5.730	43	21516	10.64	ug/L		95
33) Benzene	5.992	78	49577	4.93	ug/L		98
34) tert-Amyl methyl ether...	6.138	73	7869	1.25	ug/L		93
35) 1,2-Dichloroethane (EDC)	6.199	62	18324	5.11	ug/L		96
36) iso-Butyl Alcohol	6.278	43	25660	114.87	ug/L		88
38) Trichloroethene (TCE)	6.619	130	11743	4.83	ug/L		95
39) tert-Amyl ethyl ether ...	6.898	59	5290	1.15	ug/L		96
40) Dibromomethane	7.057	93	7254	5.04	ug/L		86
41) 1,2-Dichloropropane	7.166	63	11716	5.00	ug/L		88
42) Bromodichloromethane	7.245	83	13785	4.80	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	15807	4.34	ug/L		98
46) Toluene	8.219	91	50497	4.75	ug/L		95
47) Tetrachloroethene (PCE)	8.669	166	12115	4.68	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.663	43	25616	8.12	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

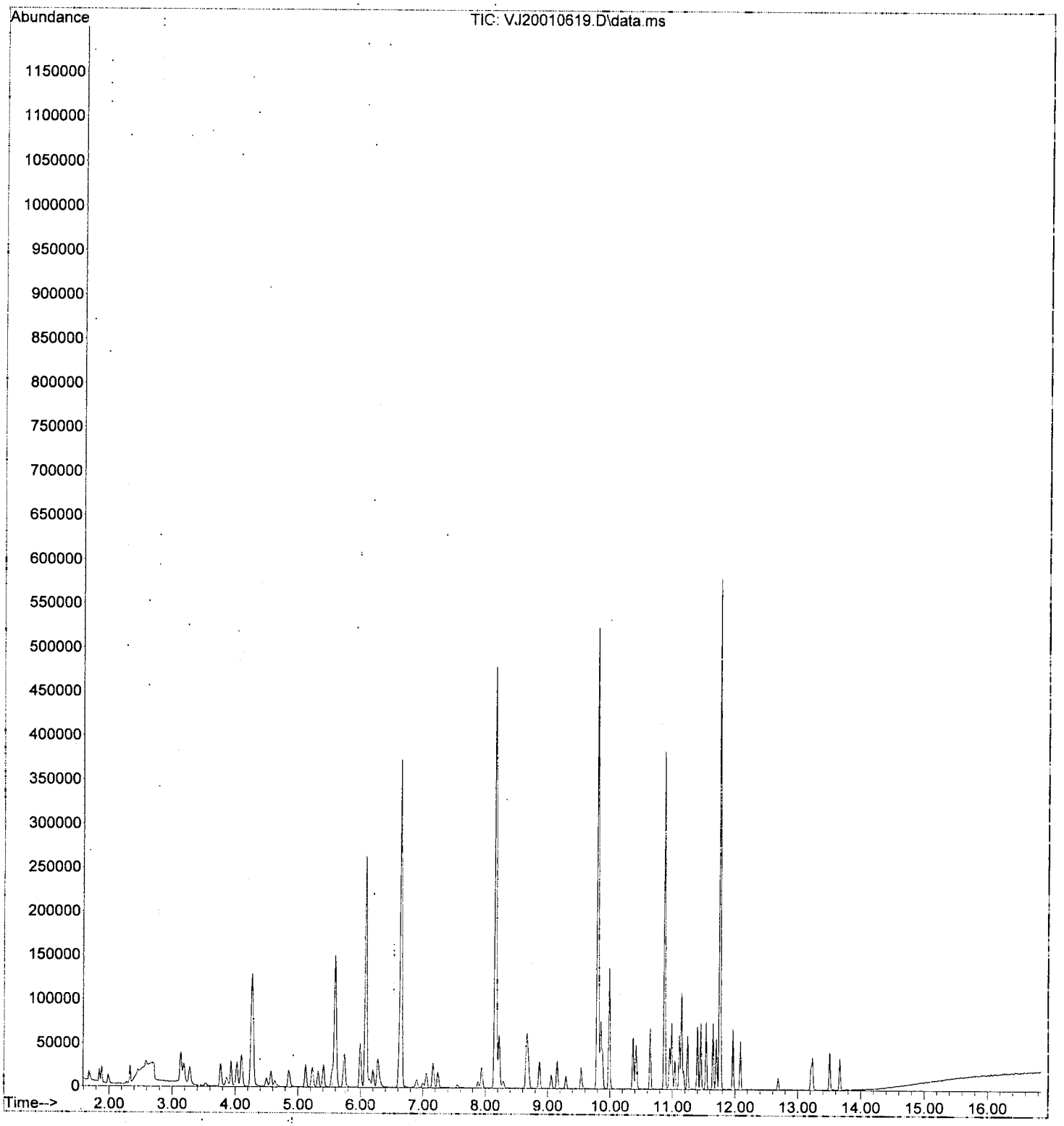
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	15519	4.36	ug/L		98
50) 1,1,2-Trichloroethane	8.869	97	10798	4.87	ug/L		95
51) Dibromochloromethane	9.058	129	9016	4.45	ug/L		90
52) 1,3-Dichloropropane	9.155	76	18904	4.90	ug/L		96
53) 1,2-Dibromoethane (EDB)	9.295	107	10465	4.71	ug/L		99
54) 2-Hexanone	9.539	43	16429	7.22	ug/L		95
55) Chlorobenzene	9.812	112	32096	4.99	ug/L		96
56) Ethylbenzene	9.849	91	52137	4.66	ug/L		100
57) 1,1,1,2-Tetrachloroethane	9.879	131	10529	4.86	ug/L		94
58) m,p-Xylenes (2)	9.989	91	72607	8.75	ug/L		98
59) o-Xylene	10.372	91	33335	4.28	ug/L		95
60) Styrene	10.415	104	21910	3.96	ug/L		96
61) Bromoform	10.433	173	5923	4.09	ug/L		97
62) Isopropylbenzene	10.646	105	40606	4.12	ug/L		96
65) Bromobenzene	10.956	156	11819	4.98	ug/L		86
66) n-Propylbenzene	10.987	91	52319	4.61	ug/L		96
67) 1,1,2,2-Tetrachloroethane	11.041	83	13376	4.59	ug/L		98
68) 2-Chlorotoluene	11.108	126	9710	4.47	ug/L		86
69) 1,3,5-Trimethylbenzene	11.151	105	36600	4.48	ug/L		94
70) 1,2,3-Trichloropropane	11.145	110	5081	4.73	ug/L		96
71) t-1,4-Dichloro-2-butene	11.181	88	1822	4.13	ug/L	#	70
72) 4-Chlorotoluene	11.242	91	31240	4.67	ug/L		96
73) tert-Butylbenzene	11.400	91	19450	4.48	ug/L		94
74) 1,2,4-Trimethylbenzene	11.455	105	35579	4.35	ug/L		95
75) sec-Butylbenzene	11.540	105	43743	4.52	ug/L		96
76) 4-Isopropyltoluene	11.650	119	34578	4.29	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	21401	4.84	ug/L		97
78) 1,4-Dichlorobenzene	11.771	146	22186	5.08	ug/L		97
79) n-Butylbenzene	11.966	91	31798	4.58	ug/L		95
80) 1,2-Dichlorobenzene	12.088	146	18907	4.67	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	3076	4.26	ug/L		66
82) Hexachlorobutadiene	13.207	223	3211	4.96	ug/L		91
83) 1,2,4-Trichlorobenzene	13.238	180	10371	4.22	ug/L		94
84) Naphthalene	13.505	128	31622	3.69	ug/L		96
85) 1,2,3-Trichlorobenzene	13.669	180	10894	4.20	ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	109312	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	270091	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	122018	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	89267	51.93	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	319667	50.83	ug/L		0.00
45) Toluene-d8 (S)	8.158	98	371403	48.73	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	95713	50.80	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	9676	4.99	ug/L		95
3) Chloromethane	1.886	50	15325	5.25	ug/L		97
4) Vinyl Chloride	1.989	62	11467	4.90	ug/L		99
5) Bromomethane	2.336	96	9353	7.53	ug/L		98
6) Chloroethane	2.457	64	2663	5.18	ug/L		79
7) Trichlorofluoromethane	2.585	101	4190	5.15	ug/L		94
8) Ethanol	3.285	45	25232	380.57	ug/L		87
9) 1,1-Dichloroethene	3.133	61	12989	5.08	ug/L		98
10) Carbon Disulfide	3.145	76	22304	4.98	ug/L		98
11) Freon 113	3.187	101	9807	4.92	ug/L		97
12) Iodomethane	3.285	142	1801	4.48	ug/L		68
13) Methylene Chloride	3.771	84	12754	5.83	ug/L		97
14) Acetone	3.863	43	16091	12.46	ug/L		96
15) t-1,2-Dichloroethene	3.936	61	15967	4.99	ug/L		97
16) n-Hexane	4.027	86	2157	4.18	ug/L	#	81
17) Methyl-tert-butyl-ether	4.100	73	37490	4.72	ug/L		99
18) tert-Butanol (TBA)	4.270	59	191781	293.31	ug/L	#	94
19) Diisopropyl ether (DIPE)	4.501	45	8433	1.12	ug/L		98
20) 1,1-Dichloroethane	4.568	63	18804	5.01	ug/L		97
21) Acrylonitrile	4.629	53	6774	4.65	ug/L		97
22) Ethyl-tert-butyl ether...	4.867	59	8258	1.11	ug/L		93
23) c-1,2-Dichloroethene	5.122	61	15089	4.81	ug/L		96
24) 2,2-Dichloropropane	5.231	77	16923	4.88	ug/L		93
25) Bromochloromethane	5.323	49	9397	4.98	ug/L		90
26) Chloroform	5.408	83	20786	5.05	ug/L		95
27) Carbon Tetrachloride	5.542	117	13736	4.60	ug/L		97
28) Tetrahydrofuran	5.584	42	6459	4.81	ug/L		91
29) 1,1,1-Trichloroethane	5.615	97	19285	4.92	ug/L		98
31) 1,1-Dichloropropene	5.743	75	14954	4.57	ug/L		97
32) 2-Butanone (MEK)	5.730	43	21516	10.64	ug/L		95
33) Benzene	5.992	78	49577	4.93	ug/L		98
34) tert-Amyl methyl ether...	6.138	73	7869	1.25	ug/L		93
35) 1,2-Dichloroethane (EDC)	6.199	62	18324	5.11	ug/L		96
36) iso-Butyl Alcohol	6.278	43	25660	114.87	ug/L		88
38) Trichloroethene (TCE)	6.619	130	11743	4.83	ug/L		95
39) tert-Amyl ethyl ether ...	6.898	59	5290	1.15	ug/L		96
40) Dibromomethane	7.057	93	7254	5.04	ug/L		86
41) 1,2-Dichloropropane	7.166	63	11716	5.00	ug/L		88
42) Bromodichloromethane	7.245	83	13785	4.80	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	15807	4.34	ug/L		98
46) Toluene	8.219	91	50497	4.75	ug/L		95
47) Tetrachloroethene (PCE)	8.669	166	12115	4.68	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.663	43	25616	8.12	ug/L		97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

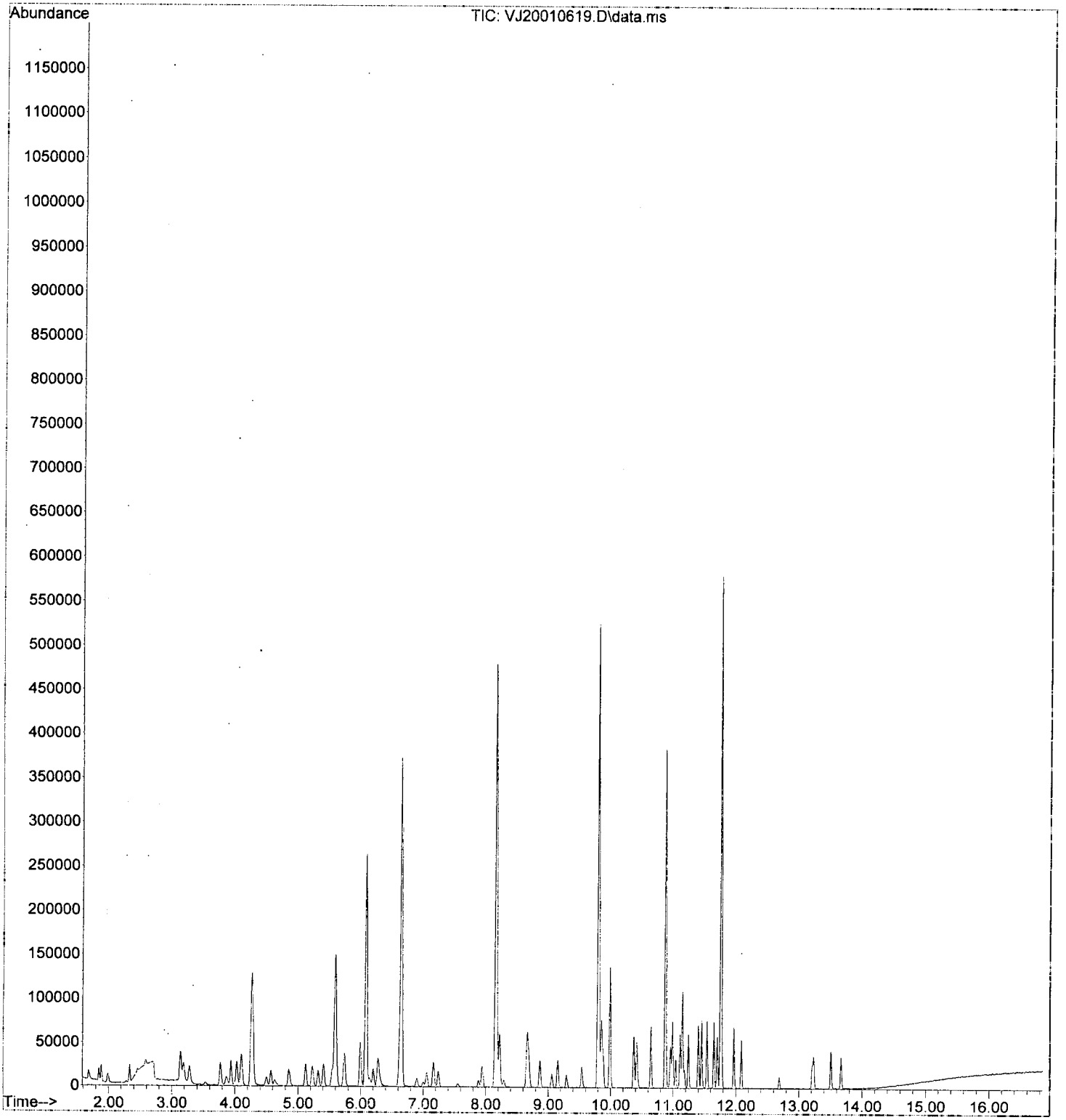
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	15519	4.36	ug/L		98
50) 1,1,2-Trichloroethane	8.869	97	10798	4.87	ug/L		95
51) Dibromochloromethane	9.058	129	9016	4.45	ug/L		90
52) 1,3-Dichloropropane	9.155	76	18904	4.90	ug/L		96
53) 1,2-Dibromoethane (EDB)	9.295	107	10465	4.71	ug/L		99
54) 2-Hexanone	9.539	43	16429	7.22	ug/L		95
55) Chlorobenzene	9.812	112	32096	4.99	ug/L		96
56) Ethylbenzene	9.849	91	52137	4.66	ug/L		100
57) 1,1,1,2-Tetrachloroethane	9.879	131	10529	4.86	ug/L		94
58) m,p-Xylenes (2)	9.989	91	72607	8.75	ug/L		98
59) o-Xylene	10.372	91	33335	4.28	ug/L		95
60) Styrene	10.415	104	21910	3.96	ug/L		96
61) Bromoform	10.433	173	5923	4.09	ug/L		97
62) Isopropylbenzene	10.646	105	40606	4.12	ug/L		96
65) Bromobenzene	10.956	156	11819	4.98	ug/L		86
66) n-Propylbenzene	10.987	91	52319	4.61	ug/L		96
67) 1,1,2,2-Tetrachloroethane	11.041	83	13376	4.59	ug/L		98
68) 2-Chlorotoluene	11.108	126	9710	4.47	ug/L		86
69) 1,3,5-Trimethylbenzene	11.151	105	36600	4.48	ug/L		94
70) 1,2,3-Trichloropropane	11.145	110	5081	4.73	ug/L		96
71) t-1,4-Dichloro-2-butene	11.181	88	1822	4.13	ug/L	#	70
72) 4-Chlorotoluene	11.242	91	31240	4.67	ug/L		96
73) tert-Butylbenzene	11.400	91	19450	4.48	ug/L		94
74) 1,2,4-Trimethylbenzene	11.455	105	35579	4.35	ug/L		95
75) sec-Butylbenzene	11.540	105	43743	4.52	ug/L		96
76) 4-Isopropyltoluene	11.650	119	34578	4.29	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	21401	4.84	ug/L		97
78) 1,4-Dichlorobenzene	11.771	146	22186	5.08	ug/L		97
79) n-Butylbenzene	11.966	91	31798	4.58	ug/L		95
80) 1,2-Dichlorobenzene	12.088	146	18907	4.67	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	3076	4.26	ug/L		66
82) Hexachlorobutadiene	13.207	223	3211	4.96	ug/L		91
83) 1,2,4-Trichlorobenzene	13.238	180	10371	4.22	ug/L		94
84) Naphthalene	13.505	128	31622	3.69	ug/L		96
85) 1,2,3-Trichlorobenzene	13.669	180	10894	4.20	ug/L		98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010619.D
Acq On : 6 Jan 2020 7:26 pm
Operator : tb
Sample : 0A06051-CAL6
Misc : 1X 5mL 5ppb DI+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:53:41 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 14:57:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	105104	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	256667	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	122138	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	86039	52.06	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	303283	50.20	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	357128	49.36	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	91761	48.66	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	19171	10.28	ug/L		96
3) Chloromethane	1.892	50	28319	10.09	ug/L		99
4) Vinyl Chloride	1.995	62	22243	9.88	ug/L		93
5) Bromomethane	2.336	96	14130	11.84	ug/L		97
6) Chloroethane	2.457	64	5109	10.34	ug/L		95
7) Trichlorofluoromethane	2.591	101	8153	10.42	ug/L		98
8) Ethanol	3.260	45	40033m	627.98	ug/L		
9) 1,1-Dichloroethene	3.139	61	25020	10.19	ug/L		99
10) Carbon Disulfide	3.151	76	43573	10.13	ug/L		98
11) Freon 113	3.194	101	19246	10.04	ug/L		99
12) Iodomethane	3.291	142	3523	9.11	ug/L		94
13) Methylene Chloride	3.772	84	22826	10.86	ug/L		98
14) Acetone	3.863	43	26202m	21.10	ug/L		
15) t-1,2-Dichloroethene	3.942	61	31429	10.22	ug/L		97
16) n-Hexane	4.033	86	4668	9.40	ug/L	#	89
17) Methyl-tert-butyl-ether	4.100	73	75246	9.85	ug/L		87
18) tert-Butanol (TBA)	4.252	59	380675m	605.51	ug/L		
19) Diisopropyl ether (DIPE)	4.495	45	17671	2.43	ug/L		95
20) 1,1-Dichloroethane	4.575	63	37310	10.34	ug/L		97
21) Acrylonitrile	4.623	53	13757m	9.82	ug/L		
22) Ethyl-tert-butyl ether...	4.867	59	17105	2.40	ug/L		94
23) c-1,2-Dichloroethene	5.128	61	30607	10.15	ug/L		99
24) 2,2-Dichloropropane	5.232	77	33201	9.96	ug/L		99
25) Bromochloromethane	5.323	49	18916	10.43	ug/L		92
26) Chloroform	5.408	83	40679	10.28	ug/L		97
27) Carbon Tetrachloride	5.548	117	28141	9.80	ug/L		98
28) Tetrahydrofuran	5.584	42	12516	9.69	ug/L		92
29) 1,1,1-Trichloroethane	5.615	97	37707	10.01	ug/L		94
31) 1,1-Dichloropropene	5.743	75	29838	9.48	ug/L		98
32) 2-Butanone (MEK)	5.724	43	39626	20.88	ug/L		97
33) Benzene	5.998	78	96046	9.93	ug/L		98
34) tert-Amyl methyl ether...	6.144	73	15488	2.57	ug/L		94
35) 1,2-Dichloroethane (EDC)	6.199	62	35220	10.22	ug/L		99
36) iso-Butyl Alcohol	6.272	43	51460m	239.60	ug/L		
38) Trichloroethene (TCE)	6.613	130	23199	9.92	ug/L		96
39) tert-Amyl ethyl ether ...	6.892	59	10793	2.44	ug/L		95
40) Dibromomethane	7.051	93	13851	10.01	ug/L		92
41) 1,2-Dichloropropane	7.166	63	22439	9.96	ug/L		90
42) Bromodichloromethane	7.239	83	26524	9.60	ug/L		96
44) c-1,3-Dichloropropene	7.945	75	31802	9.18	ug/L		99
46) Toluene	8.219	91	99117	9.81	ug/L		99
47) Tetrachloroethene (PCE)	8.675	166	23746	9.66	ug/L		97
48) 4-Methyl-2-Pentanone (...	8.663	43	52984	17.67	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 14:57:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

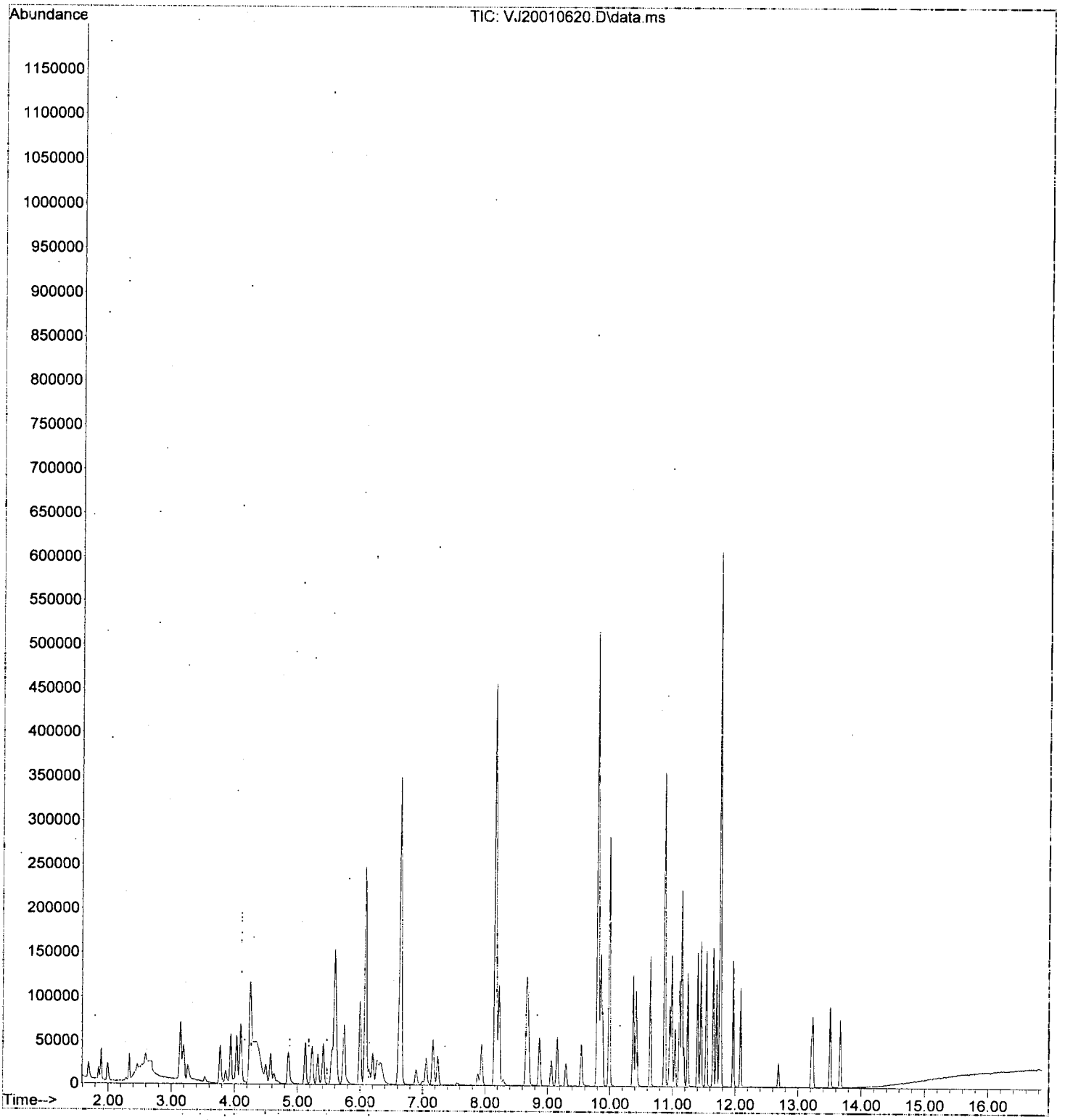
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	30984	9.15	ug/L		97
50) 1,1,2-Trichloroethane	8.870	97	20750	9.86	ug/L		93
51) Dibromochloromethane	9.058	129	18046	9.37	ug/L		99
52) 1,3-Dichloropropane	9.155	76	36128	9.86	ug/L		97
53) 1,2-Dibromoethane (EDB)	9.295	107	20354	9.64	ug/L		100
54) 2-Hexanone	9.539	43	37094	17.15	ug/L		98
55) Chlorobenzene	9.819	112	60211	9.85	ug/L		98
56) Ethylbenzene	9.855	91	103298	9.72	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	20894	10.15	ug/L		100
58) m,p-Xylenes (2)	9.989	91	150111	19.03	ug/L		97
59) o-Xylene	10.372	91	67509	9.13	ug/L		95
60) Styrene	10.415	104	47163	8.96	ug/L		100
61) Bromoform	10.433	173	12623	9.16	ug/L		97
62) Isopropylbenzene	10.646	105	86843	9.28	ug/L		98
65) Bromobenzene	10.962	156	23107	9.72	ug/L		94
66) n-Propylbenzene	10.987	91	106920	9.41	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.041	83	28029	9.62	ug/L		95
68) 2-Chlorotoluene	11.114	126	20381	9.38	ug/L		91
69) 1,3,5-Trimethylbenzene	11.151	105	75905	9.29	ug/L		93
70) 1,2,3-Trichloropropane	11.145	110	10290	9.57	ug/L		94
71) t-1,4-Dichloro-2-butene	11.181	88	3884	8.80	ug/L	#	83
72) 4-Chlorotoluene	11.242	91	64835	9.67	ug/L		94
73) tert-Butylbenzene	11.400	91	40173	9.24	ug/L		90
74) 1,2,4-Trimethylbenzene	11.455	105	75834	9.26	ug/L		96
75) sec-Butylbenzene	11.540	105	90653	9.35	ug/L		97
76) 4-Isopropyltoluene	11.650	119	73953	9.16	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	42611	9.63	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	42971	9.84	ug/L		94
79) n-Butylbenzene	11.966	91	65286	9.39	ug/L		95
80) 1,2-Dichlorobenzene	12.088	146	37998	9.38	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	6494	8.98	ug/L		72
82) Hexachlorobutadiene	13.213	223	5995	9.24	ug/L		94
83) 1,2,4-Trichlorobenzene	13.238	180	22199	9.02	ug/L		98
84) Naphthalene	13.511	128	71917	8.38	ug/L		97
85) 1,2,3-Trichlorobenzene	13.669	180	23796	9.17	ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 14:57:58 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene (I)	6.083	99	105104	50.00	ug/L		0.00	
43) Chlorobenzene-d5 (I)	9.800	117	256667	50.00	ug/L		0.00	
63) 1,4-Dichlorobenzene-d4...	11.759	152	122138	50.00	ug/L		0.00	
System Monitoring Compounds								
30) Dibromofluoromethane (S)	5.590	111	86039	52.06	ug/L		0.00	
37) 1,4-Difluorobenzene (S)	6.649	114	303283	50.20	ug/L		0.00	
45) Toluene-d8 (S)	8.164	98	357128	49.36	ug/L		0.00	
64) 4-Bromofluorobenzene (S)	10.877	174	91761	48.66	ug/L		0.00	
Target Compounds							Qvalue	
2) Dichlorodifluoromethane	1.691	85	19171	10.28	ug/L		96	
3) Chloromethane	1.892	50	28319	10.09	ug/L		99	
4) Vinyl Chloride	1.995	62	22243	9.88	ug/L		93	
5) Bromomethane	2.336	96	14130	11.84	ug/L		97	
6) Chloroethane	2.457	64	5109	10.34	ug/L		95	
7) Trichlorofluoromethane	2.591	101	8153	10.42	ug/L		98	
8) Ethanol	3.260	45	~~26102~~	~~409.15~~	~~ug/L~~		~~88~~	MI
9) 1,1-Dichloroethene	3.139	61	25020	10.19	ug/L		99	
10) Carbon Disulfide	3.151	76	43573	10.13	ug/L		98	
11) Freon 113	3.194	101	19246	10.04	ug/L		99	
12) Iodomethane	3.291	142	3523	9.11	ug/L		94	
13) Methylene Chloride	3.772	84	22826	10.86	ug/L		98	
14) Acetone	3.863	43	~~20741~~	~~16.70~~	~~ug/L~~		~~98~~	MI
15) t-1,2-Dichloroethene	3.942	61	31429	10.22	ug/L		97	
16) n-Hexane	4.033	86	4668	9.40	ug/L	#	89	
17) Methyl-tert-butyl-ether	4.100	73	75246	9.85	ug/L		87	
18) tert-Butanol (TBA)	4.252	59	~~224073~~	~~356.42~~	~~ug/L~~	#	~~93~~	MI
19) Diisopropyl ether (DIPE)	4.495	45	17671	2.43	ug/L		95	
20) 1,1-Dichloroethane	4.575	63	37310	10.34	ug/L		97	
21) Acrylonitrile	4.623	53	~~11532~~	~~8.23~~	~~ug/L~~		~~97~~	MI
22) Ethyl-tert-butyl ether...	4.867	59	17105	2.40	ug/L		94	
23) c-1,2-Dichloroethene	5.128	61	30607	10.15	ug/L		99	
24) 2,2-Dichloropropane	5.232	77	33201	9.96	ug/L		99	
25) Bromochloromethane	5.323	49	18916	10.43	ug/L		92	
26) Chloroform	5.408	83	40679	10.28	ug/L		97	
27) Carbon Tetrachloride	5.548	117	28141	9.80	ug/L		98	
28) Tetrahydrofuran	5.584	42	12516	9.69	ug/L		92	
29) 1,1,1-Trichloroethane	5.615	97	37707	10.01	ug/L		94	
31) 1,1-Dichloropropene	5.743	75	29838	9.48	ug/L		98	
32) 2-Butanone (MEK)	5.724	43	39626	20.38	ug/L		97	
33) Benzene	5.998	78	96046	9.93	ug/L		98	
34) tert-Amyl methyl ether...	6.144	73	15488	2.57	ug/L		94	
35) 1,2-Dichloroethane (EDC)	6.199	62	35220	10.22	ug/L		99	
36) iso-Butyl Alcohol	6.272	43	~~23571~~	~~109.75~~	~~ug/L~~		~~84~~	MI
38) Trichloroethene (TCE)	6.613	130	23199	9.92	ug/L		96	
39) tert-Amyl ethyl ether ...	6.892	59	10793	2.44	ug/L		95	
40) Dibromomethane	7.051	93	13851	10.01	ug/L		92	
41) 1,2-Dichloropropane	7.166	63	22439	9.96	ug/L		90	
42) Bromodichloromethane	7.239	83	26524	9.60	ug/L		96	
44) c-1,3-Dichloropropene	7.945	75	31802	9.18	ug/L		99	
46) Toluene	8.219	91	99117	9.81	ug/L		99	
47) Tetrachloroethene (PCE)	8.675	166	23746	9.66	ug/L		97	
48) 4-Methyl-2-Pentanone (...	8.663	43	52984	17.67	ug/L		98	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

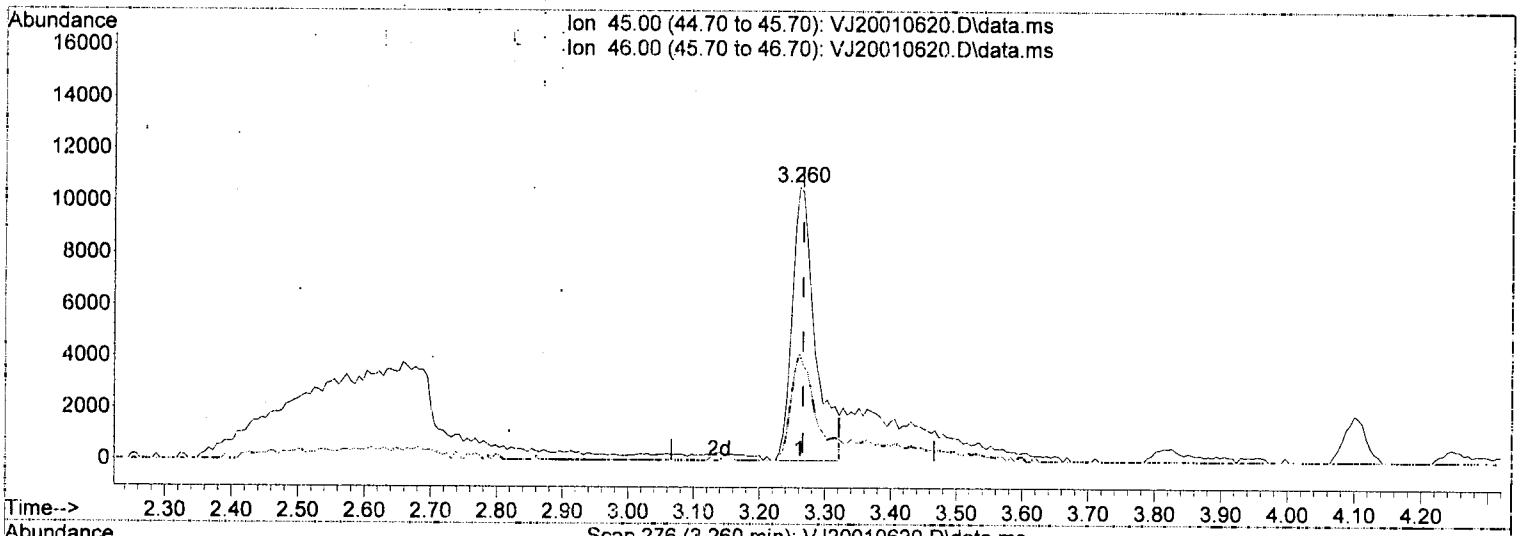
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	30984	9.15	ug/L		97
50) 1,1,2-Trichloroethane	8.870	97	20750	9.86	ug/L		93
51) Dibromochloromethane	9.058	129	18046	9.37	ug/L		99
52) 1,3-Dichloropropane	9.155	76	36128	9.86	ug/L		97
53) 1,2-Dibromoethane (EDB)	9.295	107	20354	9.64	ug/L		100
54) 2-Hexanone	9.539	43	37094	17.15	ug/L		98
55) Chlorobenzene	9.819	112	60211	9.85	ug/L		98
56) Ethylbenzene	9.855	91	103298	9.72	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	20894	10.15	ug/L		100
58) m,p-Xylenes (2)	9.989	91	150111	19.03	ug/L		97
59) o-Xylene	10.372	91	67509	9.13	ug/L		95
60) Styrene	10.415	104	47163	8.96	ug/L		100
61) Bromoform	10.433	173	12623	9.16	ug/L		97
62) Isopropylbenzene	10.646	105	86843	9.28	ug/L		98
65) Bromobenzene	10.962	156	23107	9.72	ug/L		94
66) n-Propylbenzene	10.987	91	106920	9.41	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.041	83	28029	9.62	ug/L		95
68) 2-Chlorotoluene	11.114	126	20381	9.38	ug/L		91
69) 1,3,5-Trimethylbenzene	11.151	105	75905	9.29	ug/L		93
70) 1,2,3-Trichloropropane	11.145	110	10290	9.57	ug/L		94
71) t-1,4-Dichloro-2-butene	11.181	88	3884	8.80	ug/L	#	83
72) 4-Chlorotoluene	11.242	91	64835	9.67	ug/L		94
73) tert-Butylbenzene	11.400	91	40173	9.24	ug/L		90
74) 1,2,4-Trimethylbenzene	11.455	105	75834	9.26	ug/L		96
75) sec-Butylbenzene	11.540	105	90653	9.35	ug/L		97
76) 4-Isopropyltoluene	11.650	119	73953	9.16	ug/L		99
77) 1,3-Dichlorobenzene	11.704	146	42611	9.63	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	42971	9.84	ug/L		94
79) n-Butylbenzene	11.966	91	65286	9.39	ug/L		95
80) 1,2-Dichlorobenzene	12.088	146	37998	9.38	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	6494	8.98	ug/L		72
82) Hexachlorobutadiene	13.213	223	5995	9.24	ug/L		94
83) 1,2,4-Trichlorobenzene	13.238	180	22199	9.02	ug/L		98
84) Naphthalene	13.511	128	71917	8.38	ug/L		97
85) 1,2,3-Trichlorobenzene	13.669	180	23796	9.17	ug/L		98

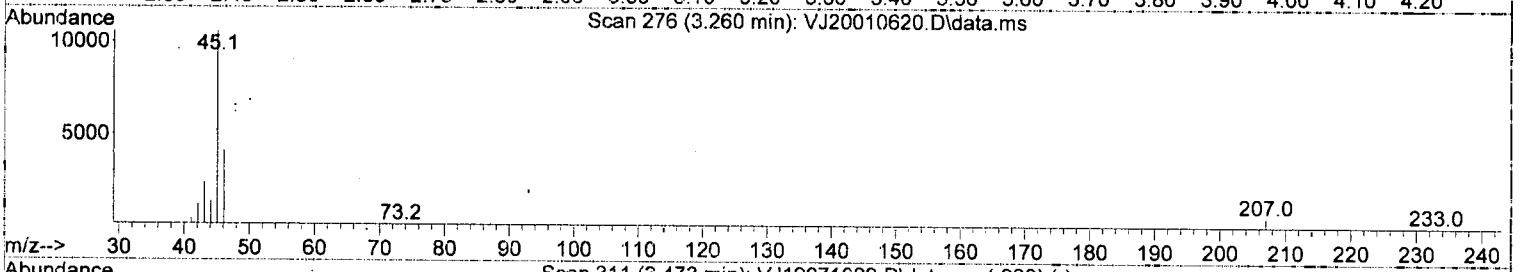
(#) = qualifier out of range (m) = manual integration (+) = signals summed

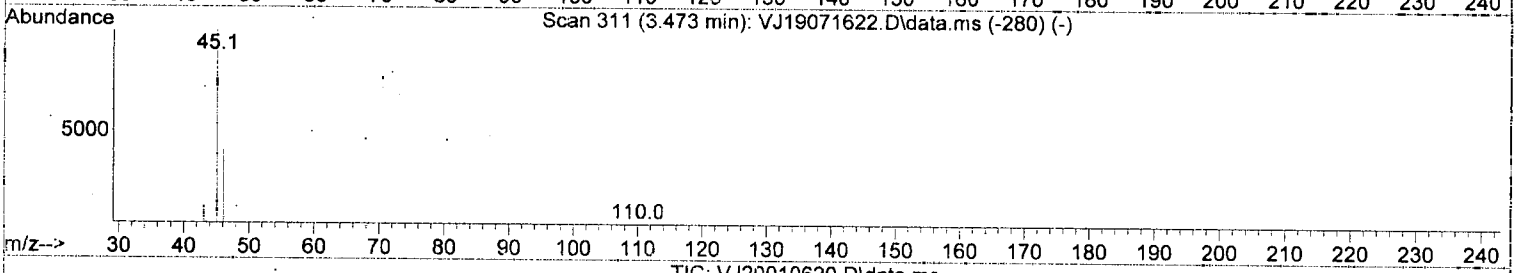
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL' 10ppb' DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(8) Ethanol

3.260min (-0.006) 409.45 ug/L

response 26102

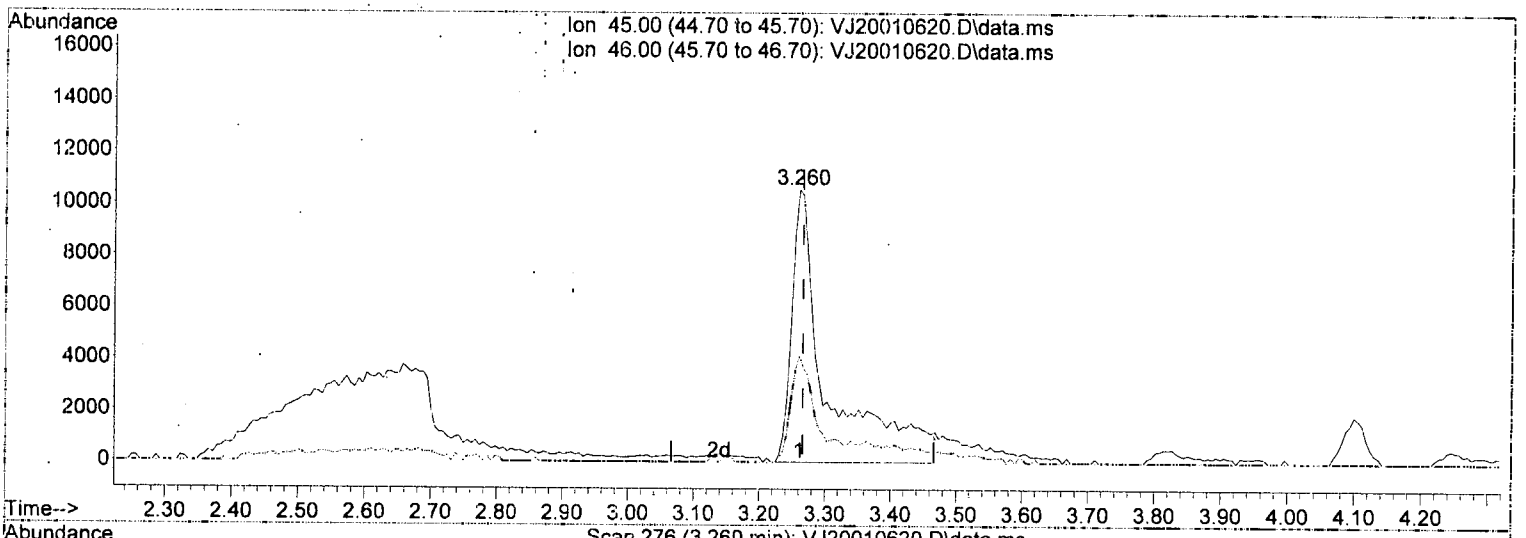
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.40
0.00	0.00	0.00
0.00	0.00	0.00

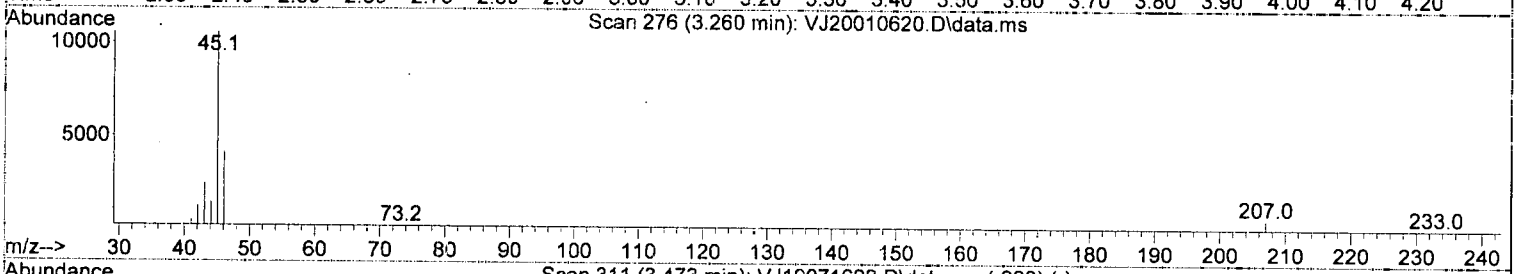
MF

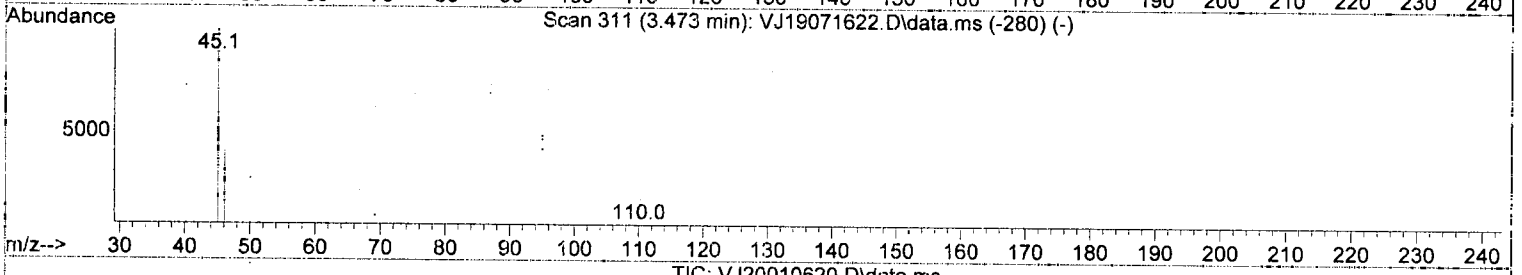
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(8) Ethanol

3.260min (-0.006) 627.98 ug/L m

response 40033

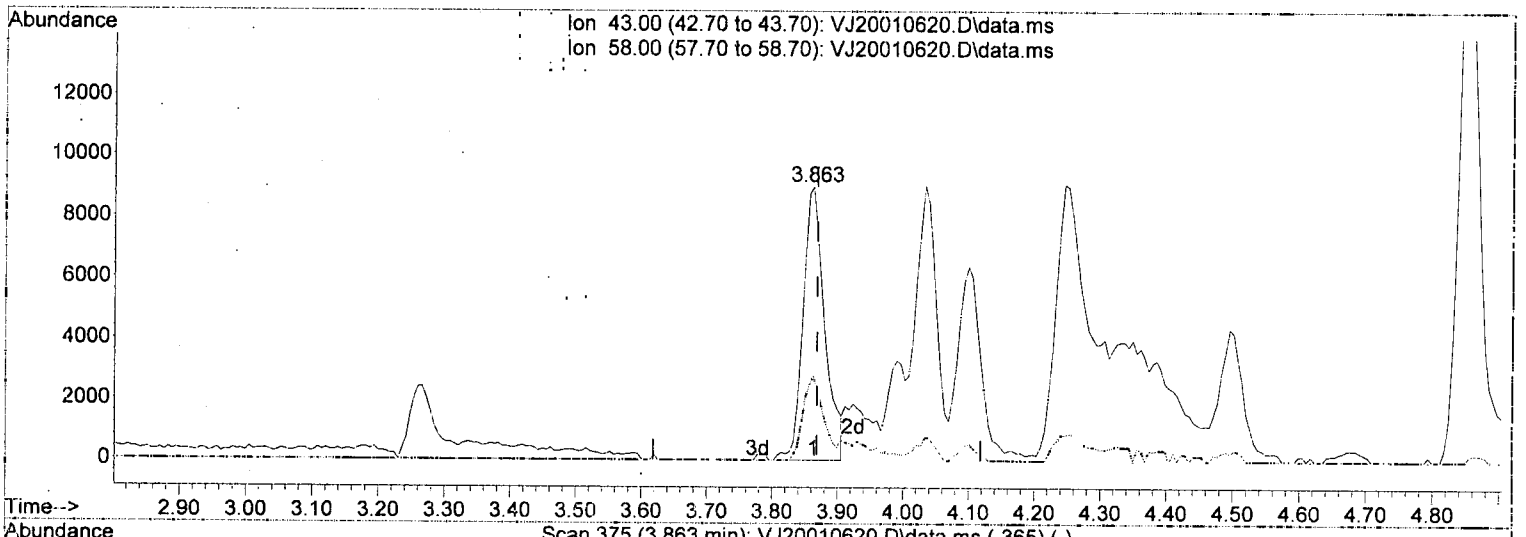
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.40
0.00	0.00	0.00
0.00	0.00	0.00

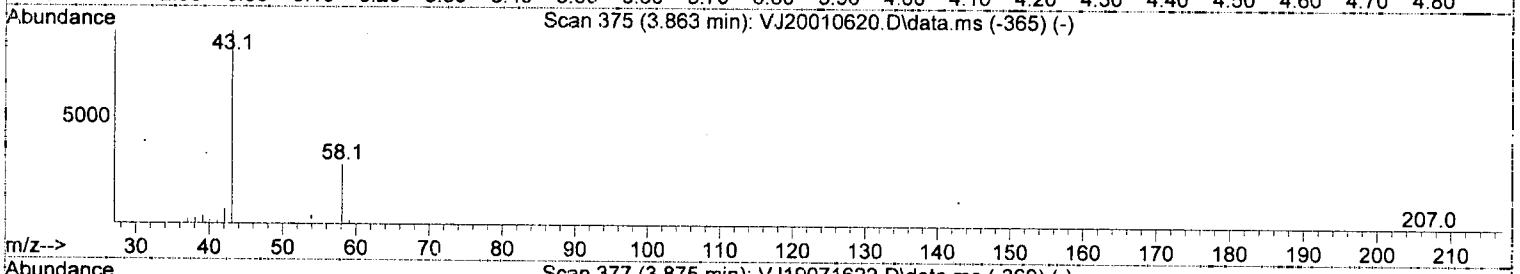
1/7/20

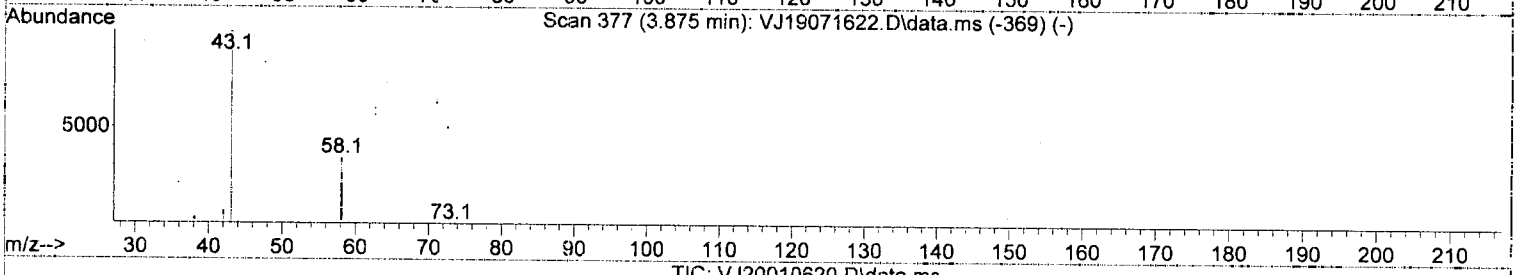
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL: 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(14) Acetone

3.863min (-0.005) 16.70 ug/L

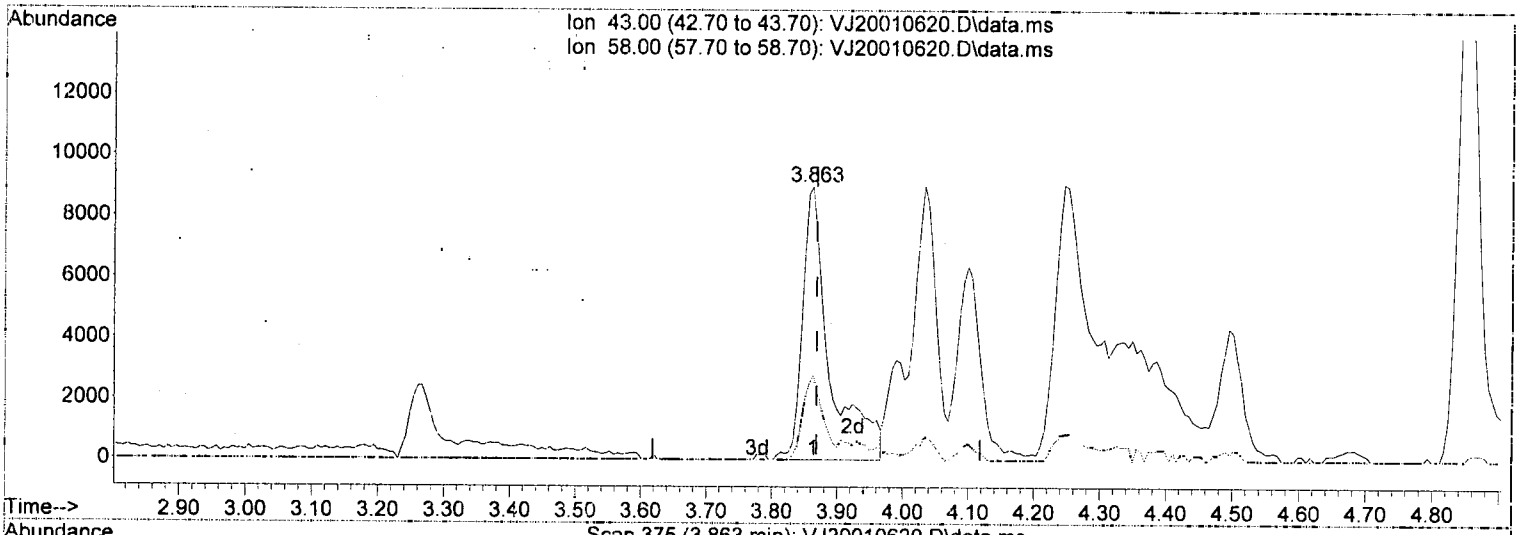
response 20741

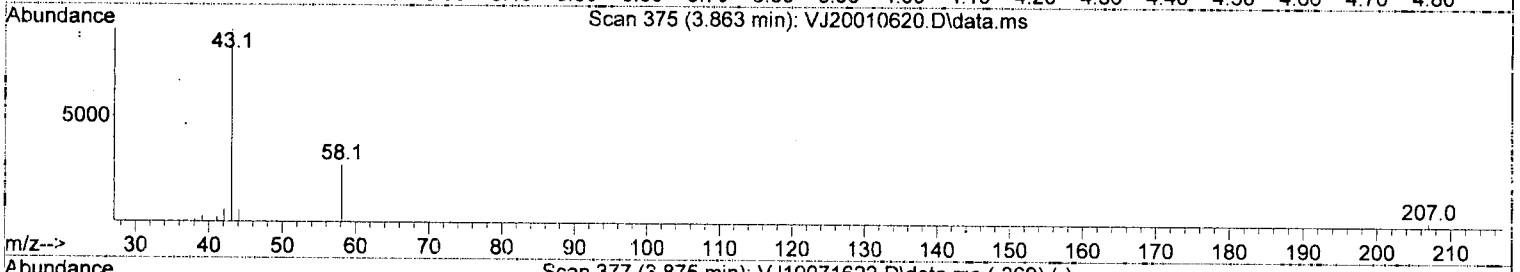
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.08
0.00	0.00	0.00
0.00	0.00	0.00

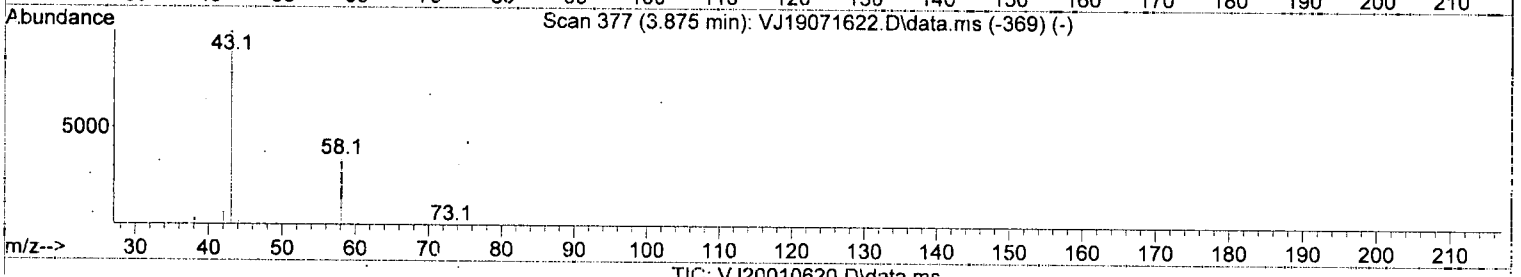
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(14) Acetone

3.863min (-0.005) 21.10 ug/L m

response 26202

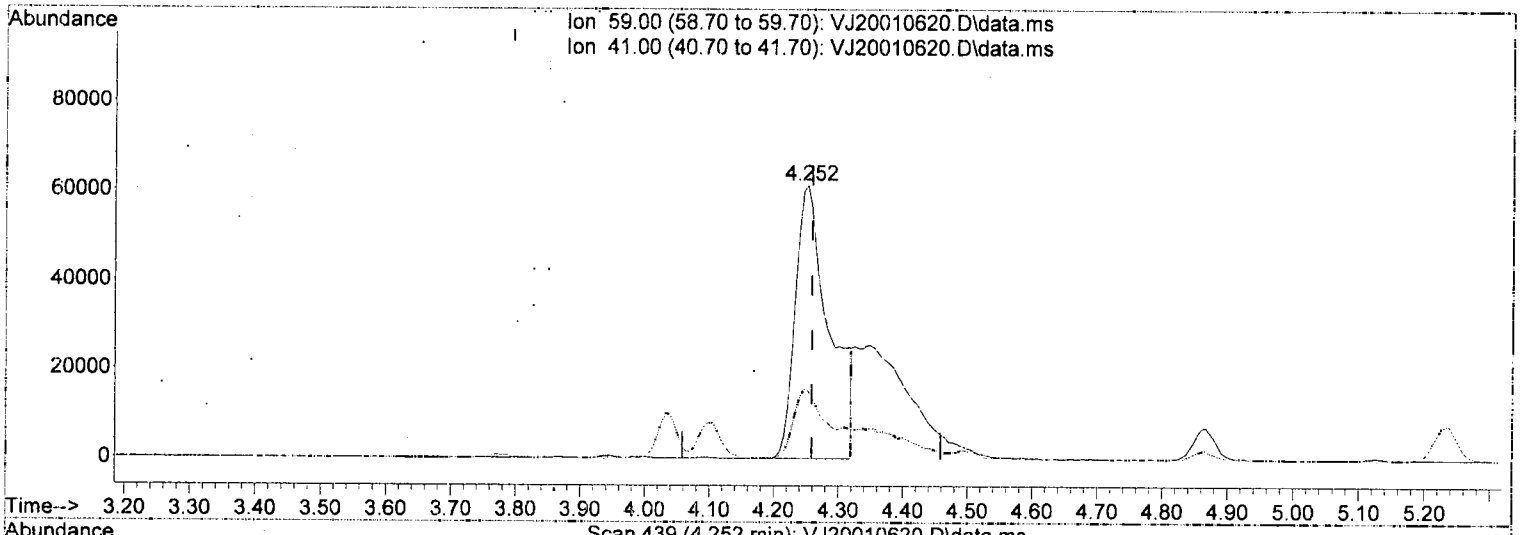
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.08
0.00	0.00	0.00
0.00	0.00	0.00

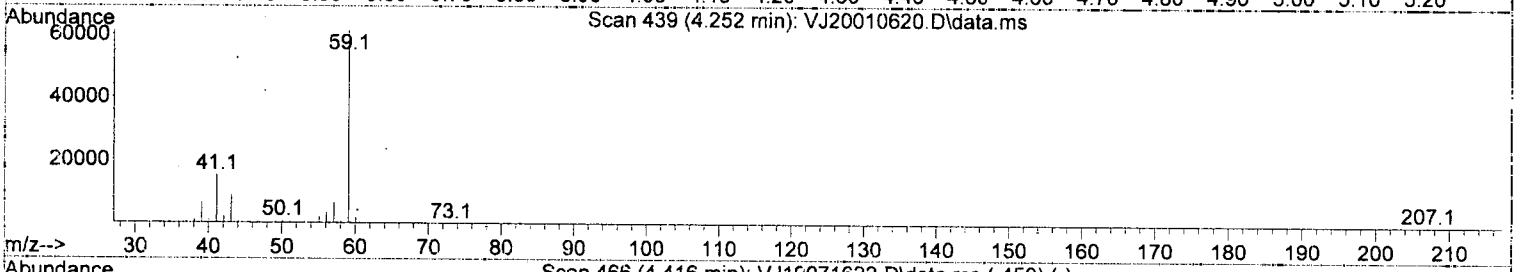
1/7/20

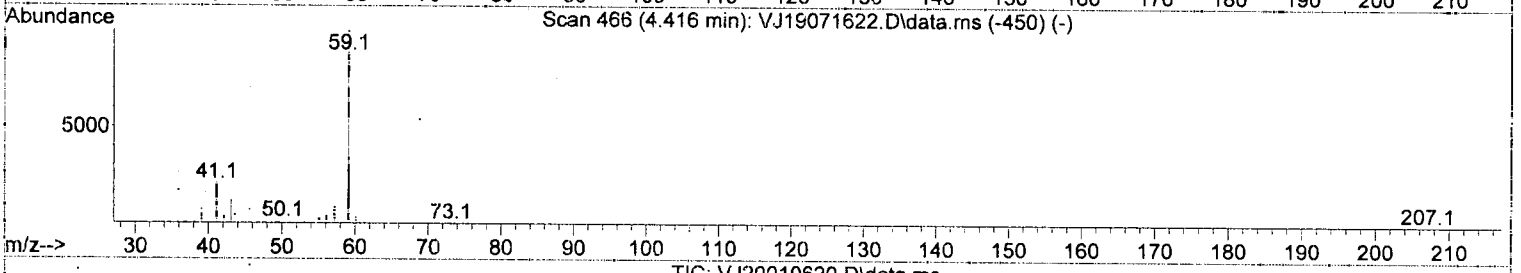
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 356.42 ug/L

response 224073

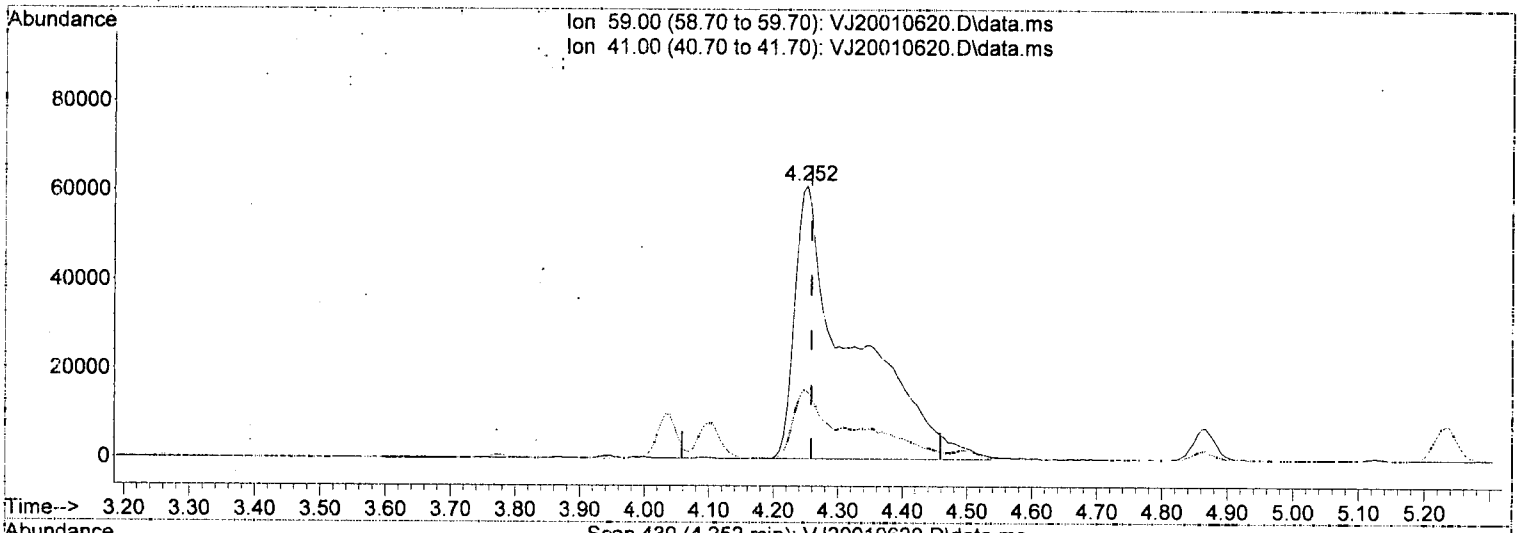
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	24.93#
0.00	0.00	0.00
0.00	0.00	0.00

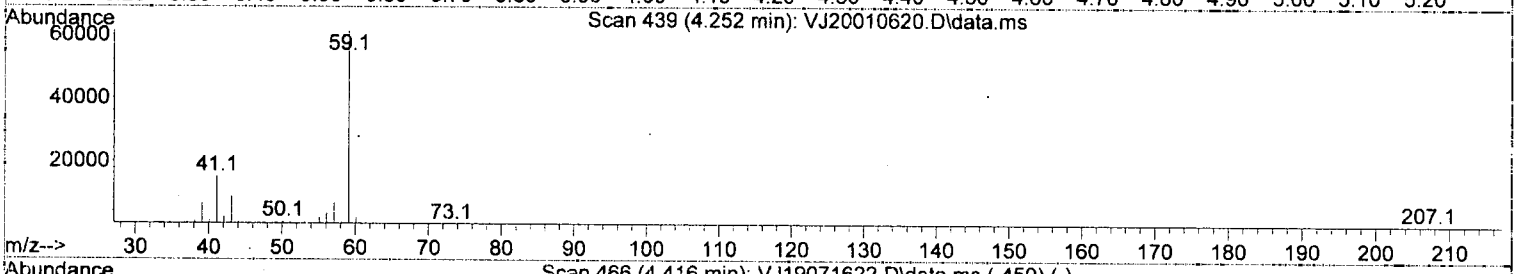
MI

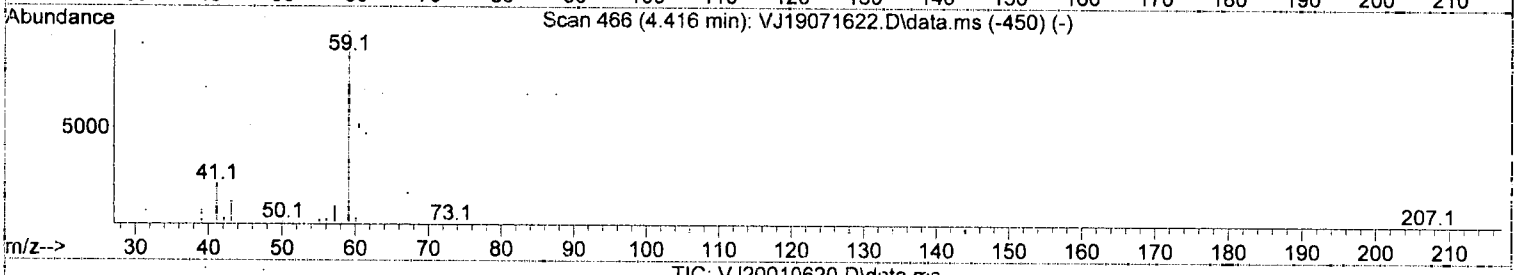
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 605.51 ug/L m

response 380675

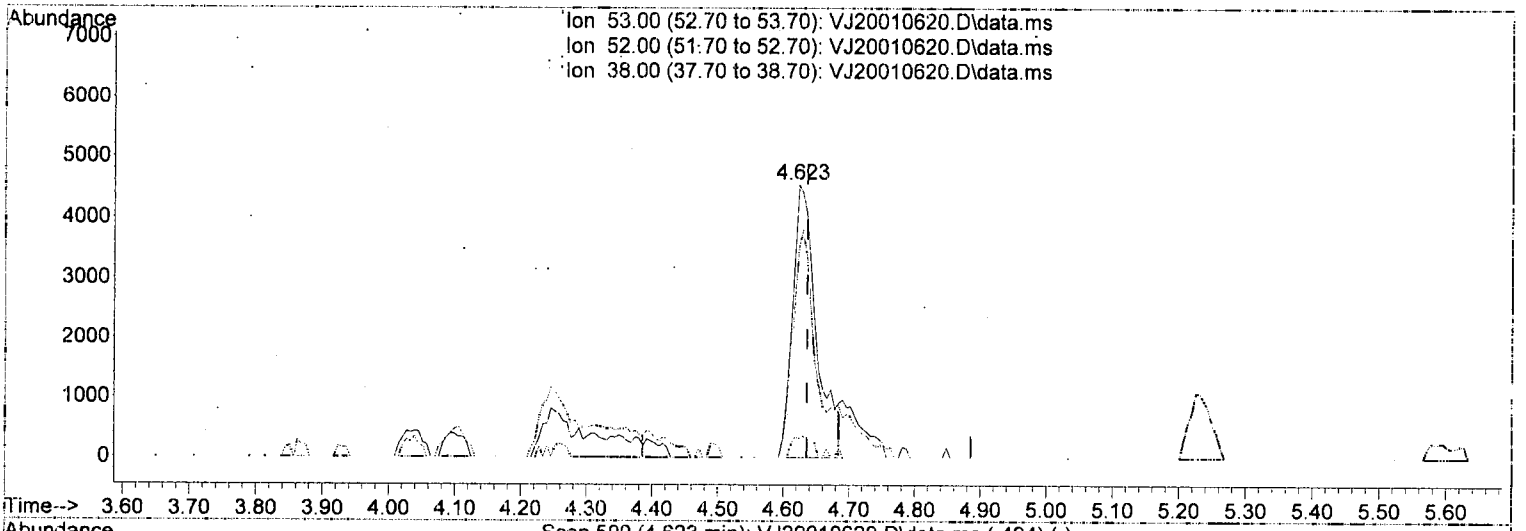
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	24.93#
0.00	0.00	0.00
0.00	0.00	0.00

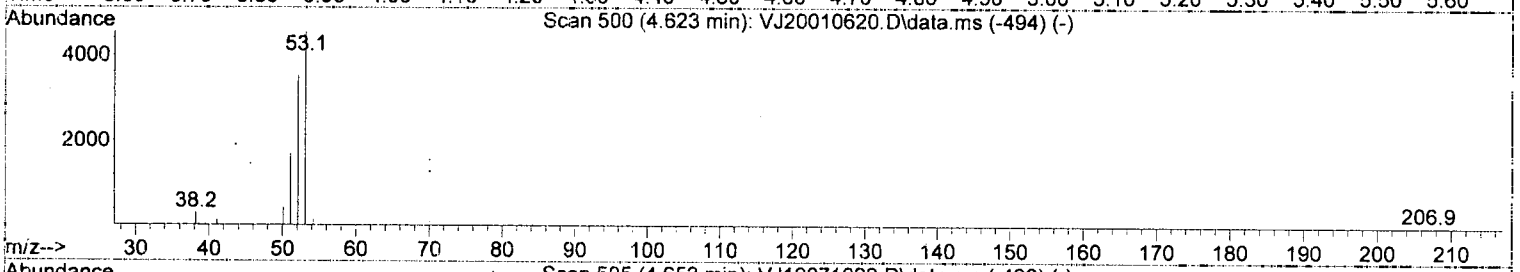
1/7/20

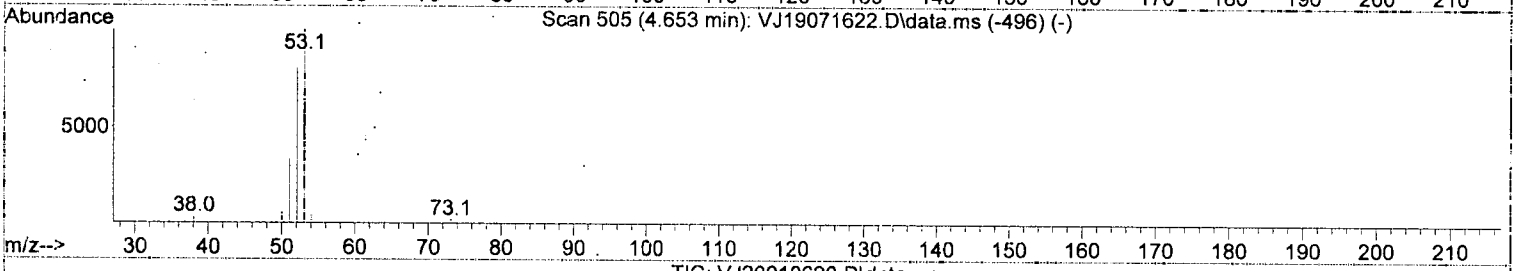
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(21) Acrylonitrile

4.623min (-0.012) 8.23 ug/L

response 11532

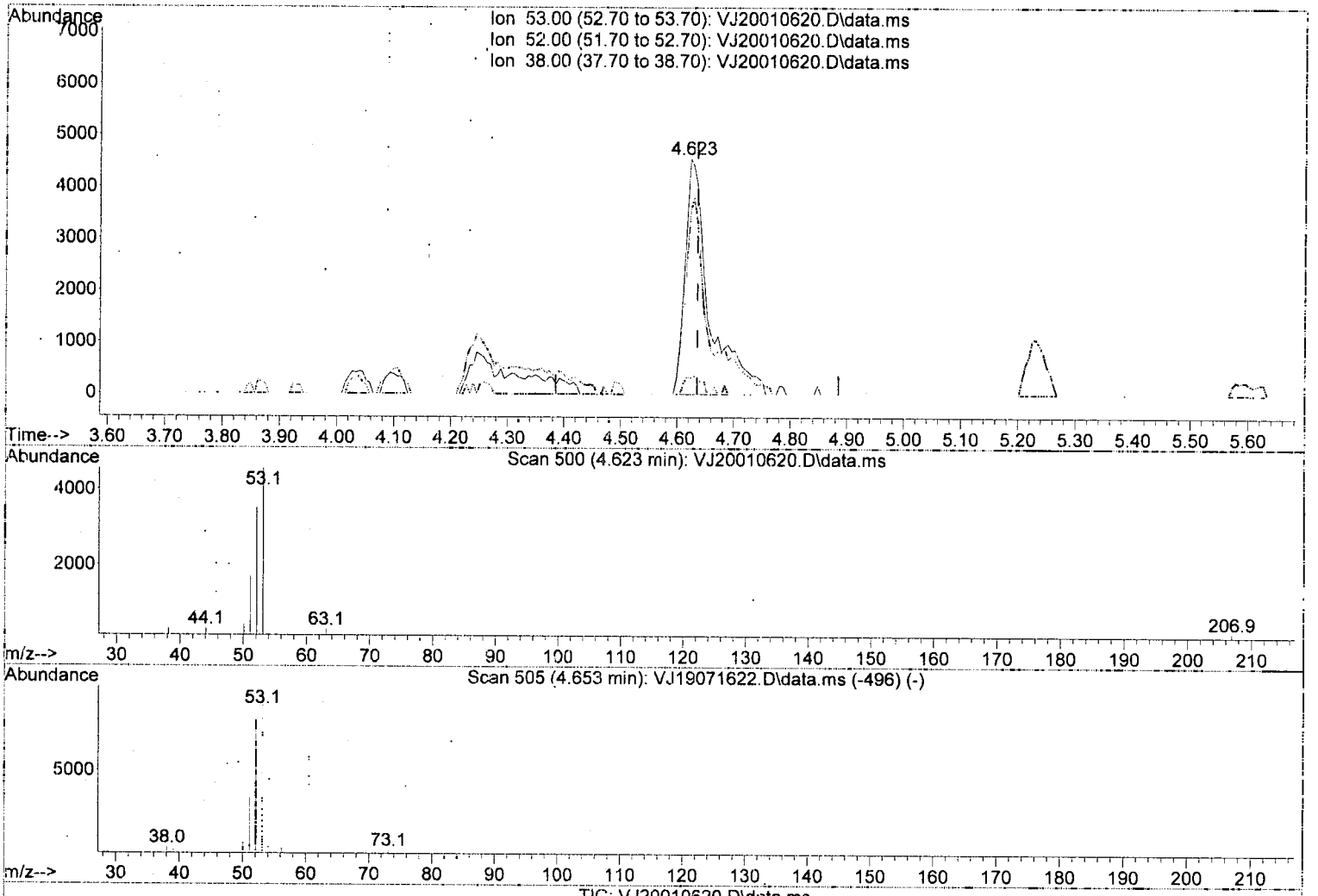
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.51
38.00	5.50	7.00
0.00	0.00	0.00

MI

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



(21) Acrylonitrile

4.623min (-0.012) 9.82 ug/L (m)

response 13757

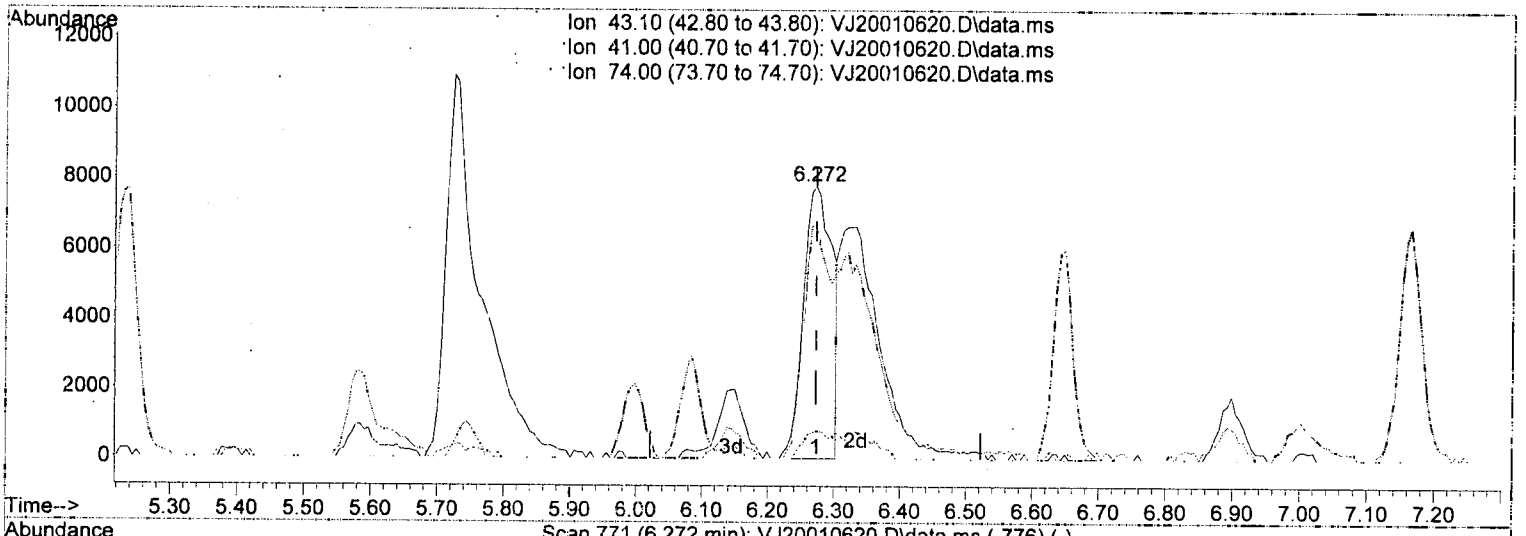
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.51
38.00	5.50	7.00
0.00	0.00	0.00

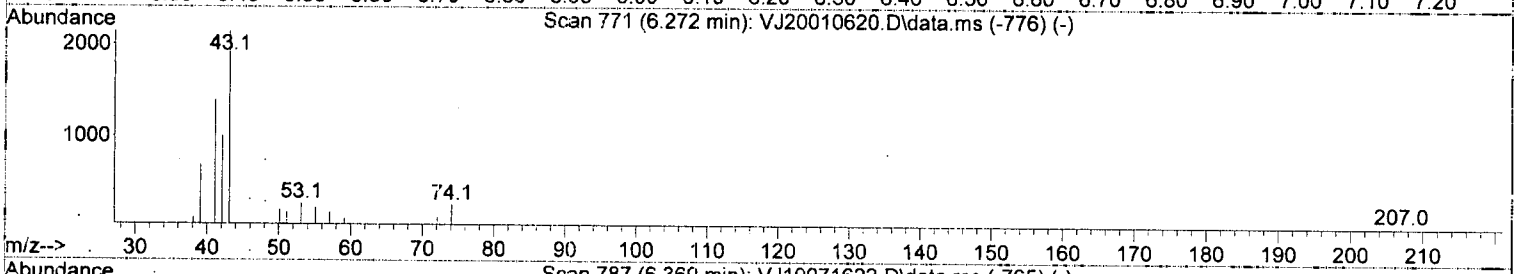
1/7/20

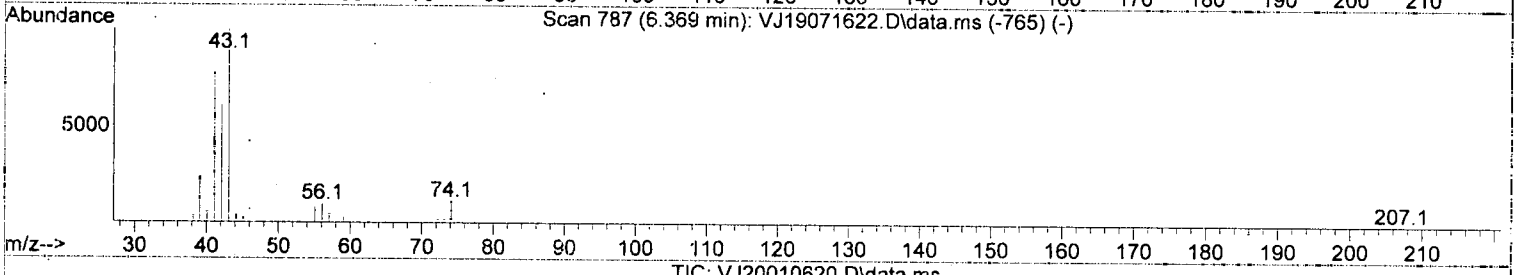
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(36) iso-Butyl Alcohol

6.272min (+ 0.000) 109.75 ug/L

response 23571

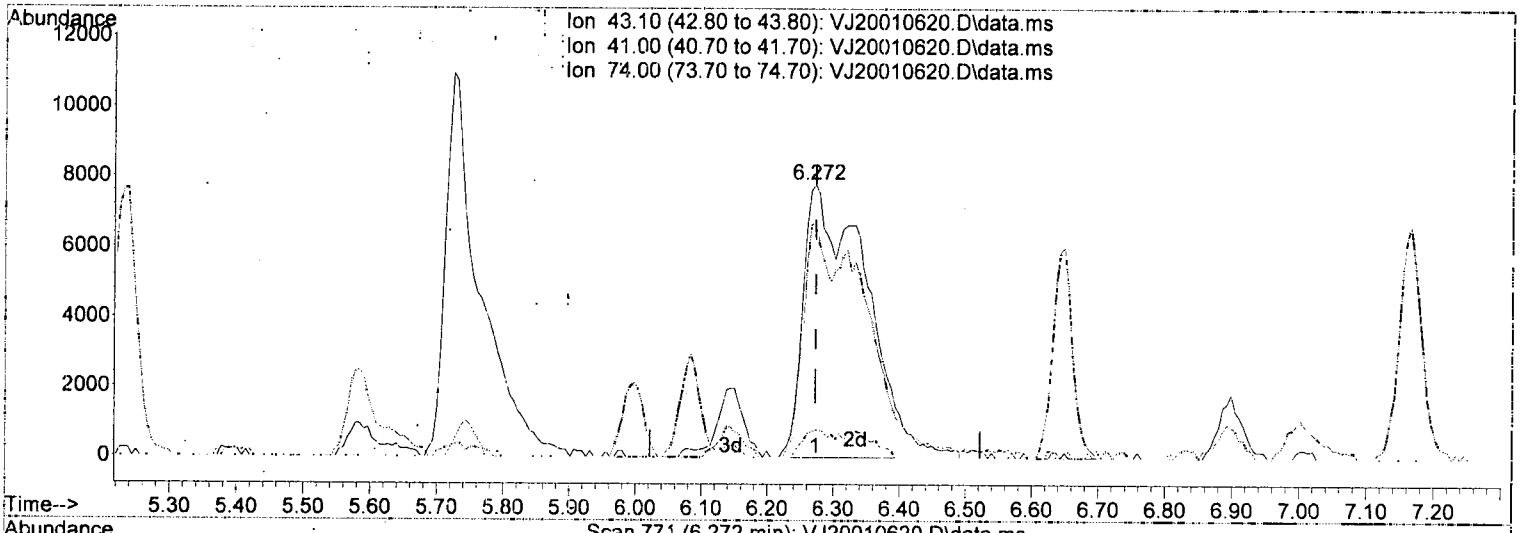
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	86.62
74.00	11.60	10.18
0.00	0.00	0.00

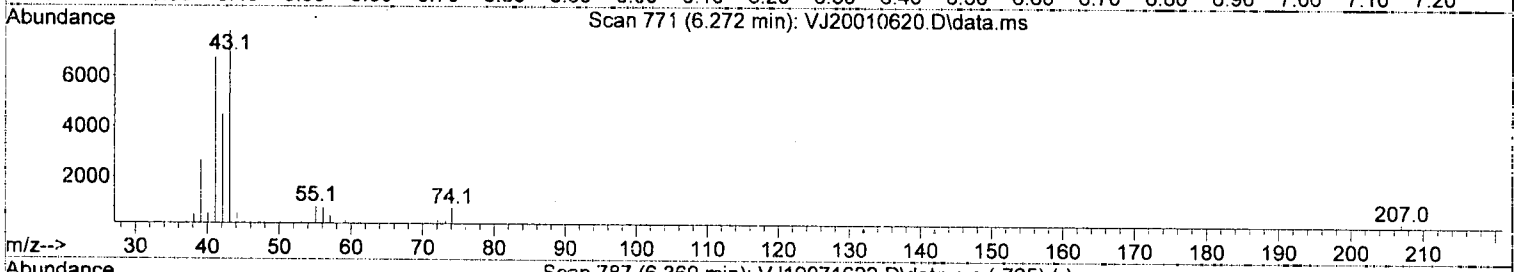
MI

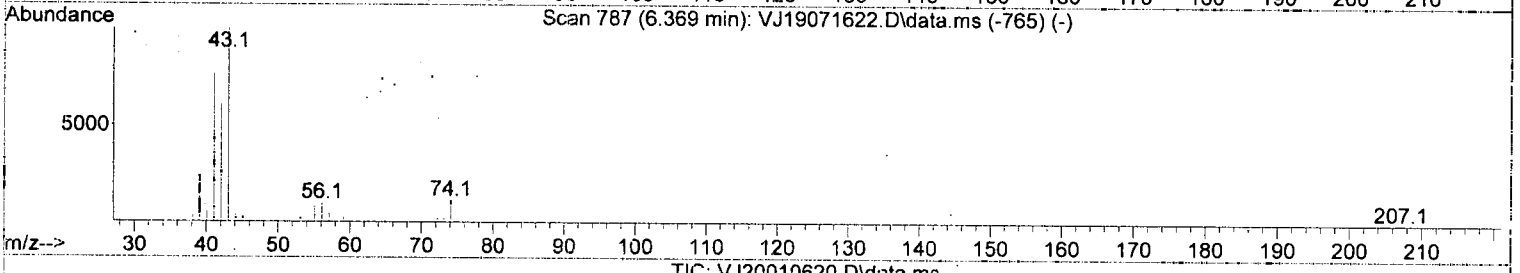
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010620.D\data.ms

(36) iso-Butyl Alcohol

6.272min (+ 0.000) 239.60 ug/L m

response 51460

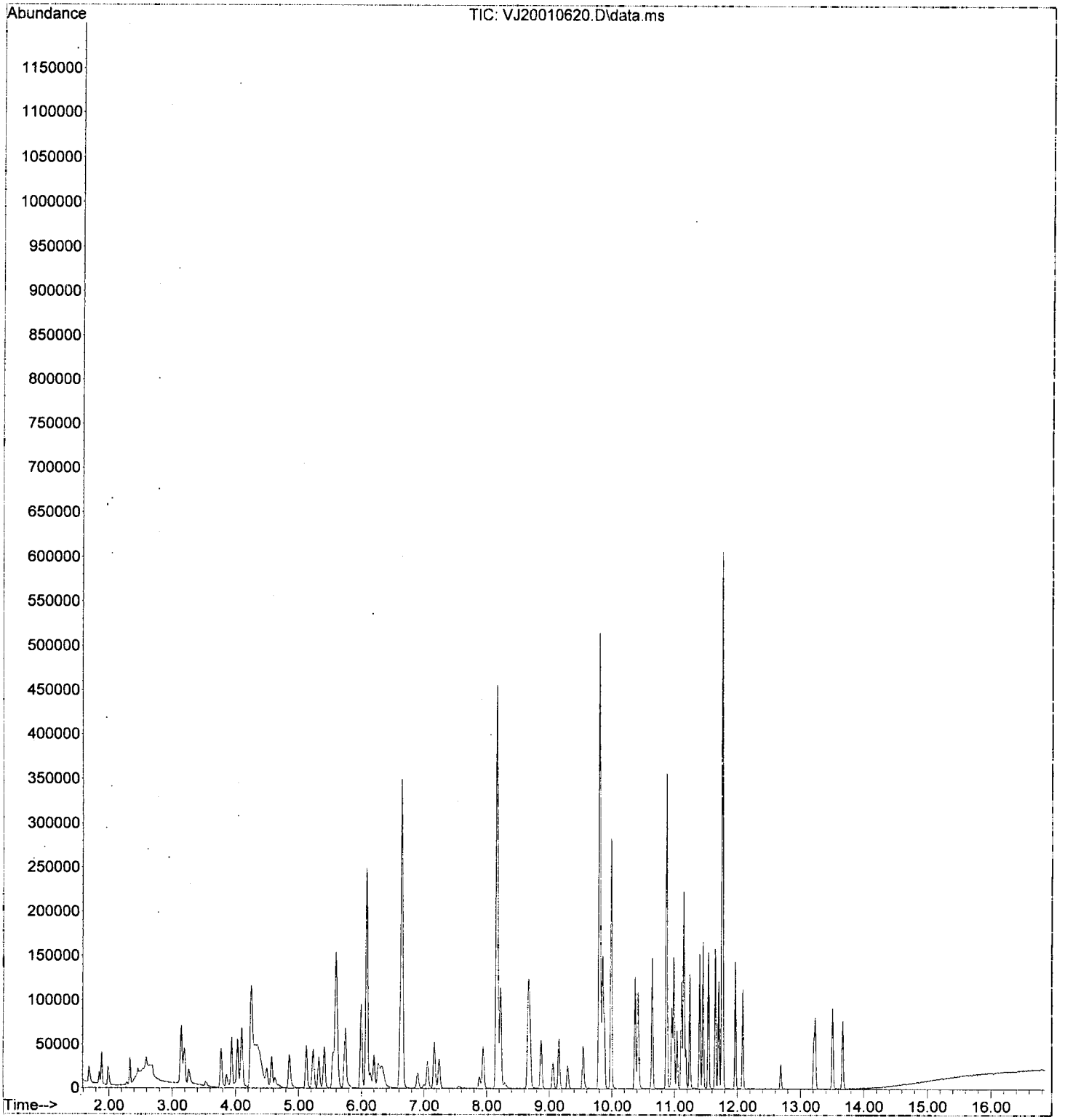
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	86.62
74.00	11.60	10.18
0.00	0.00	0.00

1/7/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010620.D
Acq On : 6 Jan 2020 7:53 pm
Operator : tb
Sample : 0A06051-CAL7
Misc : 1X 5mL 10ppb DI+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:53:44 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 15:00:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	108585	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	257589	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	120591	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	85376	50.00	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	312074	50.00	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	363051	50.00	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	93096	50.00	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	38529	20.00	ug/L		99
3) Chloromethane	1.886	50	58016	20.00	ug/L		98
4) Vinyl Chloride	1.989	62	46537	20.00	ug/L		94
5) Bromomethane	2.330	96	24661	20.00	ug/L		99
6) Chloroethane	2.457	64	10213	20.00	ug/L		93
7) Trichlorofluoromethane	2.585	101	16168	20.00	ug/L		94
8) Ethanol	3.267	45	82383m	1250.88	ug/L		
9) 1,1-Dichloroethene	3.133	61	50753	20.00	ug/L		94
10) Carbon Disulfide	3.145	76	88914	20.00	ug/L		97
11) Freon 113	3.187	101	39592	20.00	ug/L		99
12) Iodomethane	3.285	142	7988	20.00	ug/L		87
13) Methylene Chloride	3.772	84	43446	20.00	ug/L		98
14) Acetone	3.857	43	50344m	39.24	ug/L		
15) t-1,2-Dichloroethene	3.936	61	63531	20.00	ug/L		98
16) n-Hexane	4.033	86	10258	20.00	ug/L	#	89
17) Methyl-tert-butyl-ether	4.100	73	157914	20.00	ug/L		83
18) tert-Butanol (TBA)	4.252	59	810615m	1248.06	ug/L		
19) Diisopropyl ether (DIPE)	4.495	45	37517	5.00	ug/L		96
20) 1,1-Dichloroethane	4.575	63	74578	20.00	ug/L		98
21) Acrylonitrile	4.629	53	28955m	20.00	ug/L		
22) Ethyl-tert-butyl ether...	4.860	59	36823	5.00	ug/L		97
23) c-1,2-Dichloroethene	5.122	61	62311	20.00	ug/L		99
24) 2,2-Dichloropropane	5.232	77	68911	20.00	ug/L		98
25) Bromochloromethane	5.317	49	37485	20.00	ug/L		91
26) Chloroform	5.408	83	81758	20.00	ug/L		96
27) Carbon Tetrachloride	5.548	117	59324	20.00	ug/L		97
28) Tetrahydrofuran	5.578	42	26681	20.00	ug/L		92
29) 1,1,1-Trichloroethane	5.615	97	77869	20.00	ug/L		97
31) 1,1-Dichloropropene	5.743	75	65020	20.00	ug/L		93
32) 2-Butanone (MEK)	5.724	43	80360	40.00	ug/L		99
33) Benzene	5.998	78	199822	20.00	ug/L		99
34) tert-Amyl methyl ether...	6.150	73	31171	5.00	ug/L		100
35) 1,2-Dichloroethane (EDC)	6.199	62	71205	20.00	ug/L		98
36) iso-Butyl Alcohol	6.272	43	110835m	499.50	ug/L		
38) Trichloroethene (TCE)	6.613	130	48339	20.00	ug/L		93
39) tert-Amyl ethyl ether ...	6.898	59	22830	5.00	ug/L		94
40) Dibromomethane	7.057	93	28602	20.00	ug/L		93
41) 1,2-Dichloropropane	7.166	63	46552	20.00	ug/L		93
42) Bromodichloromethane	7.239	83	57072	20.00	ug/L		98
44) c-1,3-Dichloropropene	7.945	75	69513	20.00	ug/L		99
46) Toluene	8.219	91	202797	20.00	ug/L		99
47) Tetrachloroethene (PCE)	8.669	166	49335	20.00	ug/L		94
48) 4-Methyl-2-Pentanone (...	8.663	43	120371	40.00	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 15:00:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

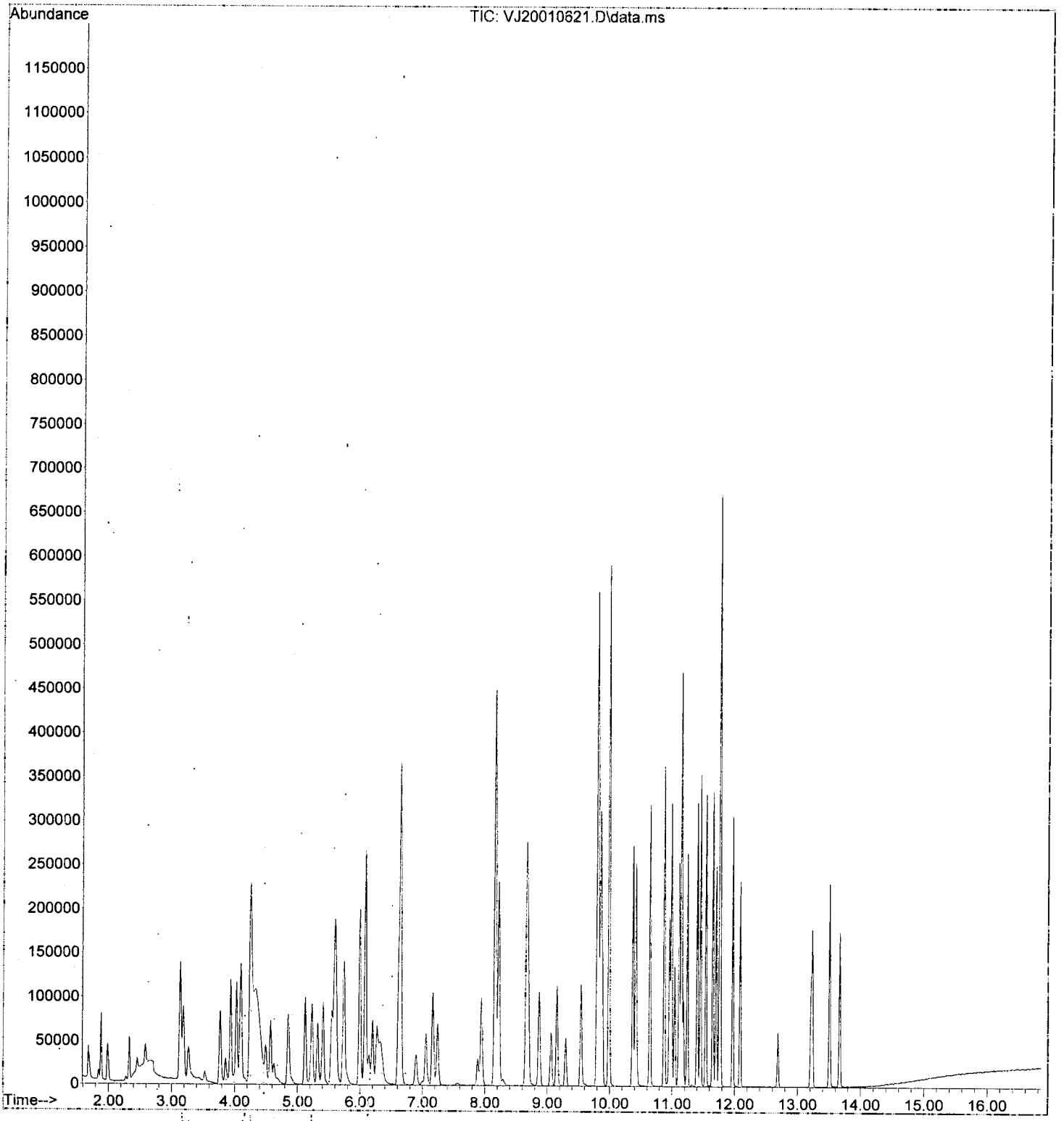
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	67947	20.00	ug/L		96
50) 1,1,2-Trichloroethane	8.870	97	42261	20.00	ug/L		96
51) Dibromochloromethane	9.058	129	38652	20.00	ug/L		99
52) 1,3-Dichloropropane	9.155	76	73561	20.00	ug/L		98
53) 1,2-Dibromoethane (EDB)	9.295	107	42367	20.00	ug/L		94
54) 2-Hexanone	9.539	43	86807	40.00	ug/L		96
55) Chlorobenzene	9.819	112	122718	20.00	ug/L		97
56) Ethylbenzene	9.849	91	213322	20.00	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	41303	20.00	ug/L		98
58) m,p-Xylenes (2)	9.989	91	316584	40.00	ug/L		98
59) o-Xylene	10.372	91	148399	20.00	ug/L		95
60) Styrene	10.415	104	105595	20.00	ug/L		97
61) Bromoform	10.433	173	27653	20.00	ug/L		97
62) Isopropylbenzene	10.646	105	187864	20.00	ug/L		98
65) Bromobenzene	10.956	156	46956	20.00	ug/L	#	84
66) n-Propylbenzene	10.987	91	224394	20.00	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.041	83	57542	20.00	ug/L		98
68) 2-Chlorotoluene	11.114	126	42921	20.00	ug/L		96
69) 1,3,5-Trimethylbenzene	11.151	105	161340	20.00	ug/L		95
70) 1,2,3-Trichloropropane	11.145	110	21237	20.00	ug/L		94
71) t-1,4-Dichloro-2-butene	11.181	88	8711	20.00	ug/L	#	86
72) 4-Chlorotoluene	11.242	91	132335	20.00	ug/L		95
73) tert-Butylbenzene	11.400	91	85895	20.00	ug/L		94
74) 1,2,4-Trimethylbenzene	11.455	105	161792	20.00	ug/L		98
75) sec-Butylbenzene	11.540	105	191481	20.00	ug/L		98
76) 4-Isopropyltoluene	11.650	119	159437	20.00	ug/L		98
77) 1,3-Dichlorobenzene	11.704	146	87350	20.00	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	86262	20.00	ug/L		96
79) n-Butylbenzene	11.966	91	137345	20.00	ug/L		96
80) 1,2-Dichlorobenzene	12.088	146	79965	20.00	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	14277	20.00	ug/L		84
82) Hexachlorobutadiene	13.213	223	12808	20.00	ug/L		94
83) 1,2,4-Trichlorobenzene	13.231	180	48617	20.00	ug/L		95
84) Naphthalene	13.505	128	169409	20.00	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	51239	20.00	ug/L		97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 15:00:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene (I)	6.083	99	108585	50.00	ug/L		0.00	
43) Chlorobenzene-d5 (I)	9.800	117	257589	50.00	ug/L		0.00	
63) 1,4-Dichlorobenzene-d4...	11.759	152	120591	50.00	ug/L		0.00	
System Monitoring Compounds								
30) Dibromofluoromethane (S)	5.590	111	85376	50.00	ug/L		0.00	
37) 1,4-Difluorobenzene (S)	6.643	114	312074	50.00	ug/L		0.00	
45) Toluene-d8 (S)	8.164	98	363051	50.00	ug/L		0.00	
64) 4-Bromofluorobenzene (S)	10.877	174	93096	50.00	ug/L		0.00	
Target Compounds							Qvalue	
2) Dichlorodifluoromethane	1.685	85	38529	20.00	ug/L		99	
3) Chloromethane	1.886	50	58016	20.00	ug/L		98	
4) Vinyl Chloride	1.989	62	46537	20.00	ug/L		94	
5) Bromomethane	2.330	96	24661	20.00	ug/L		99	
6) Chloroethane	2.457	64	10213	20.00	ug/L		93	
7) Trichlorofluoromethane	2.585	101	16168	20.00	ug/L		94	
8) Ethanol	3.267	45	~~71306~~	~~1082.69~~	~~ug/L~~		~~92~~	MI
9) 1,1-Dichloroethene	3.133	61	50753	20.00	ug/L		94	
10) Carbon Disulfide	3.145	76	88914	20.00	ug/L		97	
11) Freon 113	3.187	101	39592	20.00	ug/L		99	
12) Iodomethane	3.285	142	7988	20.00	ug/L		87	
13) Methylene Chloride	3.772	84	43446	20.00	ug/L		98	
14) Acetone	3.857	43	~~40619~~	~~31.66~~	~~ug/L~~		~~99~~	MI
15) t-1,2-Dichloroethene	3.936	61	63531	20.00	ug/L		98	
16) n-Hexane	4.033	86	10258	20.00	ug/L	#	89	
17) Methyl-tert-butyl-ether	4.100	73	157914	20.00	ug/L		83	
18) tert-Butanol (TBA)	4.252	59	~~411048~~	~~632.87~~	~~ug/L~~	#	~~92~~	MI
19) Diisopropyl ether (DIPE)	4.495	45	37517	5.00	ug/L		96	
20) 1,1-Dichloroethane	4.575	63	74578	20.00	ug/L		98	
21) Acrylonitrile	4.629	53	~~23575~~	~~16.28~~	~~ug/L~~		~~98~~	MI
22) Ethyl-tert-butyl ether...	4.860	59	36823	5.00	ug/L		97	
23) c-1,2-Dichloroethene	5.122	61	62311	20.00	ug/L		99	
24) 2,2-Dichloropropane	5.232	77	68911	20.00	ug/L		98	
25) Bromochloromethane	5.317	49	37485	20.00	ug/L		91	
26) Chloroform	5.408	83	81758	20.00	ug/L		96	
27) Carbon Tetrachloride	5.548	117	59324	20.00	ug/L		97	
28) Tetrahydrofuran	5.578	42	26681	20.00	ug/L		92	
29) 1,1,1-Trichloroethane	5.615	97	77869	20.00	ug/L		97	
31) 1,1-Dichloropropene	5.743	75	65020	20.00	ug/L		93	
32) 2-Butanone (MEK)	5.724	43	80360	40.00	ug/L		99	
33) Benzene	5.998	78	199822	20.00	ug/L		99	
34) tert-Amyl methyl ether...	6.150	73	31171	5.00	ug/L		100	
35) 1,2-Dichloroethane (EDC)	6.199	62	71205	20.00	ug/L		98	
36) iso-Butyl Alcohol	6.272	43	~~55196~~	~~248.75~~	~~ug/L~~		~~90~~	MI
38) Trichloroethene (TCE)	6.613	130	48339	20.00	ug/L		93	
39) tert-Amyl ethyl ether ...	6.898	59	22830	5.00	ug/L		94	
40) Dibromomethane	7.057	93	28602	20.00	ug/L		93	
41) 1,2-Dichloropropane	7.166	63	46552	20.00	ug/L		93	
42) Bromodichloromethane	7.239	83	57072	20.00	ug/L		98	
44) c-1,3-Dichloropropene	7.945	75	69513	20.00	ug/L		99	
46) Toluene	8.219	91	202797	20.00	ug/L		99	
47) Tetrachloroethene (PCE)	8.669	166	49335	20.00	ug/L		94	
48) 4-Methyl-2-Pentanone (...	8.663	43	120371	40.00	ug/L		98	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	67947	20.00	ug/L		96
50) 1,1,2-Trichloroethane	8.870	97	42261	20.00	ug/L		96
51) Dibromochloromethane	9.058	129	38652	20.00	ug/L		99
52) 1,3-Dichloropropane	9.155	76	73561	20.00	ug/L		98
53) 1,2-Dibromoethane (EDB)	9.295	107	42367	20.00	ug/L		94
54) 2-Hexanone	9.539	43	86807	40.00	ug/L		96
55) Chlorobenzene	9.819	112	122718	20.00	ug/L		97
56) Ethylbenzene	9.849	91	213322	20.00	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.879	131	41303	20.00	ug/L		98
58) m,p-Xylenes (2)	9.989	91	316584	40.00	ug/L		98
59) o-Xylene	10.372	91	148399	20.00	ug/L		95
60) Styrene	10.415	104	105595	20.00	ug/L		97
61) Bromoform	10.433	173	27653	20.00	ug/L		97
62) Isopropylbenzene	10.646	105	187864	20.00	ug/L		98
65) Bromobenzene	10.956	156	46956	20.00	ug/L	#	84
66) n-Propylbenzene	10.987	91	224394	20.00	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.041	83	57542	20.00	ug/L		98
68) 2-Chlorotoluene	11.114	126	42921	20.00	ug/L		96
69) 1,3,5-Trimethylbenzene	11.151	105	161340	20.00	ug/L		95
70) 1,2,3-Trichloropropane	11.145	110	21237	20.00	ug/L		94
71) t-1,4-Dichloro-2-butene	11.181	88	8711	20.00	ug/L	#	86
72) 4-Chlorotoluene	11.242	91	132335	20.00	ug/L		95
73) tert-Butylbenzene	11.400	91	85895	20.00	ug/L		94
74) 1,2,4-Trimethylbenzene	11.455	105	161792	20.00	ug/L		98
75) sec-Butylbenzene	11.540	105	191481	20.00	ug/L		98
76) 4-Isopropyltoluene	11.650	119	159437	20.00	ug/L		98
77) 1,3-Dichlorobenzene	11.704	146	87350	20.00	ug/L		98
78) 1,4-Dichlorobenzene	11.771	146	86262	20.00	ug/L		96
79) n-Butylbenzene	11.966	91	137345	20.00	ug/L		96
80) 1,2-Dichlorobenzene	12.088	146	79965	20.00	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.690	157	14277	20.00	ug/L		84
82) Hexachlorobutadiene	13.213	223	12808	20.00	ug/L		94
83) 1,2,4-Trichlorobenzene	13.231	180	48617	20.00	ug/L		95
84) Naphthalene	13.505	128	169409	20.00	ug/L		98
85) 1,2,3-Trichlorobenzene	13.669	180	51239	20.00	ug/L		97

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

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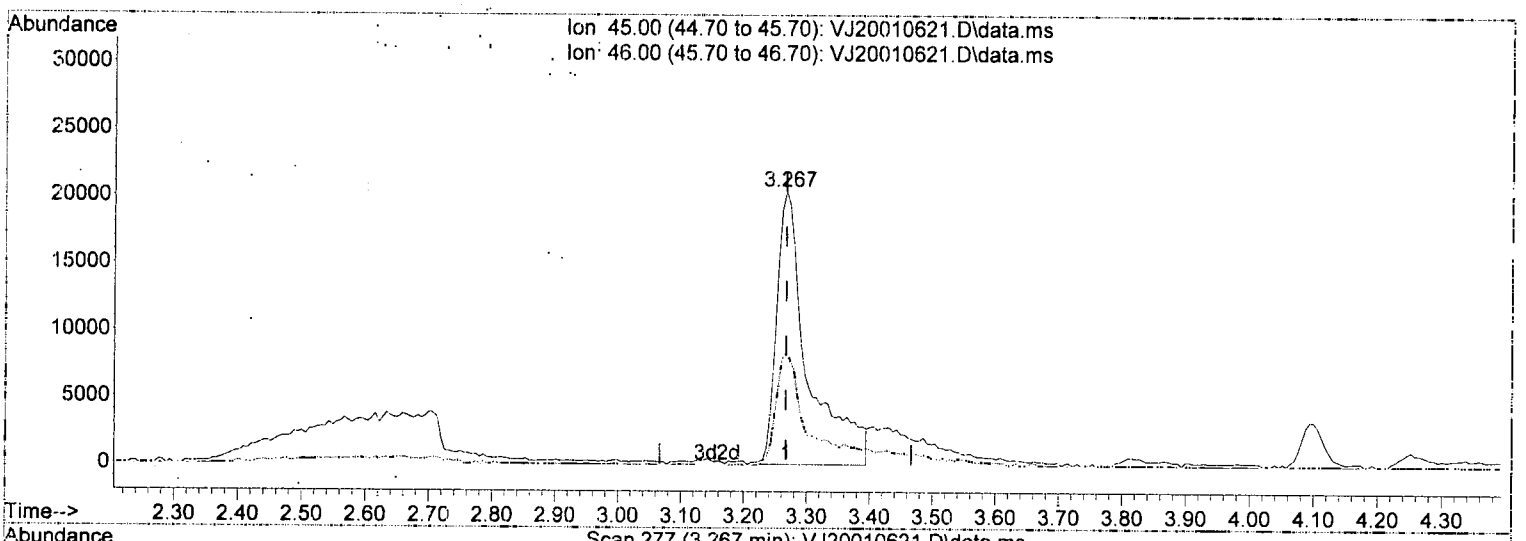
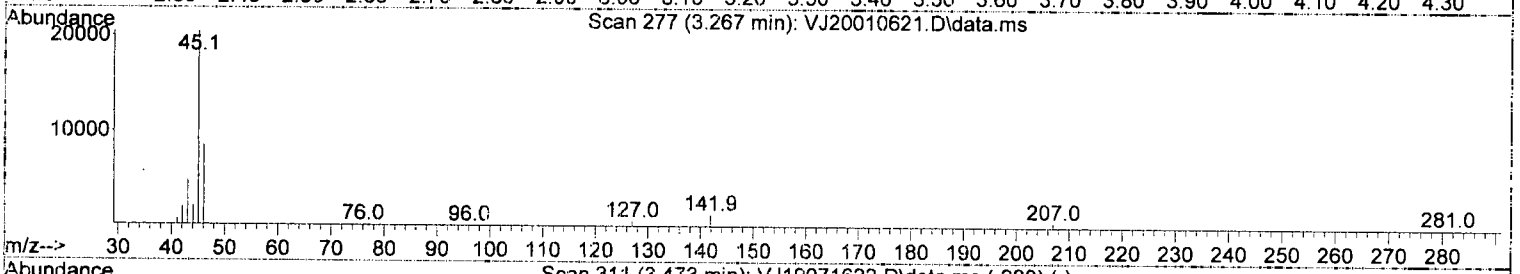
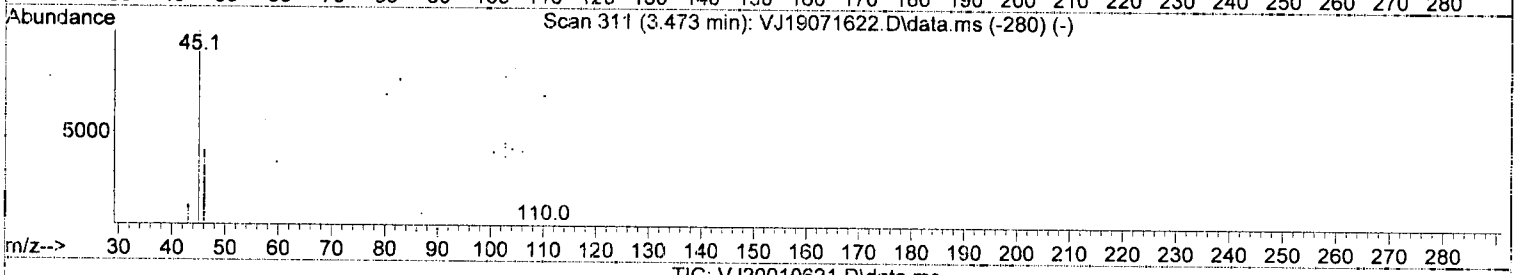
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(8) Ethanol

3.267min (+ 0.001) 1082.69 ug/L

response 71306

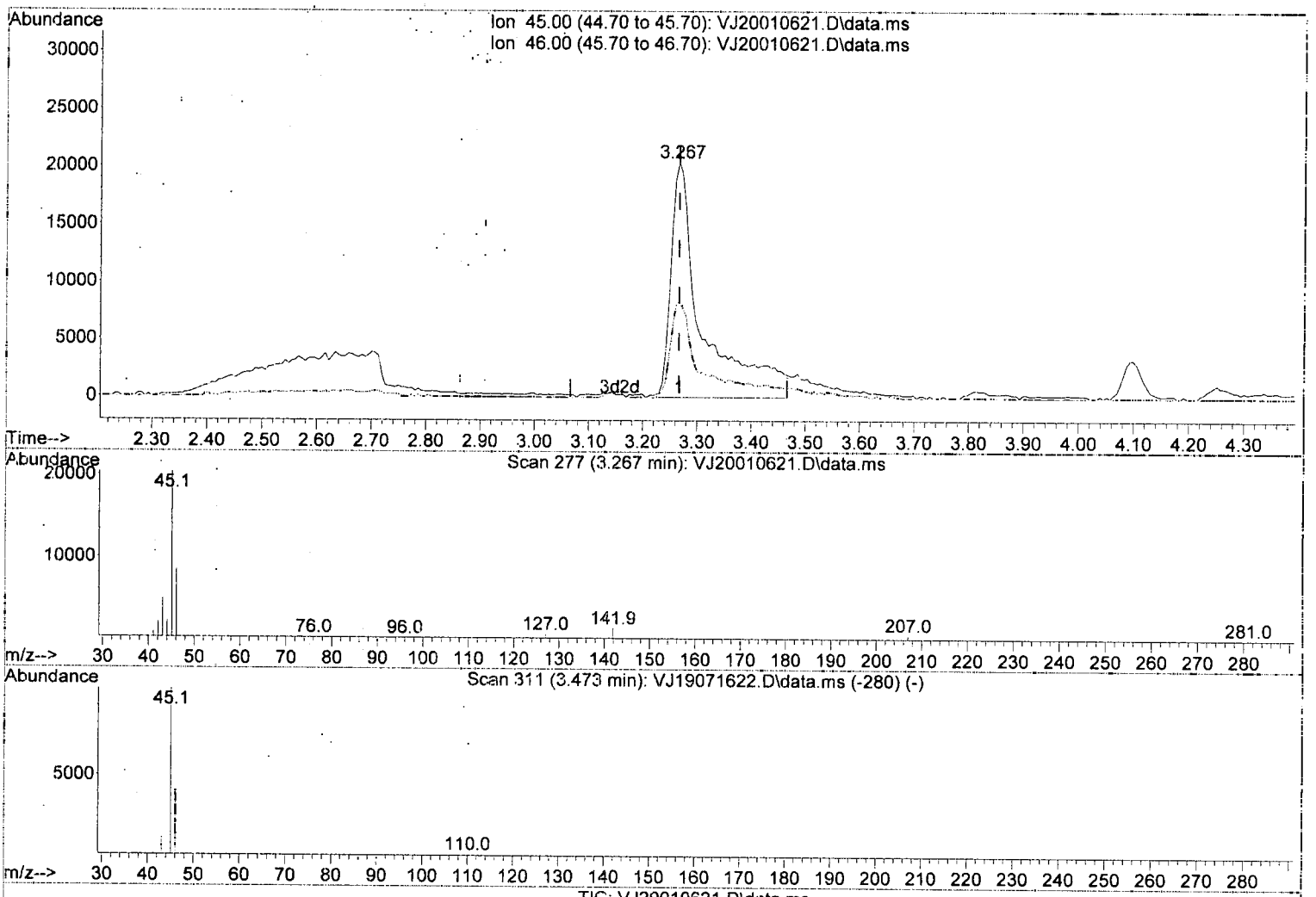
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	41.81
0.00	0.00	0.00
0.00	0.00	0.00

MI

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



TIC: VJ20010621.D\data.ms

(8) Ethanol

3.267min (+ 0.001) 1250.88 ug/L (m)

response 82383

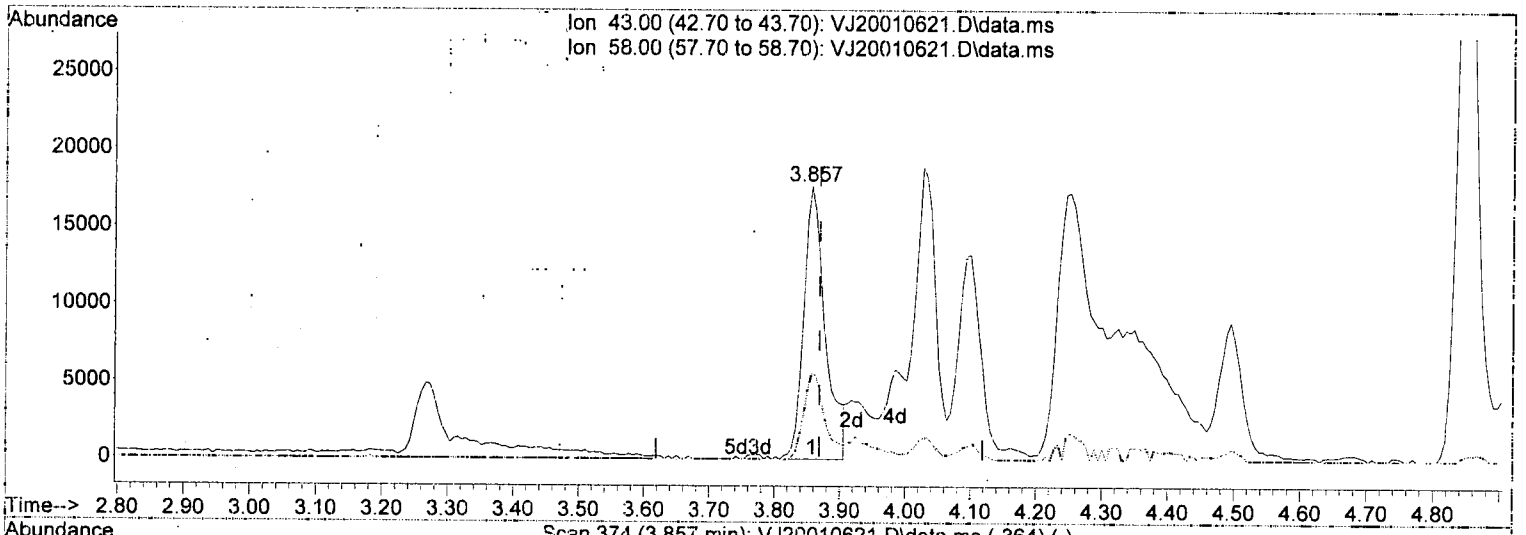
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	41.81
0.00	0.00	0.00
0.00	0.00	0.00

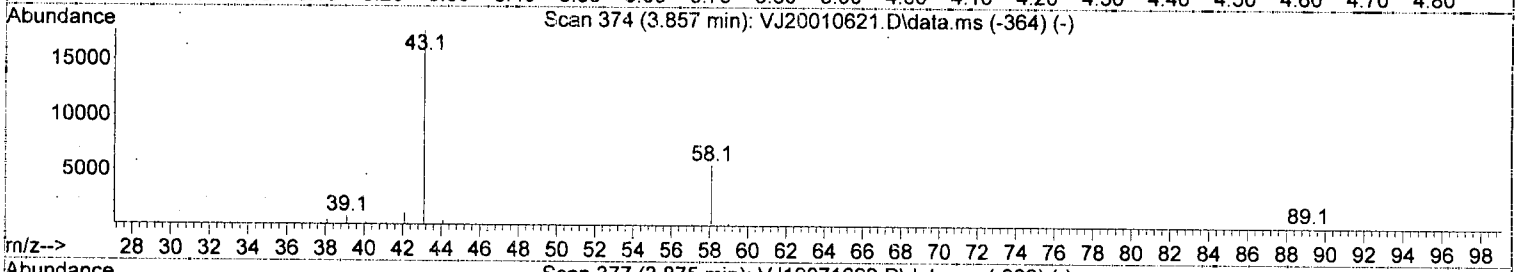
1/7/20

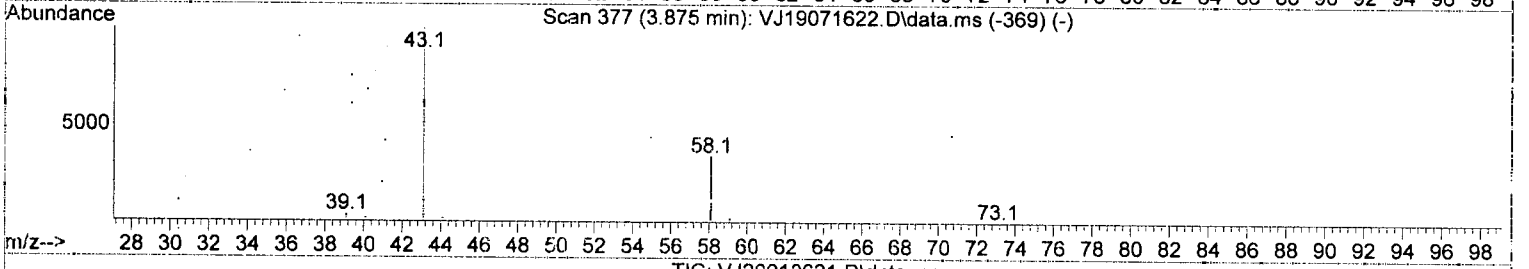
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL; 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(14) Acetone

3.857min (-0.011) 31.66 ug/L

response 40619

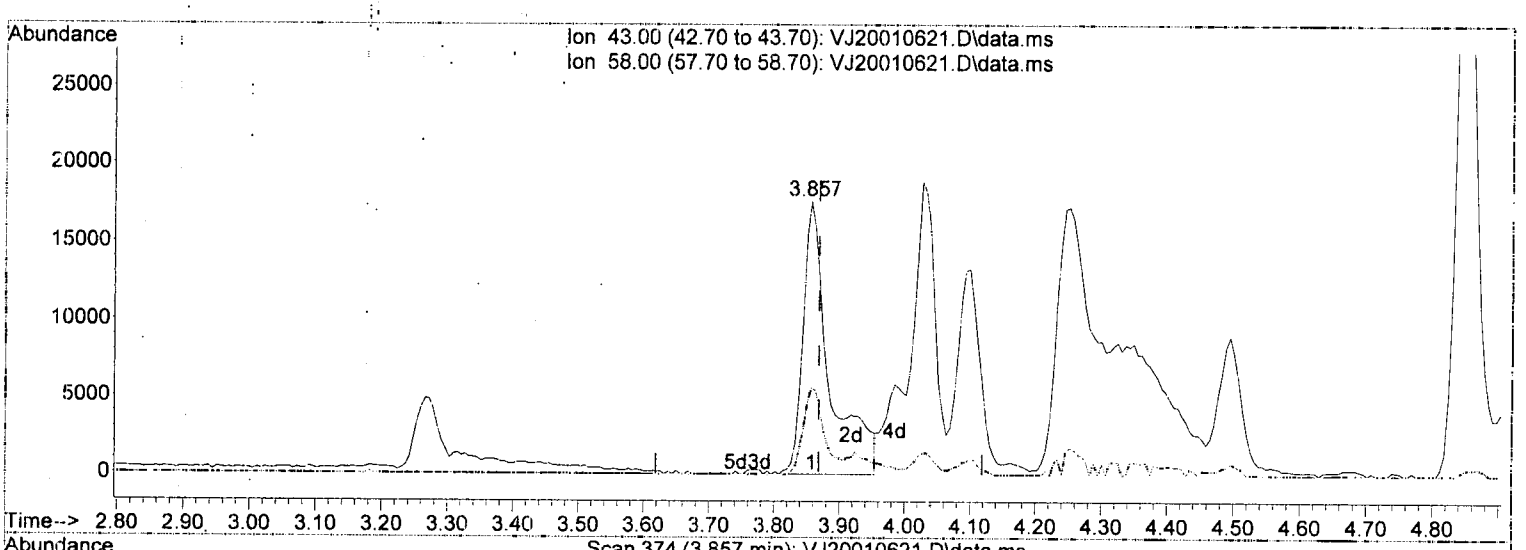
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.68
0.00	0.00	0.00
0.00	0.00	0.00

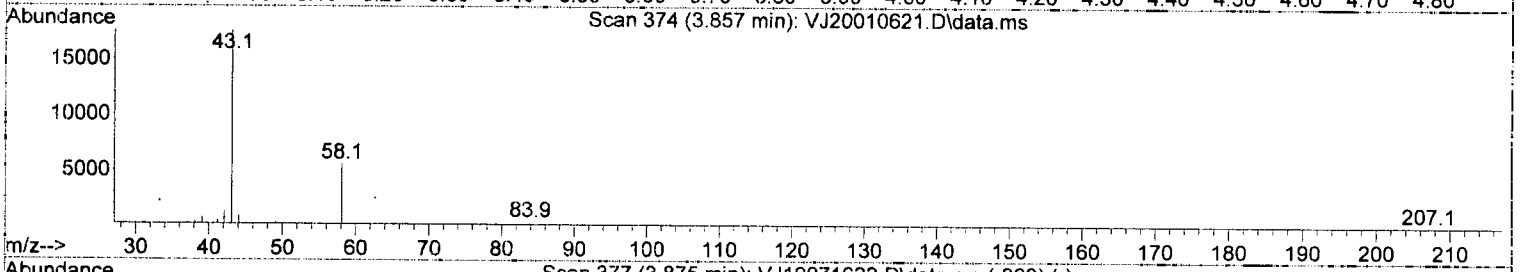
MI

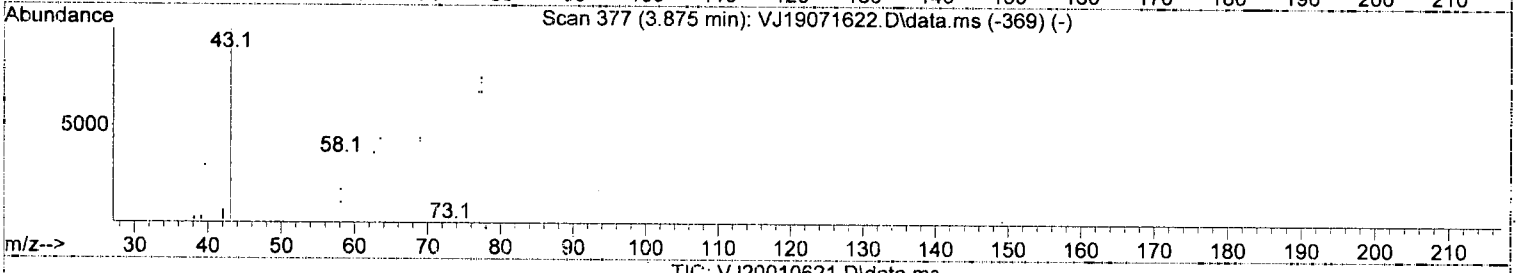
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL; 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(14) Acetone

3.857min (-0.011) 39.24 ug/L m

response 50344

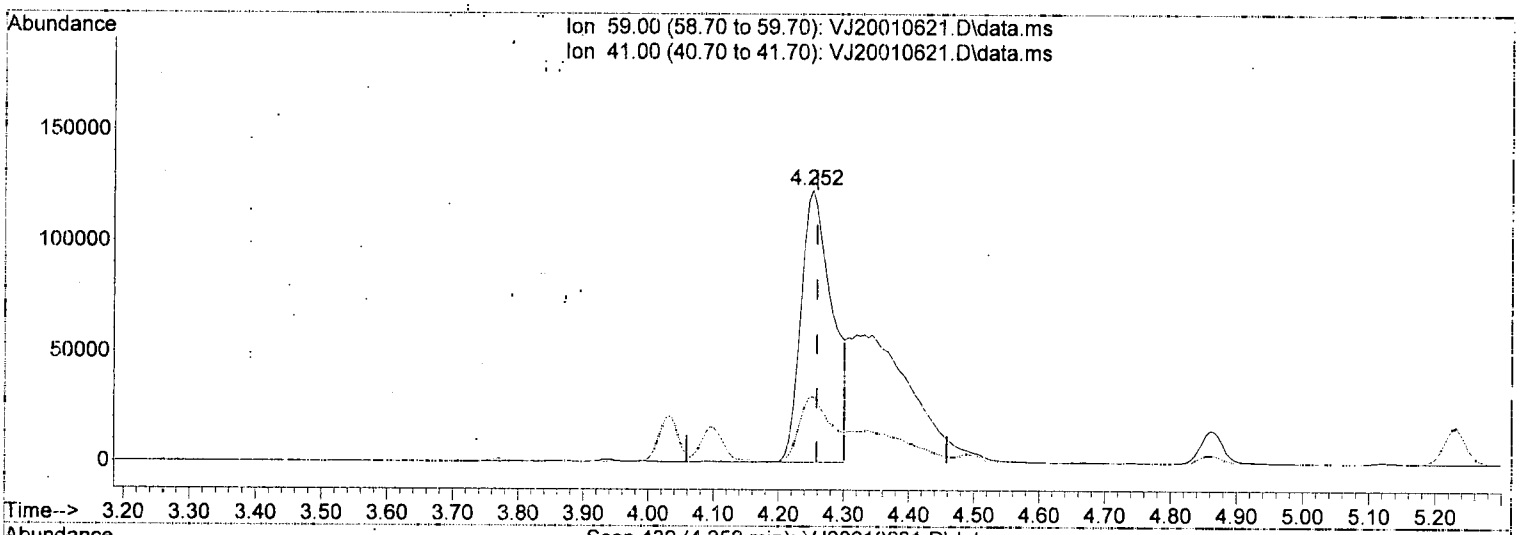
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.68
0.00	0.00	0.00
0.00	0.00	0.00

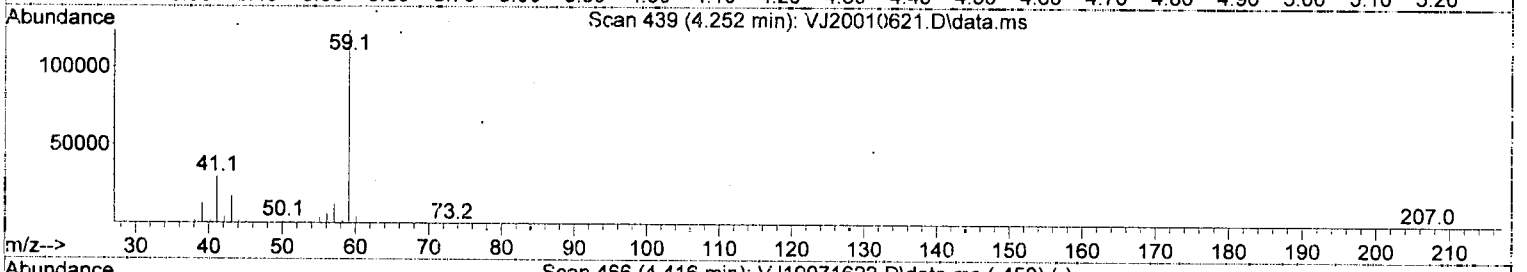
1/7/20

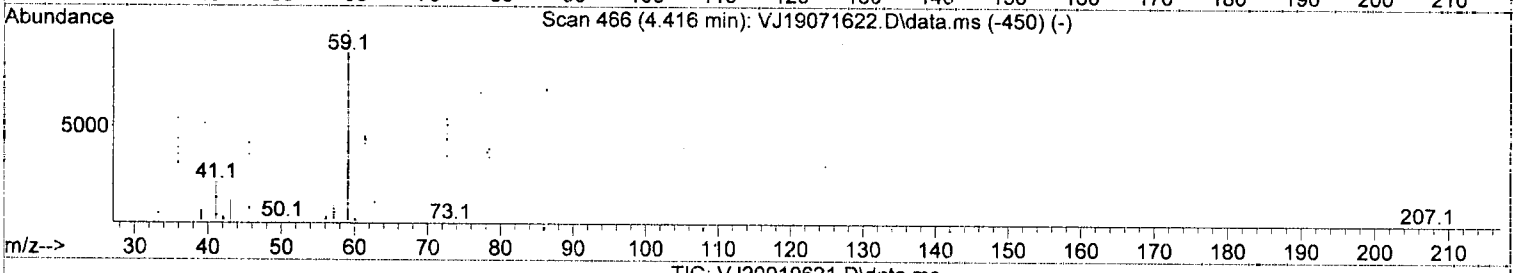
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 632.87 ug/L

response 411048

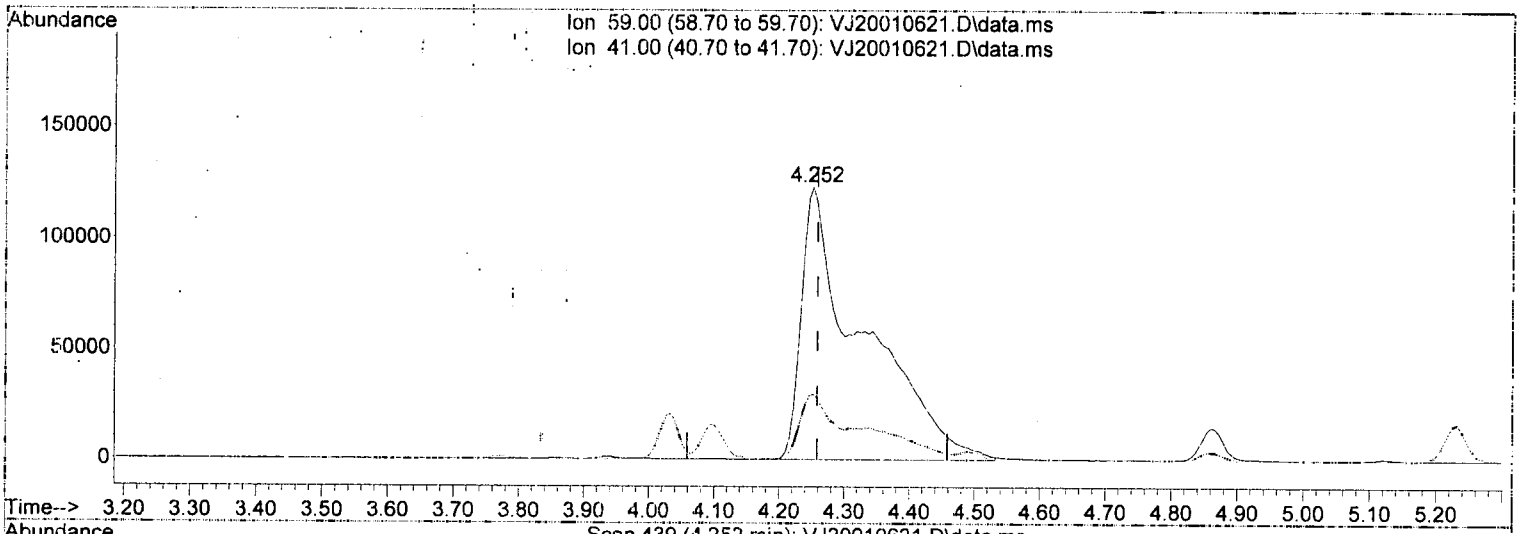
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	24.32#
0.00	0.00	0.00
0.00	0.00	0.00

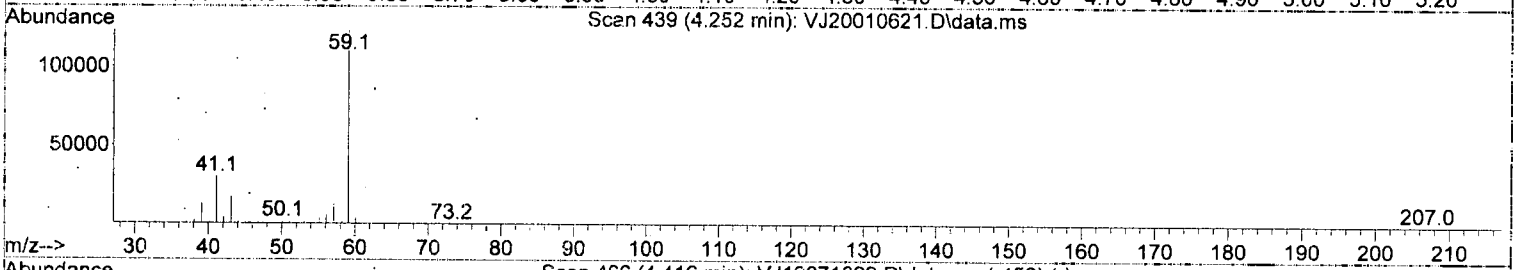
MI

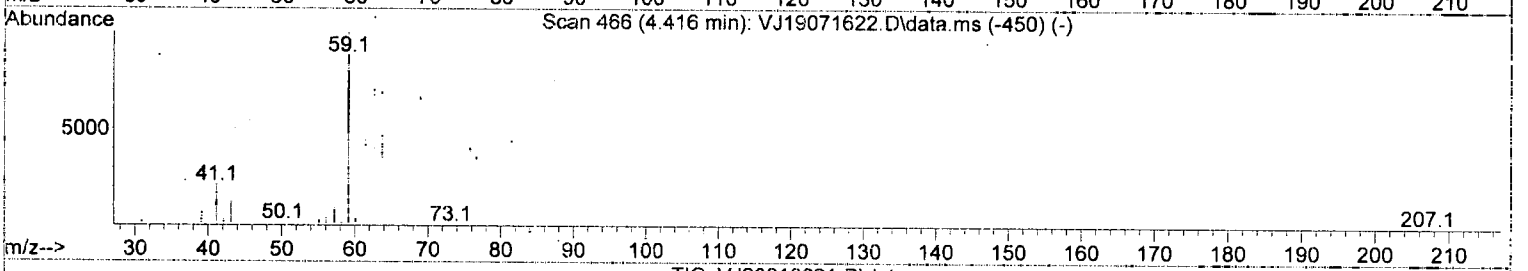
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 1248.06 ug/L (m)

response 810615

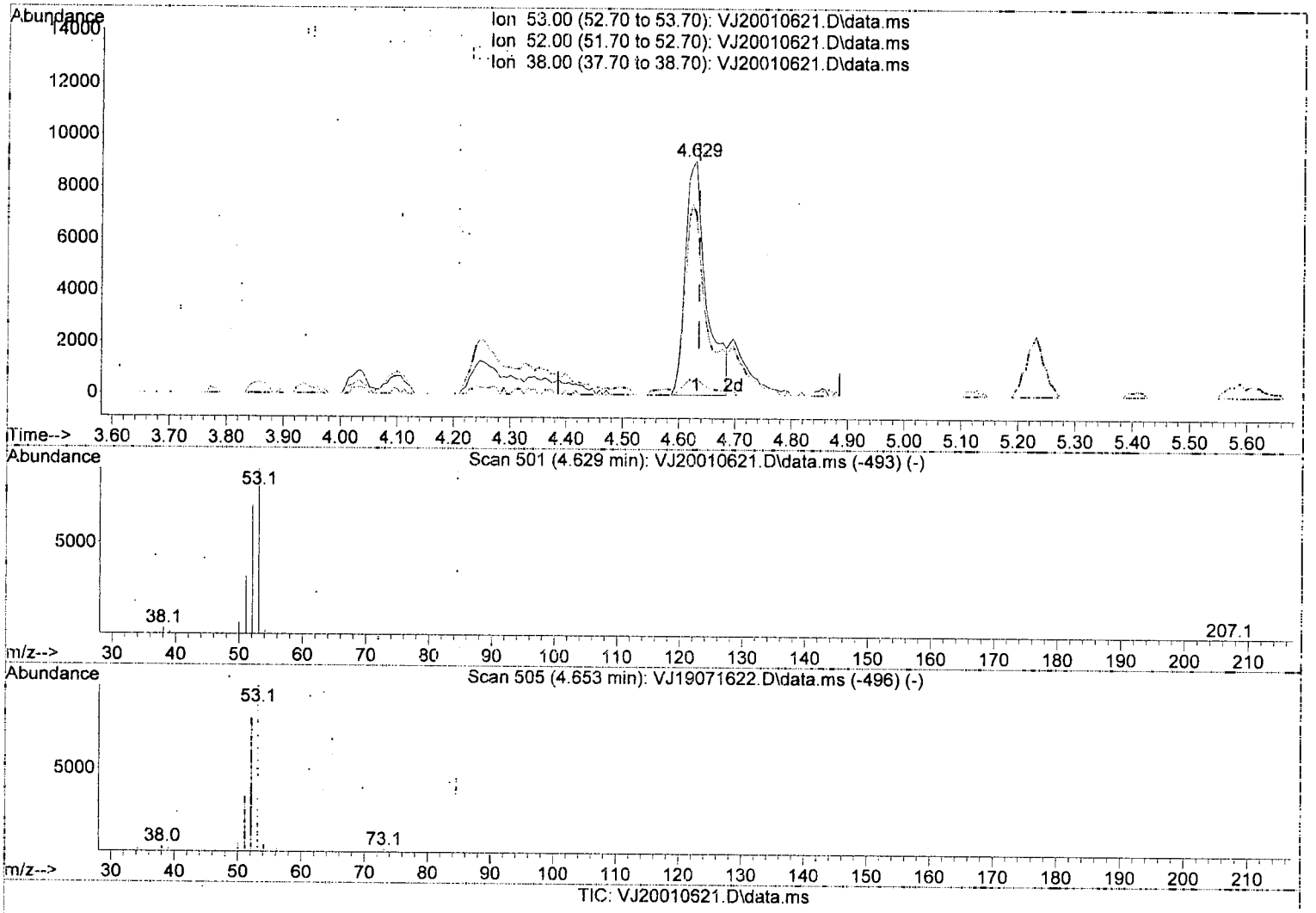
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	24.32#
0.00	0.00	0.00
0.00	0.00	0.00

1/7/20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



TIC: VJ20010621.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 16.28 ug/L

response 23575

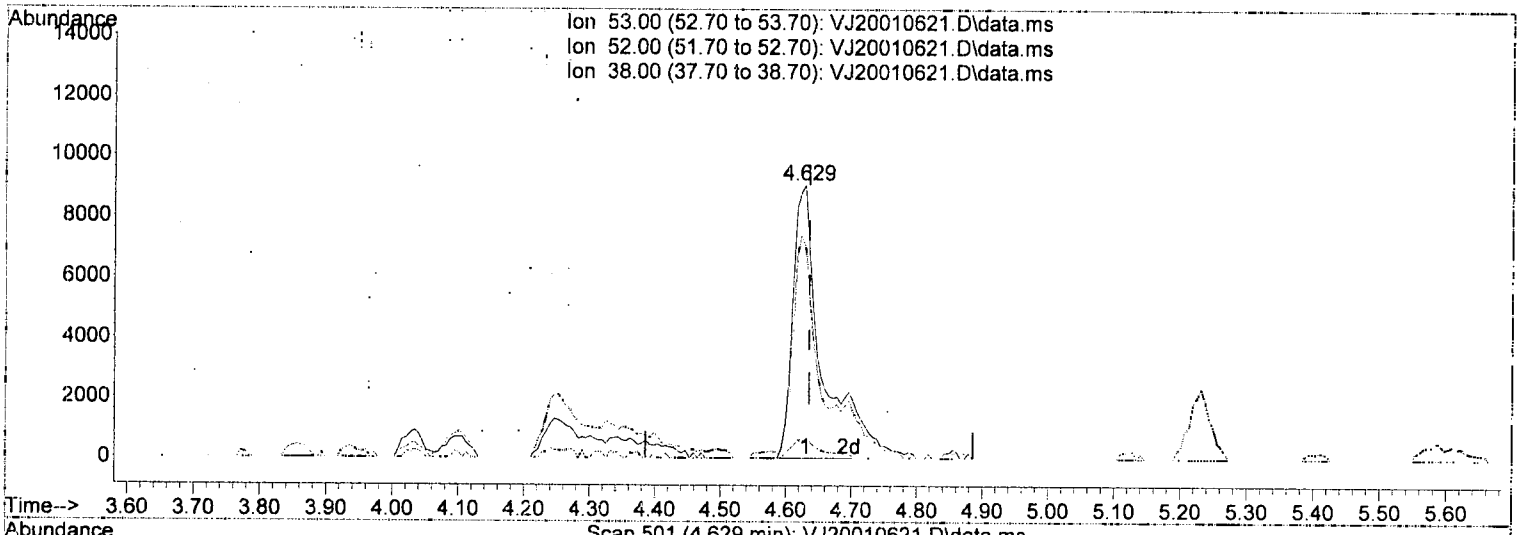
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.69
38.00	5.50	4.50
0.00	0.00	0.00

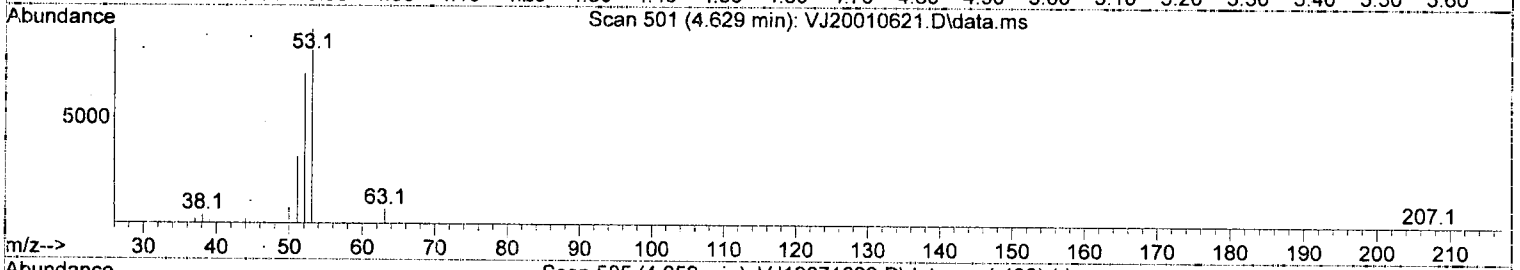
MI

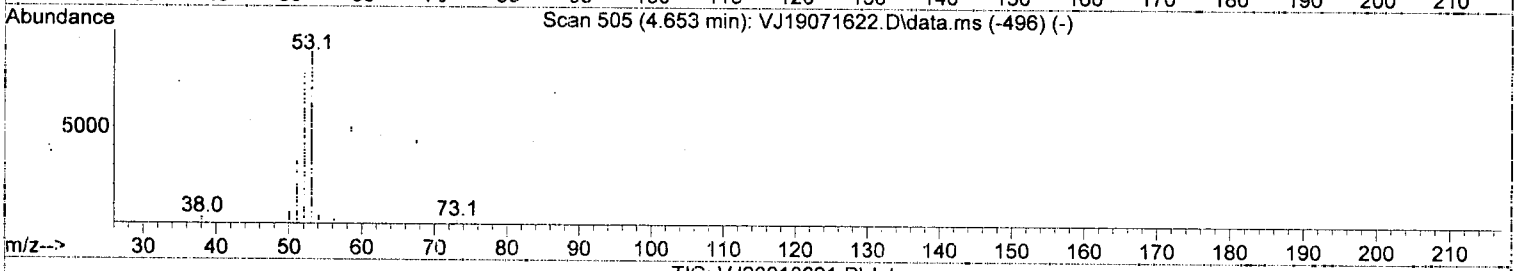
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 20.00 ug/L m

response 28955

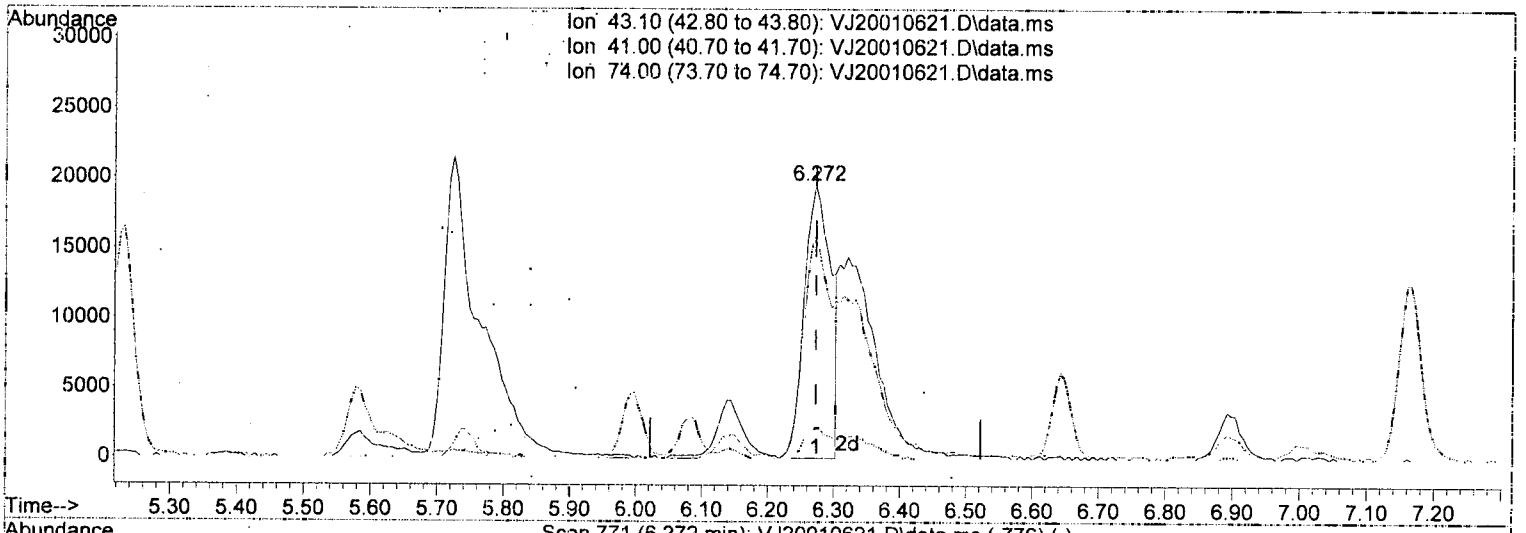
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.69
38.00	5.50	6.49
0.00	0.00	0.00

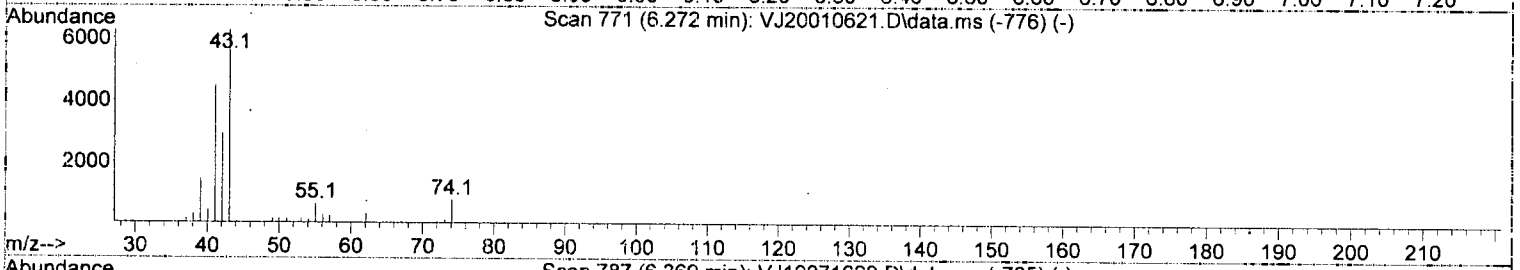
1/7/20

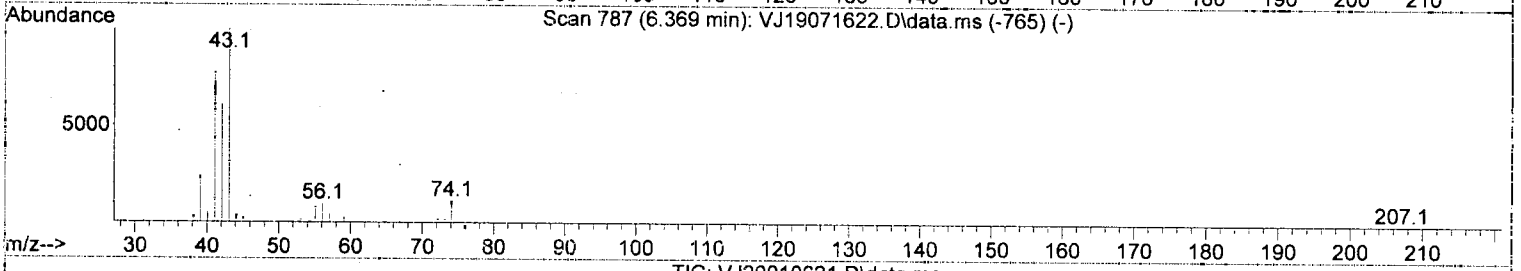
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(36) iso-Butyl Alcohol

6.272min (+ 0.000) 248.75 ug/L

response 55196

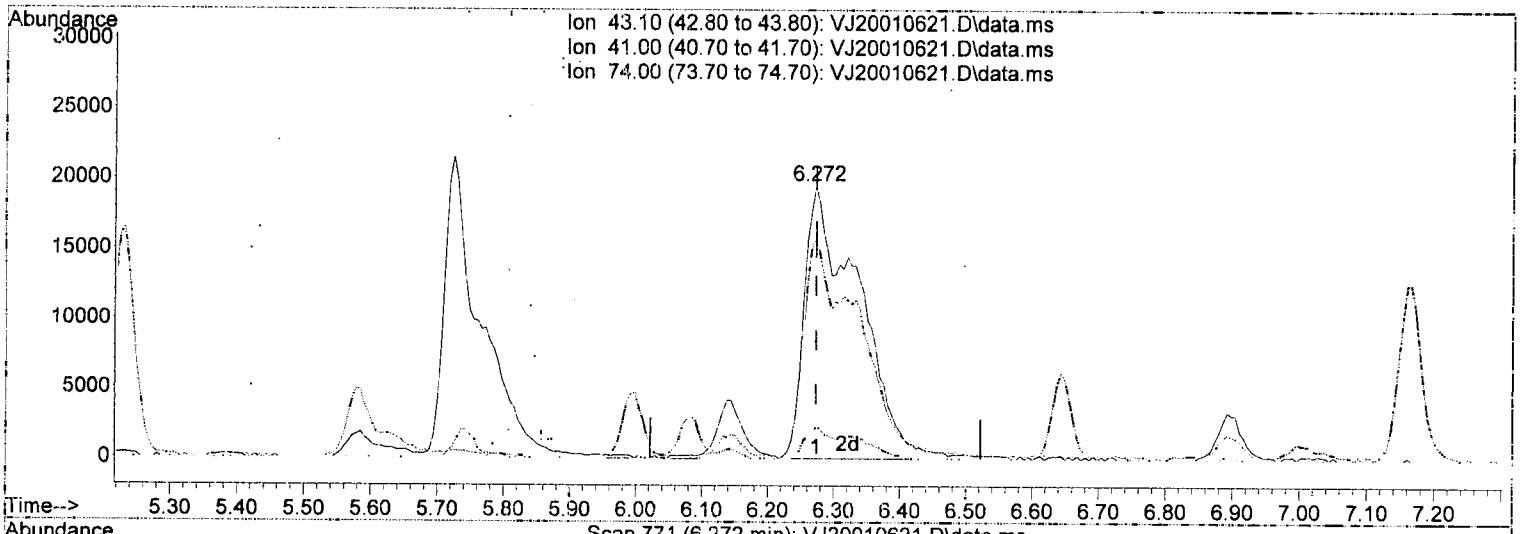
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	80.95
74.00	11.60	11.26
0.00	0.00	0.00

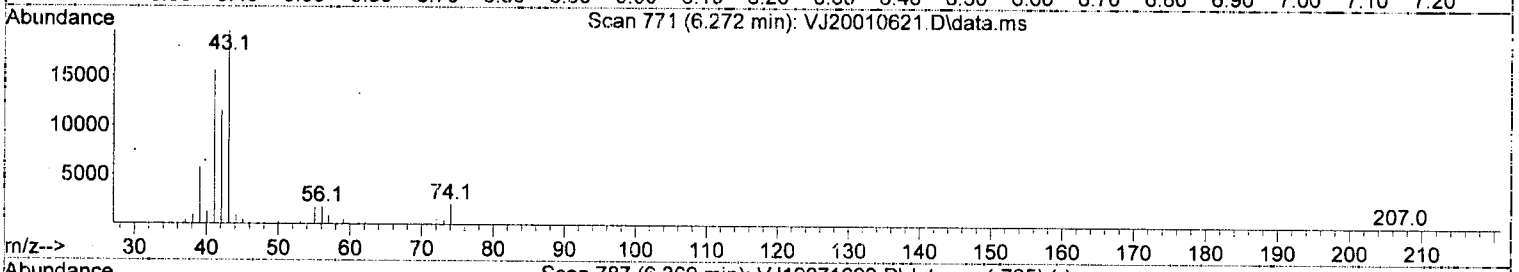
MI

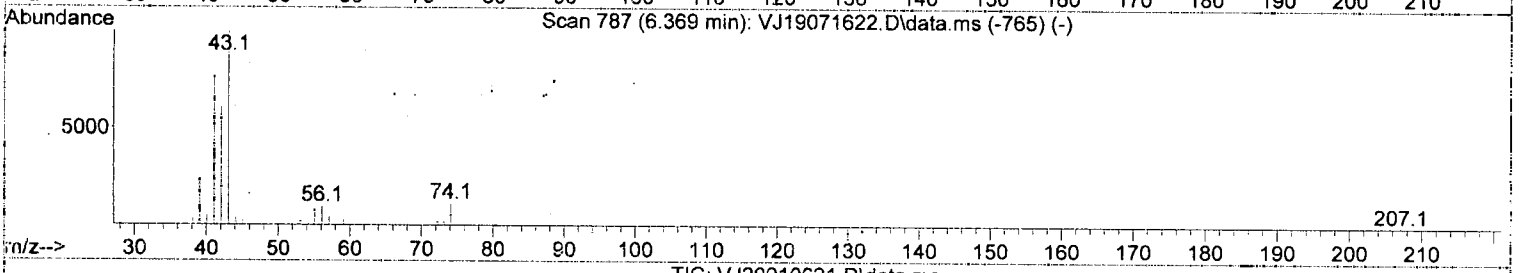
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010621.D\data.ms

(36) iso-Butyl Alcohol

6.272min (+ 0.000) 499.50 ug/L (m)

11/7/20

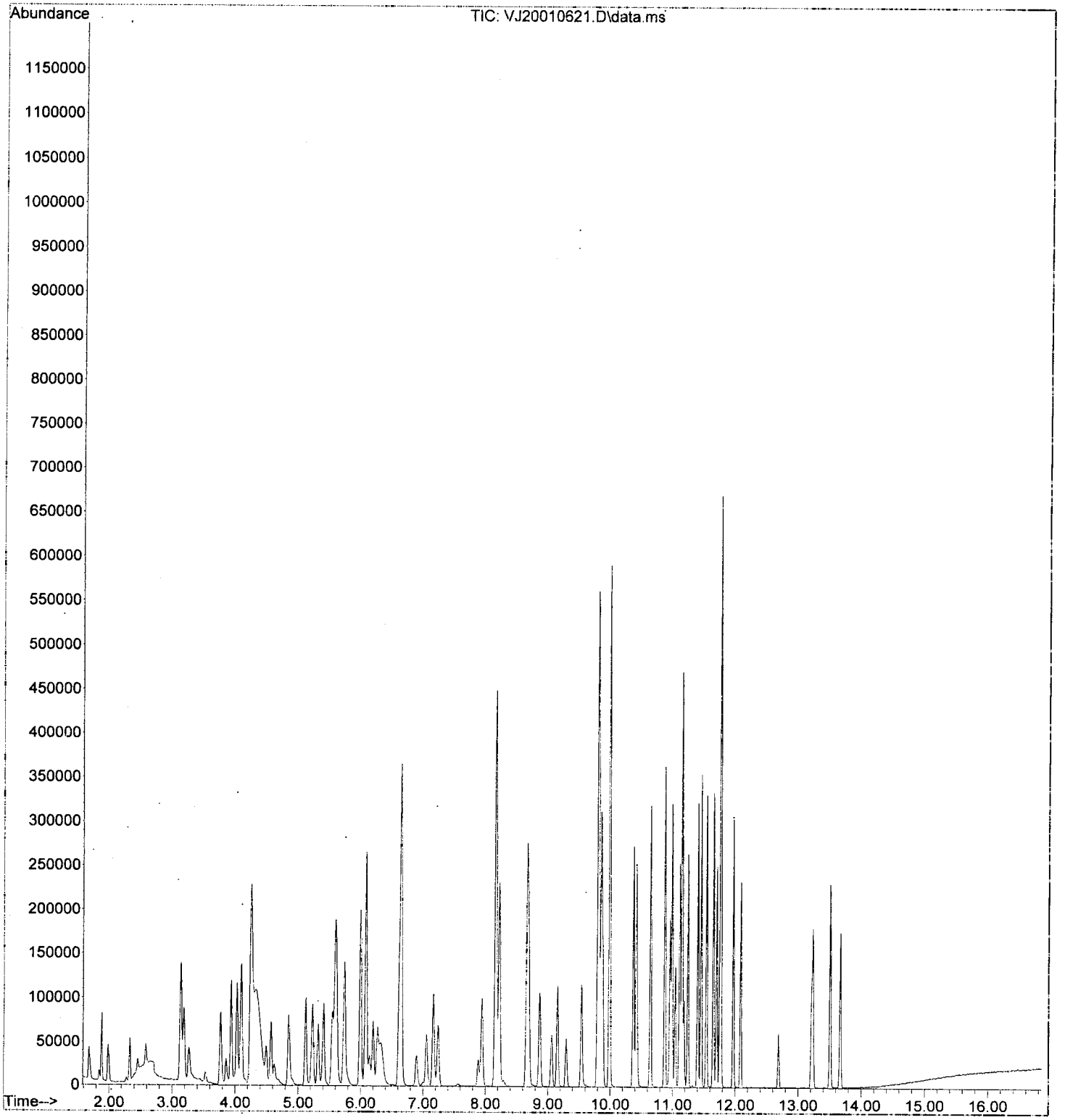
response 110835

Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	80.95
74.00	11.60	11.26
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010621.D
Acq On : 6 Jan 2020 8:20 pm
Operator : tb
Sample : 0A06051-CAL8
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

1/7/20

Quant Time: Jan 07 15:01:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	109944	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	263462	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	127339	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88107	50.96	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	323337	51.16	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366647	49.37	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	98126	49.91	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	133544	68.46	ug/L		98
3) Chloromethane	1.885	50	167097	56.89	ug/L		99
4) Vinyl Chloride	1.989	62	134342	57.02	ug/L		94
5) Bromomethane	2.336	96	56169	44.99	ug/L		96
6) Chloroethane	2.457	64	30532	59.05	ug/L		98
7) Trichlorofluoromethane	2.591	101	45598	55.71	ug/L		100
8) Ethanol	3.273	45	170551m	2557.59	ug/L		
9) 1,1-Dichloroethene	3.133	61	135159	52.60	ug/L		97
10) Carbon Disulfide	3.145	76	244493	54.32	ug/L		98
11) Freon 113	3.187	101	103618	51.70	ug/L		99
12) Iodomethane	3.291	142	29149	72.08	ug/L		92
13) Methylene Chloride	3.771	84	110204	50.10	ug/L		98
14) Acetone	3.857	43	142899m	110.00	ug/L		
15) t-1,2-Dichloroethene	3.942	61	165597	51.49	ug/L		98
16) n-Hexane	4.033	86	28595	55.06	ug/L		94
17) Methyl-tert-butyl-ether	4.100	73	417641	52.24	ug/L		73
18) tert-Butanol (TBA)	4.252	59	1662623	2528.20	ug/L	#	89
19) Diisopropyl ether (DIPE)	4.495	45	71778	9.45	ug/L		98
20) 1,1-Dichloroethane	4.574	63	199104	52.73	ug/L		99
21) Acrylonitrile	4.623	53	76346	52.08	ug/L		93
22) Ethyl-tert-butyl ether...	4.866	59	67581	9.06	ug/L		96
23) c-1,2-Dichloroethene	5.122	61	163860	51.94	ug/L		99
24) 2,2-Dichloropropane	5.231	77	178479	51.16	ug/L		100
25) Bromochloromethane	5.323	49	96440	50.82	ug/L		96
26) Chloroform	5.408	83	212235	51.28	ug/L		97
27) Carbon Tetrachloride	5.548	117	163003	54.27	ug/L		96
28) Tetrahydrofuran	5.578	42	71504	52.94	ug/L		96
29) 1,1,1-Trichloroethane	5.615	97	203751	51.68	ug/L		98
31) 1,1-Dichloropropene	5.742	75	173054	52.57	ug/L		95
32) 2-Butanone (MEK)	5.724	43	212809	104.62	ug/L		99
33) Benzene	5.998	78	519107	51.31	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	61806	9.79	ug/L		100
35) 1,2-Dichloroethane (EDC)	6.199	62	182611	50.66	ug/L		98
36) iso-Butyl Alcohol	6.272	43	313482	1395.31	ug/L		96
38) Trichloroethene (TCE)	6.612	130	127363	52.04	ug/L		98
39) tert-Amyl ethyl ether ...	6.898	59	46132	9.98	ug/L		90
40) Dibromomethane	7.056	93	74740	51.62	ug/L		93
41) 1,2-Dichloropropane	7.166	63	124220	52.71	ug/L		94
42) Bromodichloromethane	7.239	83	156309	54.10	ug/L		98
44) c-1,3-Dichloropropene	7.945	75	179213	50.41	ug/L		100
46) Toluene	8.218	91	527429	50.86	ug/L		99
47) Tetrachloroethene (PCE)	8.669	166	128862	51.08	ug/L		93
48) 4-Methyl-2-Pentanone (...	8.663	43	335118	108.88	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 15:01:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

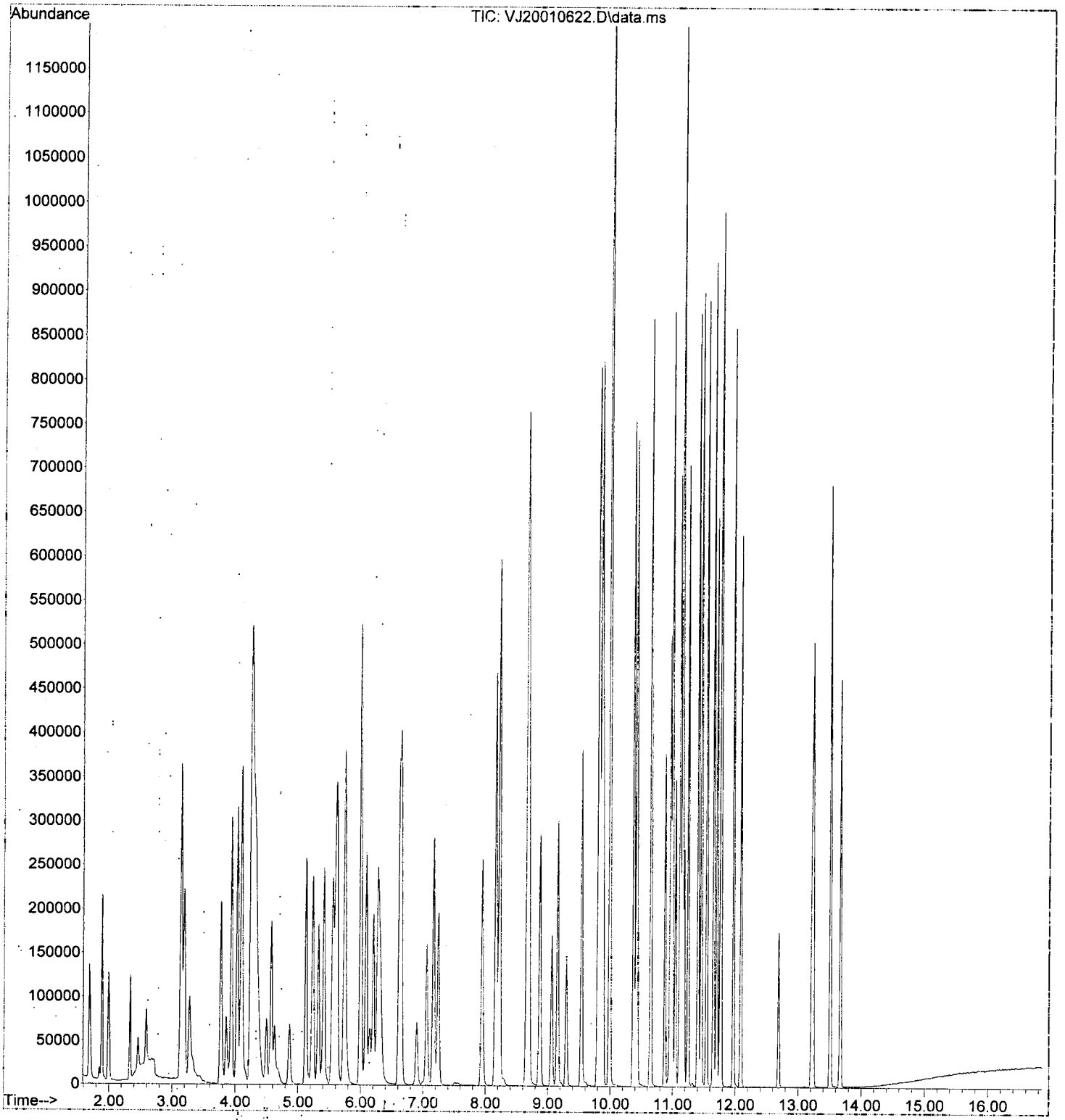
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	181998	52.38	ug/L	98
50) 1,1,2-Trichloroethane	8.869	97	108807	50.36	ug/L	97
51) Dibromochloromethane	9.058	129	107752	54.51	ug/L	98
52) 1,3-Dichloropropane	9.155	76	197608	52.53	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	115102	53.12	ug/L	97
54) 2-Hexanone	9.539	43	255220	114.98	ug/L	99
55) Chlorobenzene	9.812	112	316184	50.38	ug/L	97
56) Ethylbenzene	9.849	91	565519	51.84	ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.879	131	111798	52.93	ug/L	99
58) m,p-Xylenes (2)	9.989	91	841910	104.00	ug/L	98
59) o-Xylene	10.372	91	410782	54.13	ug/L	96
60) Styrene	10.415	104	305455	56.56	ug/L	97
61) Bromoform	10.433	173	78801	55.72	ug/L	98
62) Isopropylbenzene	10.646	105	518688	53.99	ug/L	98
65) Bromobenzene	10.956	156	125364	50.57	ug/L	87
66) n-Propylbenzene	10.986	91	599088	50.57	ug/L	96
67) 1,1,2,2-Tetrachloroethane	11.041	83	148641	48.93	ug/L	98
68) 2-Chlorotoluene	11.114	126	113827	50.23	ug/L	96
69) 1,3,5-Trimethylbenzene	11.151	105	430440	50.53	ug/L	98
70) 1,2,3-Trichloropropane	11.145	110	55741	49.71	ug/L	89
71) t-1,4-Dichloro-2-butene	11.181	88	25245	54.89	ug/L	92
72) 4-Chlorotoluene	11.242	91	353161	50.55	ug/L	94
73) tert-Butylbenzene	11.400	91	232884	51.35	ug/L	93
74) 1,2,4-Trimethylbenzene	11.455	105	429588	50.29	ug/L	99
75) sec-Butylbenzene	11.540	105	513113	50.75	ug/L	97
76) 4-Isopropyltoluene	11.650	119	441545	52.45	ug/L	98
77) 1,3-Dichlorobenzene	11.704	146	225400	48.87	ug/L	97
78) 1,4-Dichlorobenzene	11.771	146	227356	49.92	ug/L	97
79) n-Butylbenzene	11.966	91	378474	52.19	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	211241	50.03	ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	40894	54.25	ug/L	81
82) Hexachlorobutadiene	13.213	223	33881	50.10	ug/L	96
83) 1,2,4-Trichlorobenzene	13.231	180	136960	53.36	ug/L	97
84) Naphthalene	13.505	128	494428	55.28	ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	140414	51.90	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 15:01:21 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

BB 1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	109944	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	263462	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	127339	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	88107	50.96	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	323337	51.16	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366647	49.37	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	98126	49.91	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	133544	68.46	ug/L		98
3) Chloromethane	1.885	50	167097	56.89	ug/L		99
4) Vinyl Chloride	1.989	62	134342	57.02	ug/L		94
5) Bromomethane	2.336	96	56169	44.99	ug/L		96
6) Chloroethane	2.457	64	30532	59.05	ug/L		98
7) Trichlorofluoromethane	2.591	101	45598	55.71	ug/L		100
8) Ethanol	3.273	45	~~166638~~	~~2498.91~~	~~ug/L~~		~~90~~ MI
9) 1,1-Dichloroethene	3.133	61	135159	52.60	ug/L		97
10) Carbon Disulfide	3.145	76	244493	54.32	ug/L		98
11) Freon 113	3.187	101	103618	51.70	ug/L		99
12) Iodomethane	3.291	142	29149	72.08	ug/L		92
13) Methylene Chloride	3.771	84	110204	50.10	ug/L		98
14) Acetone	3.857	43	~~104777~~	~~80.65~~	~~ug/L~~		~~98~~ MI
15) t-1,2-Dichloroethene	3.942	61	165597	51.49	ug/L		98
16) n-Hexane	4.033	86	28595	55.06	ug/L		94
17) Methyl-tert-butyl-ether	4.100	73	417641	52.24	ug/L		73
18) tert-Butanol (TBA)	4.252	59	1662623	2528.20	ug/L	#	89
19) Diisopropyl ether (DIPE)	4.495	45	71778	9.45	ug/L		98
20) 1,1-Dichloroethane	4.574	63	199104	52.73	ug/L		99
21) Acrylonitrile	4.623	53	76346	52.08	ug/L		93
22) Ethyl-tert-butyl ether...	4.866	59	67581	9.06	ug/L		96
23) c-1,2-Dichloroethene	5.122	61	163860	51.94	ug/L		99
24) 2,2-Dichloropropane	5.231	77	178479	51.16	ug/L		100
25) Bromochloromethane	5.323	49	96440	50.82	ug/L		96
26) Chloroform	5.408	83	212235	51.28	ug/L		97
27) Carbon Tetrachloride	5.548	117	163003	54.27	ug/L		96
28) Tetrahydrofuran	5.578	42	71504	52.94	ug/L		96
29) 1,1,1-Trichloroethane	5.615	97	203751	51.68	ug/L		98
31) 1,1-Dichloropropene	5.742	75	173054	52.57	ug/L		95
32) 2-Butanone (MEK)	5.724	43	212809	104.62	ug/L		99
33) Benzene	5.998	78	519107	51.31	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	61806	9.79	ug/L		100
35) 1,2-Dichloroethane (EDC)	6.199	62	182611	50.66	ug/L		98
36) iso-Butyl Alcohol	6.272	43	313482	1395.31	ug/L		96
38) Trichloroethene (TCE)	6.612	130	127363	52.04	ug/L		98
39) tert-Amyl ethyl ether ...	6.898	59	46132	9.98	ug/L		90
40) Dibromomethane	7.056	93	74740	51.62	ug/L		93
41) 1,2-Dichloropropane	7.166	63	124220	52.71	ug/L		94
42) Bromodichloromethane	7.239	83	156309	54.10	ug/L		98
44) c-1,3-Dichloropropene	7.945	75	179213	50.41	ug/L		100
46) Toluene	8.218	91	527429	50.86	ug/L		99
47) Tetrachloroethene (PCE)	8.669	166	128862	51.08	ug/L		93
48) 4-Methyl-2-Pentanone (...	8.663	43	335118	108.88	ug/L		97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

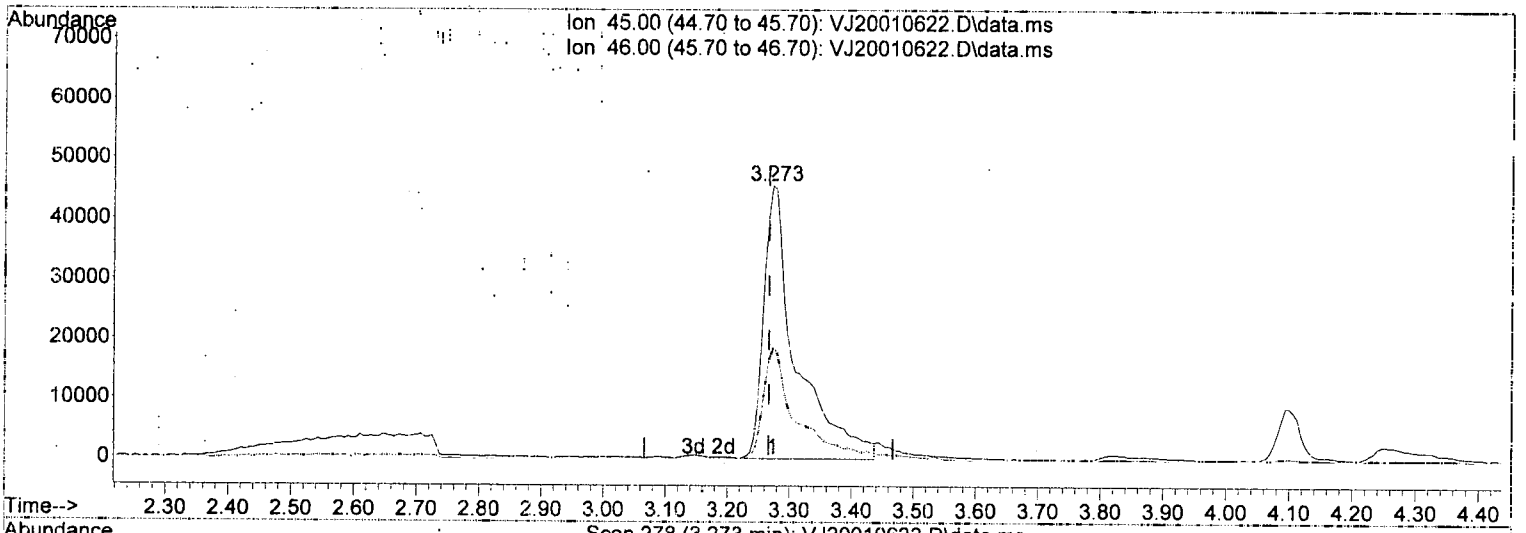
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	181998	52.38	ug/L	98
50) 1,1,2-Trichloroethane	8.869	97	108807	50.35	ug/L	97
51) Dibromochloromethane	9.058	129	107752	54.51	ug/L	98
52) 1,3-Dichloropropane	9.155	76	197608	52.53	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	115102	53.12	ug/L	97
54) 2-Hexanone	9.539	43	255220	114.98	ug/L	99
55) Chlorobenzene	9.812	112	316184	50.38	ug/L	97
56) Ethylbenzene	9.849	91	565519	51.84	ug/L	99
57) 1,1,1,2-Tetrachloroethane	9.879	131	111798	52.93	ug/L	99
58) m,p-Xylenes (2)	9.989	91	841910	104.00	ug/L	98
59) o-Xylene	10.372	91	410782	54.13	ug/L	96
60) Styrene	10.415	104	305455	56.56	ug/L	97
61) Bromoform	10.433	173	78801	55.72	ug/L	98
62) Isopropylbenzene	10.646	105	518688	53.99	ug/L	98
65) Bromobenzene	10.956	156	125364	50.57	ug/L	87
66) n-Propylbenzene	10.986	91	599088	50.57	ug/L	96
67) 1,1,2,2-Tetrachloroethane	11.041	83	148641	48.93	ug/L	98
68) 2-Chlorotoluene	11.114	126	113827	50.23	ug/L	96
69) 1,3,5-Trimethylbenzene	11.151	105	430440	50.53	ug/L	98
70) 1,2,3-Trichloropropane	11.145	110	55741	49.71	ug/L	89
71) t-1,4-Dichloro-2-butene	11.181	88	25245	54.89	ug/L	92
72) 4-Chlorotoluene	11.242	91	353161	50.55	ug/L	94
73) tert-Butylbenzene	11.400	91	232884	51.35	ug/L	93
74) 1,2,4-Trimethylbenzene	11.455	105	429588	50.29	ug/L	99
75) sec-Butylbenzene	11.540	105	513113	50.75	ug/L	97
76) 4-Isopropyltoluene	11.650	119	441545	52.45	ug/L	98
77) 1,3-Dichlorobenzene	11.704	146	225400	48.87	ug/L	97
78) 1,4-Dichlorobenzene	11.771	146	227356	49.92	ug/L	97
79) n-Butylbenzene	11.966	91	378474	52.19	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	211241	50.03	ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	40894	54.25	ug/L	81
82) Hexachlorobutadiene	13.213	223	33881	50.10	ug/L	96
83) 1,2,4-Trichlorobenzene	13.231	180	136960	53.36	ug/L	97
84) Naphthalene	13.505	128	494428	55.28	ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	140414	51.90	ug/L	97

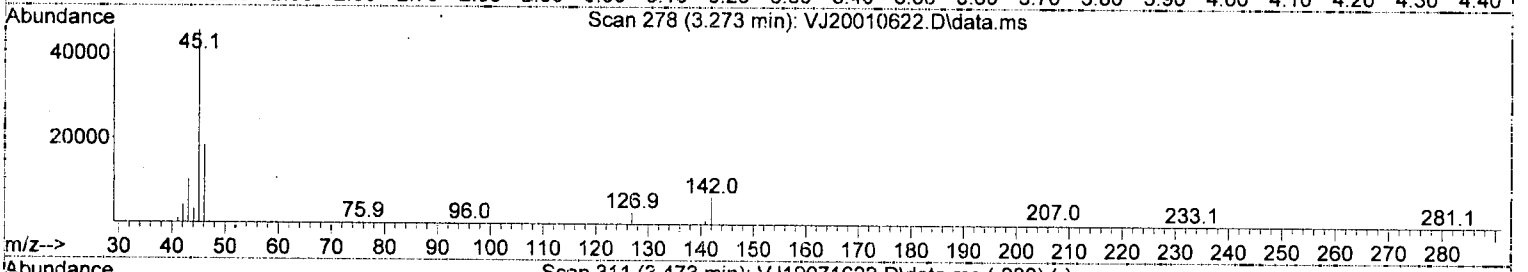
(#) = qualifier out of range (m) = manual integration (+) = signals summed

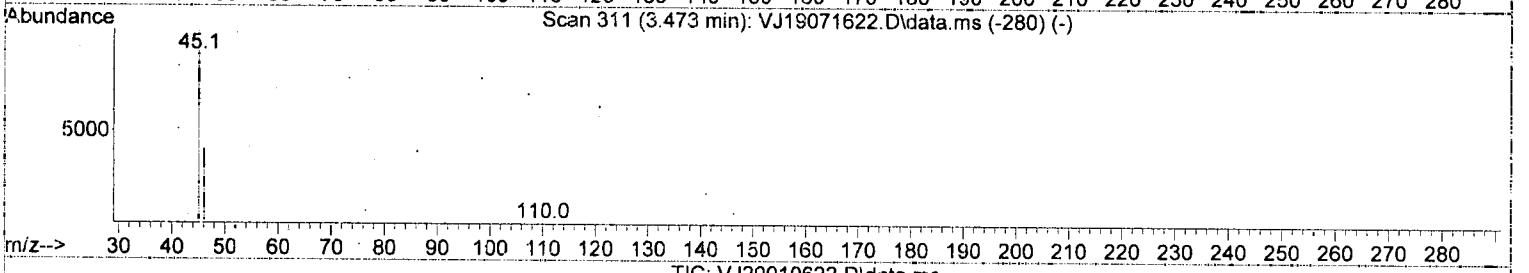
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL; 50ppb; DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010622.D\data.ms

(8) Ethanol

3.273min (+ 0.006) 2498.91 ug/L

response 166638

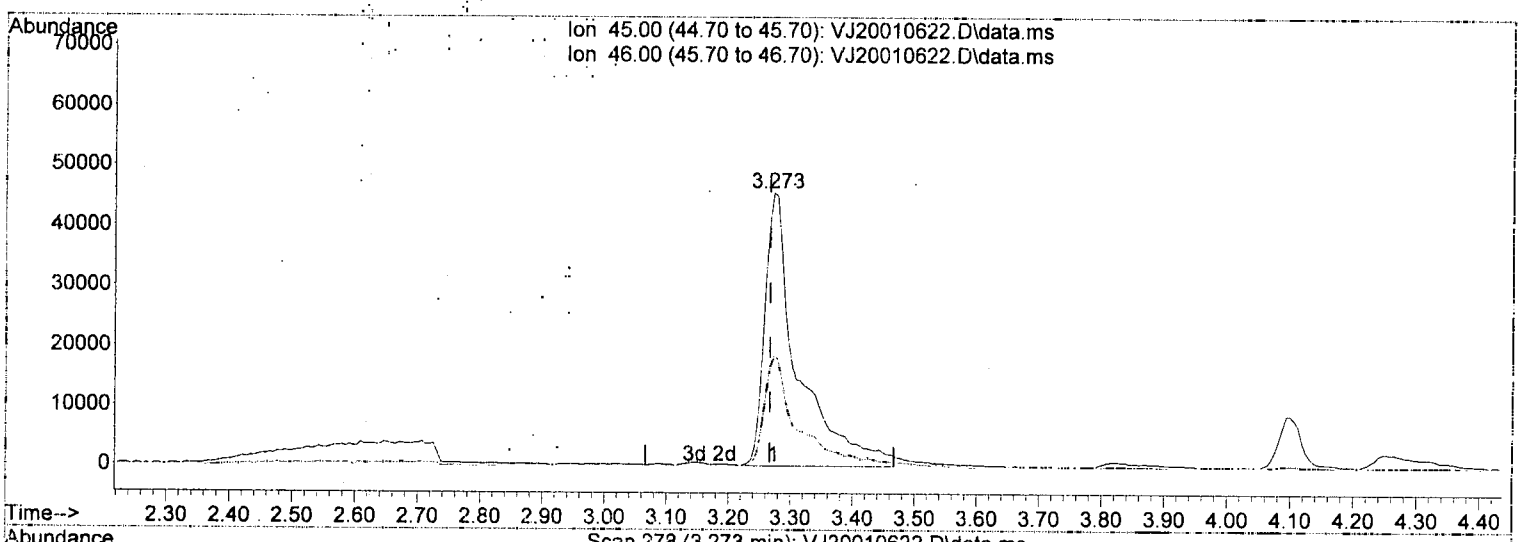
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	40.54
0.00	0.00	0.00
0.00	0.00	0.00

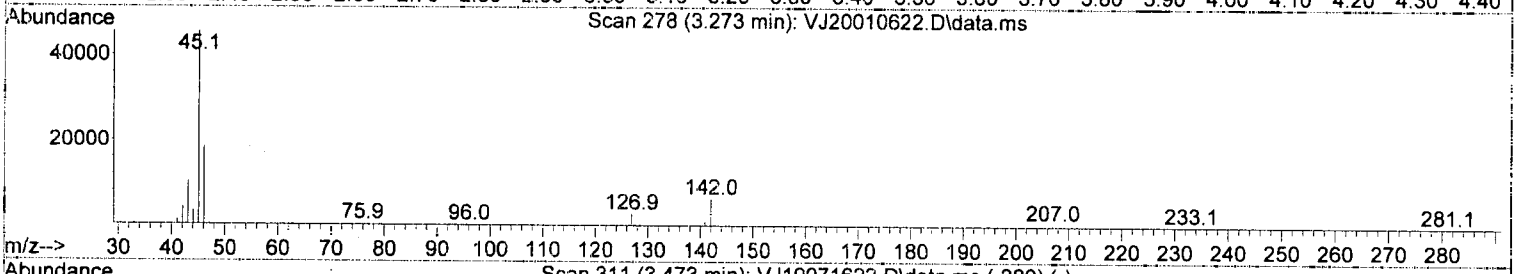
MT

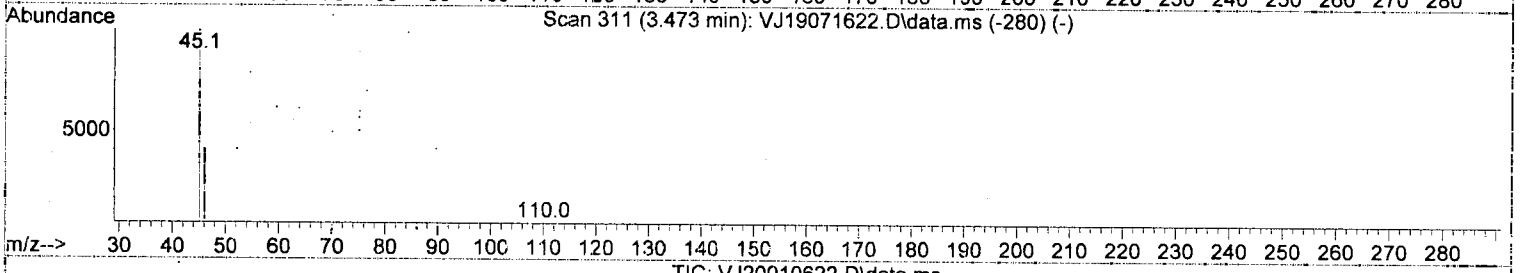
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010622.D\data.ms

(8) Ethanol

3.273min (+ 0.006) 2557.59 ug/L

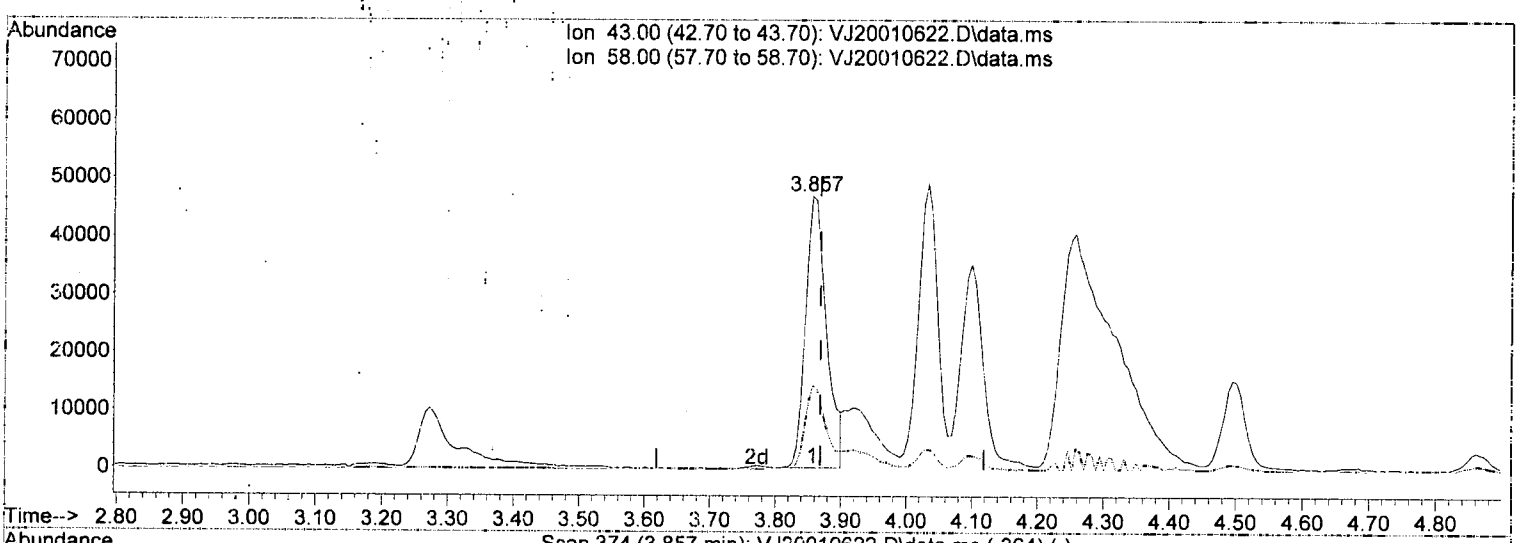
response 170551

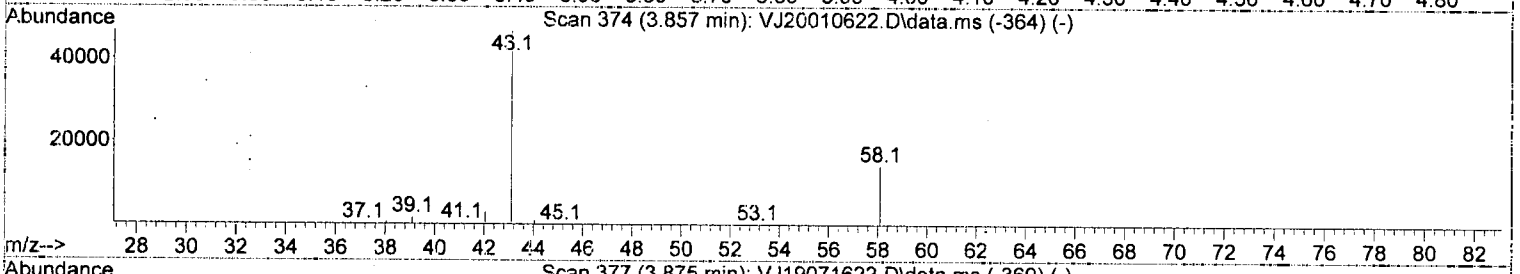
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	40.54
0.00	0.00	0.00
0.00	0.00	0.00

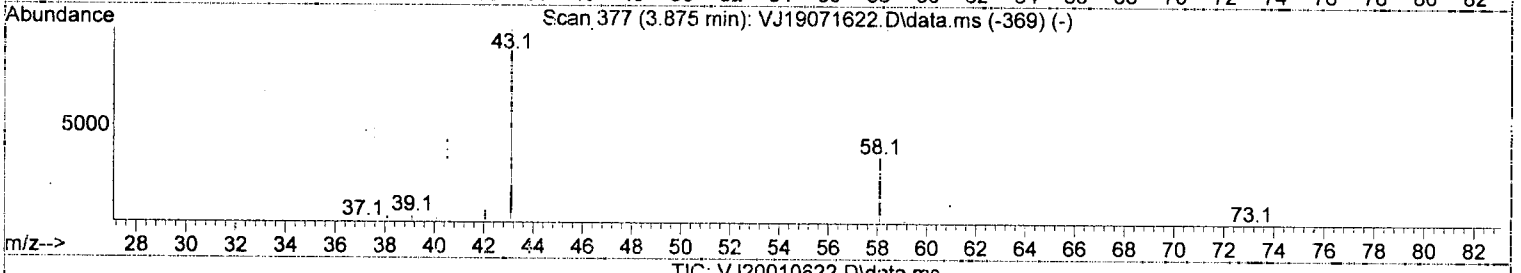
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010622.D\data.ms

(14) Acetone

3.857min (-0.011) 80.65 ug/L

response 104777

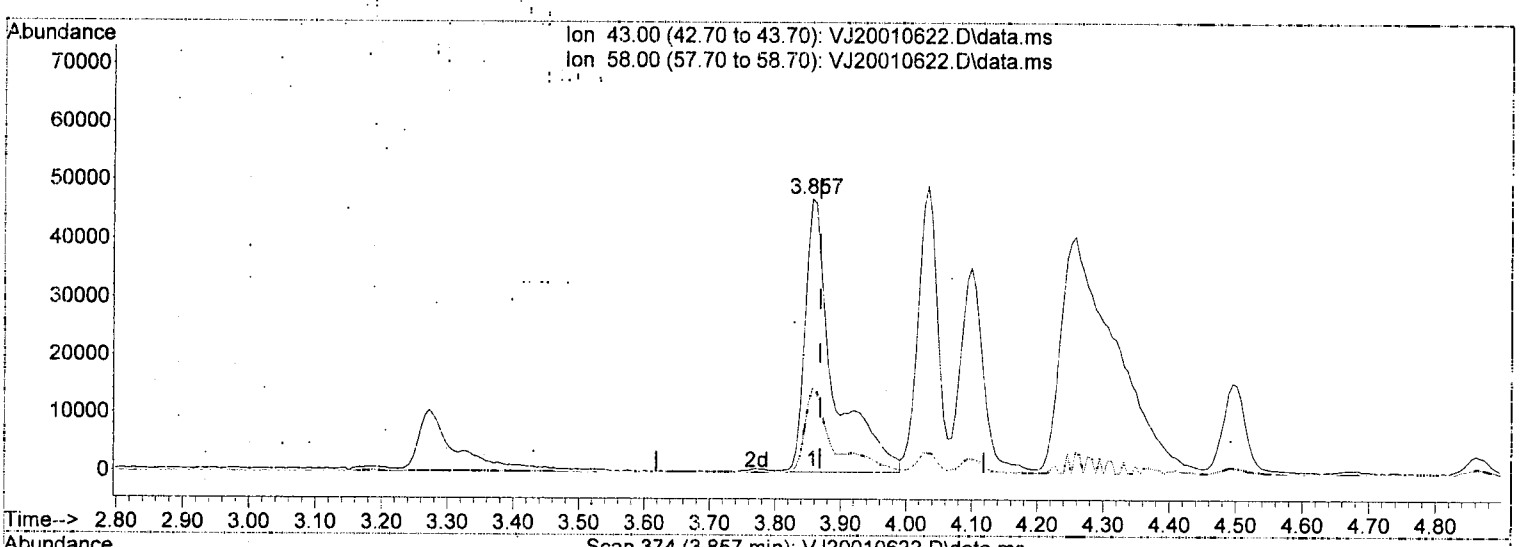
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.88
0.00	0.00	0.00
0.00	0.00	0.00

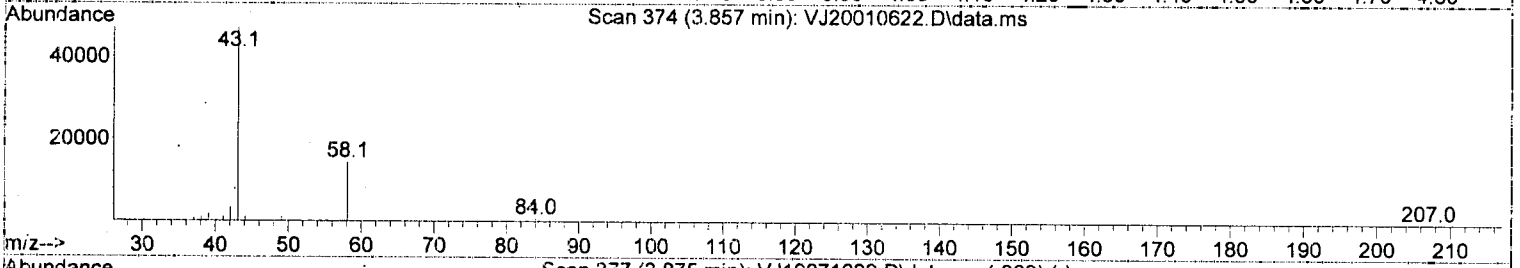
MI

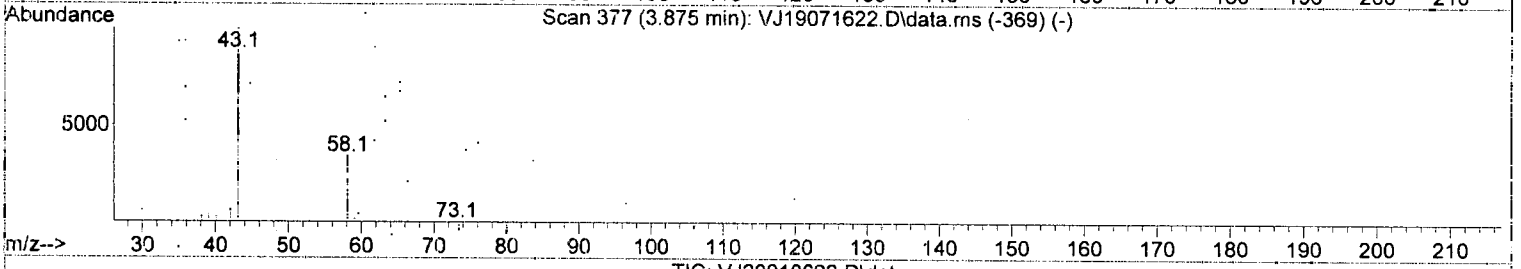
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL .50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010622.D\data.ms

(14) Acetone

3.857min (-0.011) 110.00 ug/L m

response 142899

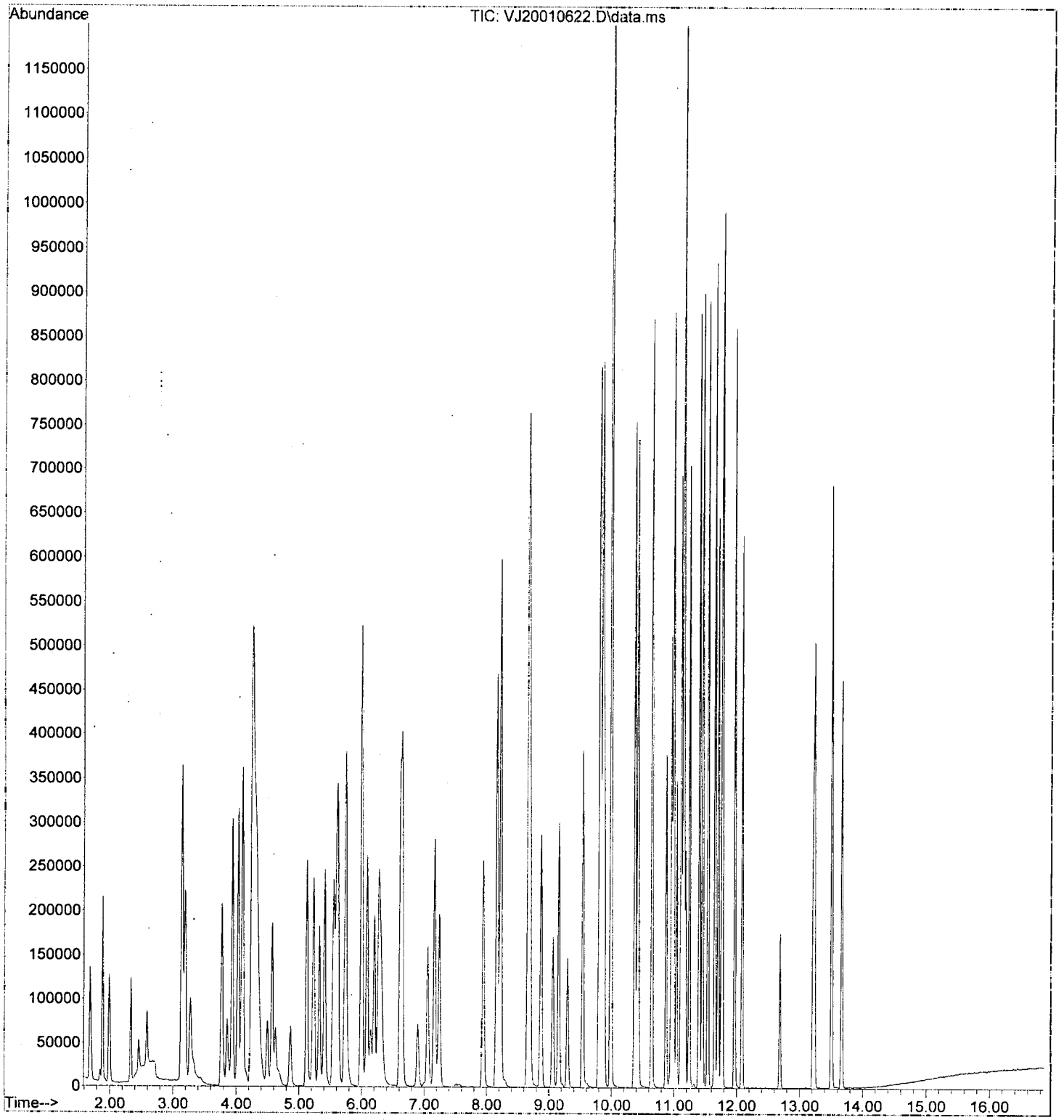
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.73
0.00	0.00	0.00
0.00	0.00	0.00

1/7/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010622.D
Acq On : 6 Jan 2020 8:47 pm
Operator : tb
Sample : 0A06051-CAL9
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:53:50 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010623.D
Acq On : 6 Jan 2020 9:14 pm
Operator : tb
Sample : 0A06051-IBL2
Misc : 1X ; 5mL DI+MeOH
ALS Vial : 13 ; Sample Multiplier: 1

Quant Time: Jan 08 10:51:34 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

NR

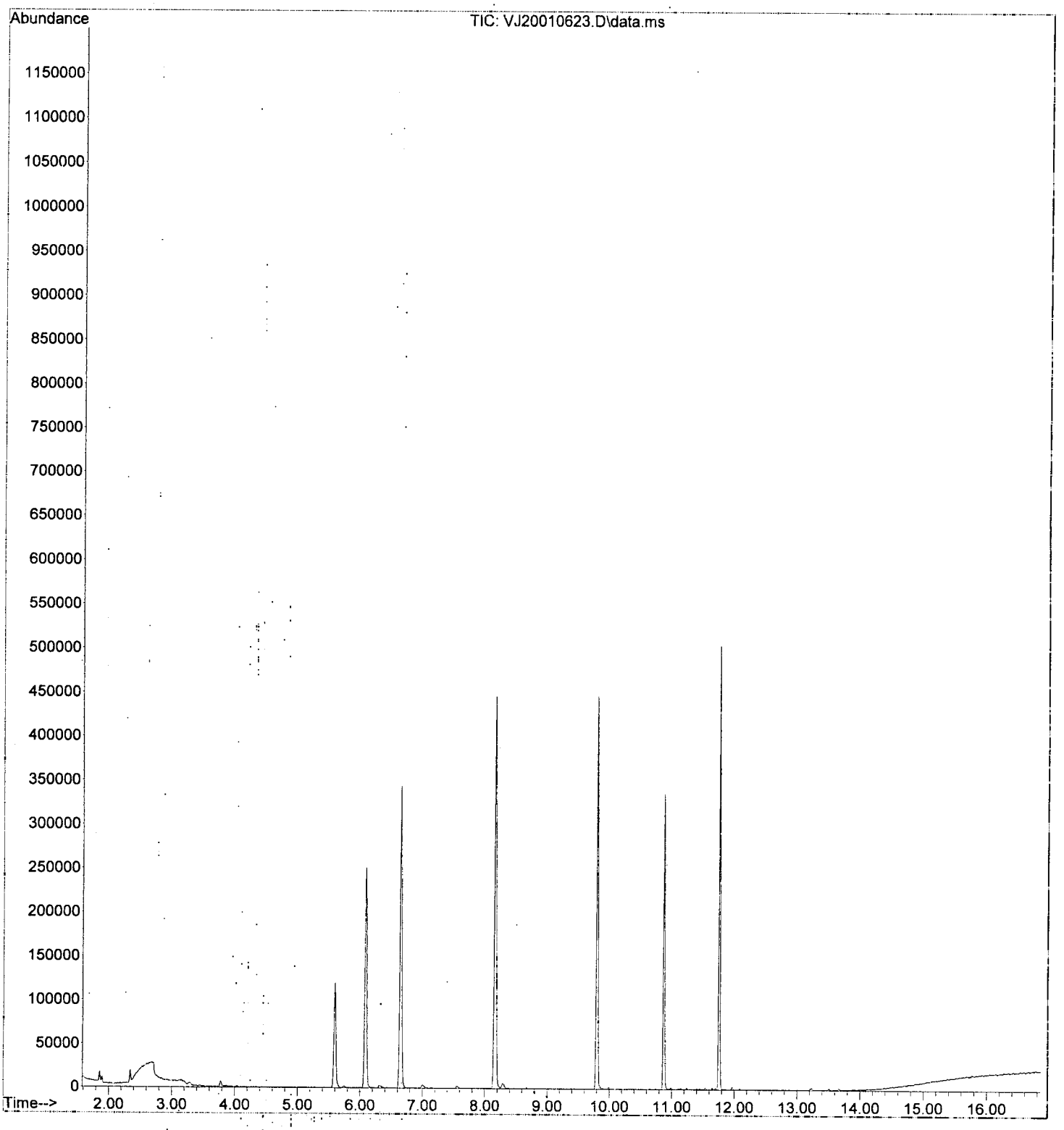
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.089	99	104203	50.00 ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	245180	50.00 ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	107574	50.00 ug/L		0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.596	111	82513	49.02 ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	301846	49.66 ug/L		0.00
45) Toluene-d8 (S)	8.164	98	344140	50.63 ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	85372	51.41 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.703	85	209	0.10 ug/L	#	51
3) Chloromethane	1.897	50	4933	1.65 ug/L		97
5) Bromomethane	2.348	96	6488	3.06 ug/L		98
6) Chloroethane	2.463	64	55	0.10 ug/L	#	50
8) Ethanol	3.272	45	2273	Below Cal		81
10) Carbon Disulfide	3.157	76	1729	0.38 ug/L		90
11) Freon 113	3.205	101	189	0.10 ug/L	#	66
12) Iodomethane	3.297	142	2687	7.26 ug/L		88
13) Methylene Chloride	3.777	84	3107	0.51 ug/L		87
14) Acetone	3.875	43	1409	1.07 ug/L		61
15) t-1,2-Dichloroethene	3.954	61	403	0.13 ug/L		86
18) tert-Butanol (TBA)	4.252	59	178	0.30 ug/L	#	46
31) 1,1-Dichloropropene	5.748	75	395	0.13 ug/L	#	39
32) 2-Butanone (MEK)	5.736	43	2867	1.39 ug/L		94
36) iso-Butyl Alcohol	6.320	43	1703	7.63 ug/L		80
47) Tetrachloroethene (PCE)	8.662	166	325	0.15 ug/L	#	79
55) Chlorobenzene	9.818	112	560	0.10 ug/L	#	12
56) Ethylbenzene	9.849	91	1104	0.11 ug/L		92
58) m,p-Xylenes (2)	9.989	91	1526	0.22 ug/L		93
60) Styrene	10.414	104	230	0.26 ug/L		53
62) Isopropylbenzene	10.646	105	898	0.11 ug/L		87
66) n-Propylbenzene	10.992	91	1912	0.20 ug/L		89
69) 1,3,5-Trimethylbenzene	11.144	105	966	0.15 ug/L		91
72) 4-Chlorotoluene	11.242	91	870	0.16 ug/L		86
73) tert-Butylbenzene	11.400	91	586	0.17 ug/L	#	70
74) 1,2,4-Trimethylbenzene	11.455	105	949	0.15 ug/L		91
75) sec-Butylbenzene	11.540	105	1567	0.21 ug/L		92
76) 4-Isopropyltoluene	11.649	119	1220	0.20 ug/L		85
77) 1,3-Dichlorobenzene	11.704	146	852	0.23 ug/L		82
78) 1,4-Dichlorobenzene	11.777	146	1093	0.28 ug/L		98
79) n-Butylbenzene	11.966	91	1740	0.30 ug/L		98
80) 1,2-Dichlorobenzene	12.094	146	625	0.19 ug/L		91
82) Hexachlorobutadiene	13.207	223	165	0.31 ug/L	#	73
83) 1,2,4-Trichlorobenzene	13.237	180	959	0.47 ug/L		90
84) Naphthalene	13.505	128	1872	0.35 ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	884	0.43 ug/L		84

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010623.D
Acq On : 6 Jan 2020 9:14 pm
Operator : tb
Sample : 0A06051-IBL2
Misc : 1X 5mL ! DI+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 08 10:51:34 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 15:04:11 2020
Quant Method : C:\msdchem\1\methods\~~VJ200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/8/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	110868	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	264522	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	132141	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	88968	51.03	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	322488	50.50	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366947	49.21	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	99383	48.71	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	260818	132.60	ug/L		98
3) Chloromethane	1.898	50	323609	109.26	ug/L		99
4) Vinyl Chloride	1.995	62	261456	110.05	ug/L		95
5) Bromomethane	2.342	96	102308	81.26	ug/L		99
6) Chloroethane	2.470	64	65757	126.12	ug/L		99
7) Trichlorofluoromethane	2.591	101	91399	110.73	ug/L		98
8) Ethanol	3.260	45	289845m	4310.30	ug/L		
9) 1,1-Dichloroethene	3.145	61	259216	100.04	ug/L		95
10) Carbon Disulfide	3.157	76	479467	105.63	ug/L		97
11) Freon 113	3.200	101	202415	100.14	ug/L		98
12) Iodomethane	3.297	142	74685	183.14	ug/L		89
13) Methylene Chloride	3.777	84	214594	96.75	ug/L		99
14) Acetone	3.857	43	265824m	202.92	ug/L		
15) t-1,2-Dichloroethene	3.948	61	326255	100.59	ug/L		97
16) n-Hexane	4.039	86	56002	106.94	ug/L	#	91
17) Methyl-tert-butyl-ether	4.100	73	838469	104.01	ug/L		91
18) tert-Butanol (TBA)	4.252	59	3395354m	5119.98	ug/L		
19) Diisopropyl ether (DIPE)	4.501	45	157347	20.54	ug/L		98
20) 1,1-Dichloroethane	4.574	63	394635	103.65	ug/L		99
21) Acrylonitrile	4.629	53	154316m	104.40	ug/L		
22) Ethyl-tert-butyl ether...	4.866	59	143062	19.03	ug/L		98
23) c-1,2-Dichloroethene	5.128	61	330862	104.01	ug/L		99
24) 2,2-Dichloropropane	5.238	77	352081	100.08	ug/L		95
25) Bromochloromethane	5.323	49	184637	96.48	ug/L		96
26) Chloroform	5.414	83	418939	100.37	ug/L		97
27) Carbon Tetrachloride	5.548	117	328646	108.52	ug/L		96
28) Tetrahydrofuran	5.578	42	146362	107.45	ug/L		95
29) 1,1,1-Trichloroethane	5.615	97	408532	102.77	ug/L		98
31) 1,1-Dichloropropene	5.742	75	350616	105.63	ug/L		96
32) 2-Butanone (MEK)	5.724	43	426227	207.79	ug/L		98
33) Benzene	5.998	78	1027410	100.71	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	129917	20.41	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.205	62	359673	98.94	ug/L		99
36) iso-Butyl Alcohol	6.272	43	641400m	2831.07	ug/L		
38) Trichloroethene (TCE)	6.619	130	261248	105.86	ug/L		97
39) tert-Amyl ethyl ether ...	6.898	59	101352	21.74	ug/L		92
40) Dibromomethane	7.057	93	147470	101.00	ug/L		95
41) 1,2-Dichloropropane	7.166	63	251031	105.63	ug/L		94
42) Bromodichloromethane	7.245	83	319153	109.54	ug/L		97
44) c-1,3-Dichloropropene	7.945	75	375031	105.07	ug/L		99
46) Toluene	8.225	91	1043895	100.25	ug/L		98
47) Tetrachloroethene (PCE)	8.669	166	257455	101.63	ug/L		94
48) 4-Methyl-2-Pentanone (...	8.663	43	694774	224.83	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 15:04:11 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

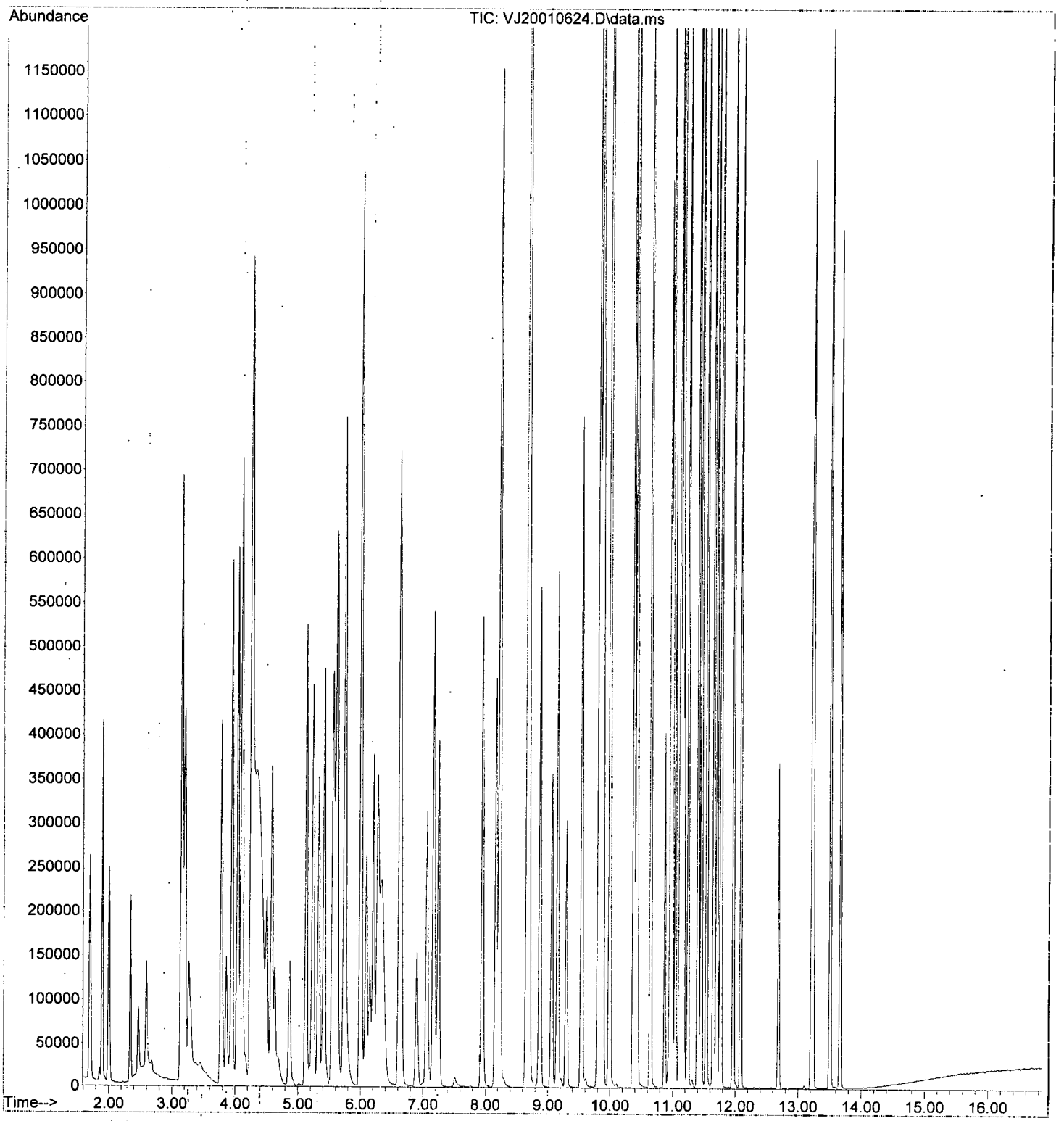
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	364799	104.56 ug/L	96
50) 1,1,2-Trichloroethane	8.869	97	216245	99.66 ug/L	99
51) Dibromochloromethane	9.064	129	225531	113.64 ug/L	99
52) 1,3-Dichloropropane	9.155	76	390171	103.30 ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	233841	107.50 ug/L	100
54) 2-Hexanone	9.539	43	540017	242.31 ug/L	99
55) Chlorobenzene	9.818	112	628098	99.68 ug/L	99
56) Ethylbenzene	9.849	91	1130105	103.18 ug/L	100
57) 1,1,1,2-Tetrachloroethane	9.879	131	222622	104.97 ug/L	99
58) m,p-Xylenes (2)	9.989	91	1695177	208.57 ug/L	99
59) o-Xylene	10.372	91	848401	111.34 ug/L	97
60) Styrene	10.415	104	642559	118.51 ug/L	98
61) Bromoform	10.433	173	170457	120.05 ug/L	97
62) Isopropylbenzene	10.646	105	1059421	109.83 ug/L	98
65) Bromobenzene	10.956	156	255205	99.20 ug/L	86
66) n-Propylbenzene	10.987	91	1201239	97.71 ug/L	97
67) 1,1,2,2-Tetrachloroethane	11.041	83	306207	97.13 ug/L	96
68) 2-Chlorotoluene	11.114	126	234244	99.61 ug/L	97
69) 1,3,5-Trimethylbenzene	11.151	105	863093	97.64 ug/L	98
70) 1,2,3-Trichloropropane	11.145	110	111214	95.58 ug/L	96
71) t-1,4-Dichloro-2-butene	11.181	88	51769	108.47 ug/L	93
72) 4-Chlorotoluene	11.242	91	721994	99.58 ug/L	95
73) tert-Butylbenzene	11.400	91	472004	100.30 ug/L	96
74) 1,2,4-Trimethylbenzene	11.455	105	869693	98.11 ug/L	99
75) sec-Butylbenzene	11.540	105	1045783	99.68 ug/L	98
76) 4-Isopropyltoluene	11.650	119	890642	101.96 ug/L	99
77) 1,3-Dichlorobenzene	11.704	146	464345	97.03 ug/L	98
78) 1,4-Dichlorobenzene	11.771	146	464868	98.36 ug/L	97
79) n-Butylbenzene	11.966	91	768302	102.10 ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	434657	99.21 ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	91004	116.34 ug/L	87
82) Hexachlorobutadiene	13.213	223	70914	101.06 ug/L	96
83) 1,2,4-Trichlorobenzene	13.231	180	294426	110.53 ug/L	95
84) Naphthalene	13.505	128	1049457	113.07 ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	293236	104.45 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 15:04:11 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\~~VJ200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	110868	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	264522	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	132141	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	88968	51.03	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	322488	50.60	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	366947	49.21	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	99383	48.71	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	260818	132.60	ug/L		98
3) Chloromethane	1.898	50	323609	109.26	ug/L		99
4) Vinyl Chloride	1.995	62	261456	110.05	ug/L		95
5) Bromomethane	2.342	96	102308	81.26	ug/L		99
6) Chloroethane	2.470	64	65757	126.12	ug/L		99
7) Trichlorofluoromethane	2.591	101	91399	110.73	ug/L		98
8) Ethanol	3.260	45	~~213066~~	~~3168.52~~	~~ug/L~~		~~90~~ MI
9) 1,1-Dichloroethene	3.145	61	259216	100.04	ug/L		95
10) Carbon Disulfide	3.157	76	479467	105.63	ug/L		97
11) Freon 113	3.200	101	202415	100.14	ug/L		98
12) Iodomethane	3.297	142	74685	183.14	ug/L		89
13) Methylene Chloride	3.777	84	214594	96.75	ug/L		99
14) Acetone	3.857	43	~~188554~~	~~143.93~~	~~ug/L~~		~~97~~ MI
15) t-1,2-Dichloroethene	3.948	61	326255	100.59	ug/L		97
16) n-Hexane	4.039	86	56002	106.94	ug/L	#	91
17) Methyl-tert-butyl-ether	4.100	73	838469	104.01	ug/L		91
18) tert-Butanol (TBA)	4.252	59	~~1882043~~	~~2838.00~~	~~ug/L~~	#	~~87~~ MI
19) Diisopropyl ether (DIPE)	4.501	45	157347	20.54	ug/L		98
20) 1,1-Dichloroethane	4.574	63	394635	103.65	ug/L		99
21) Acrylonitrile	4.629	53	~~112841~~	~~76.34~~	~~ug/L~~		~~97~~ MI
22) Ethyl-tert-butyl ether...	4.866	59	143062	19.03	ug/L		98
23) c-1,2-Dichloroethene	5.128	61	330862	104.01	ug/L		99
24) 2,2-Dichloropropane	5.238	77	352081	100.08	ug/L		95
25) Bromochloromethane	5.323	49	184637	96.48	ug/L		96
26) Chloroform	5.414	83	418939	100.37	ug/L		97
27) Carbon Tetrachloride	5.548	117	328646	108.52	ug/L		96
28) Tetrahydrofuran	5.578	42	146362	107.45	ug/L		95
29) 1,1,1-Trichloroethane	5.615	97	408532	102.77	ug/L		98
31) 1,1-Dichloropropene	5.742	75	350616	105.63	ug/L		96
32) 2-Butanone (MEK)	5.724	43	426227	207.79	ug/L		98
33) Benzene	5.998	78	1027410	100.71	ug/L		99
34) tert-Amyl methyl ether...	6.144	73	129917	20.41	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.205	62	359673	98.94	ug/L		99
36) iso-Butyl Alcohol	6.272	43	~~306318~~	~~1352.06~~	~~ug/L~~		~~97~~ MI
38) Trichloroethene (TCE)	6.619	130	261248	105.86	ug/L		97
39) tert-Amyl ethyl ether ...	6.898	59	101352	21.74	ug/L		92
40) Dibromomethane	7.057	93	147470	101.00	ug/L		95
41) 1,2-Dichloropropane	7.166	63	251031	105.63	ug/L		94
42) Bromodichloromethane	7.245	83	319153	109.54	ug/L		97
44) c-1,3-Dichloropropene	7.945	75	375031	105.07	ug/L		99
46) Toluene	8.225	91	1043895	100.25	ug/L		98
47) Tetrachloroethene (PCE)	8.669	166	257455	101.63	ug/L		94
48) 4-Methyl-2-Pentanone (...	8.663	43	694774	224.83	ug/L		98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	364799	104.56	ug/L	96
50) 1,1,2-Trichloroethane	8.869	97	216245	99.66	ug/L	99
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52) 1,3-Dichloropropane	9.155	76	390171	103.30	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	233841	107.50	ug/L	100
54) 2-Hexanone	9.539	43	540017	242.31	ug/L	99
55) Chlorobenzene	9.818	112	628098	99.68	ug/L	99
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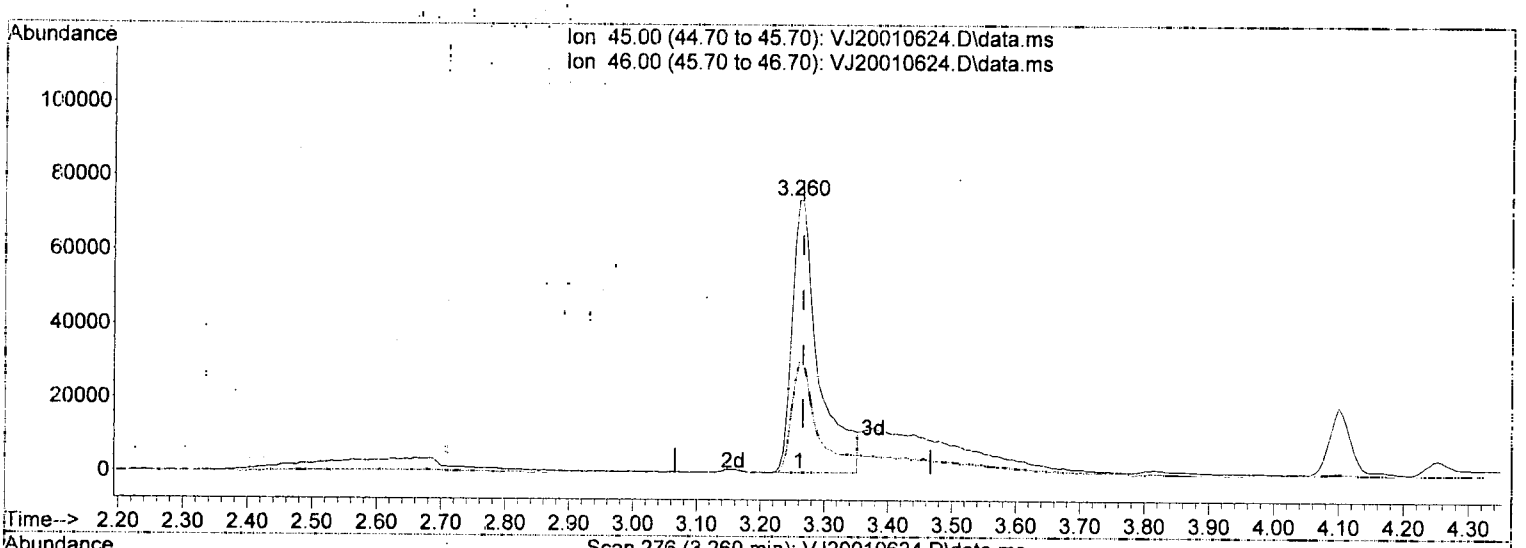
58) m,p-Xylenes (2)	9.989	91	1695177	208.57	ug/L	99
59) o-Xylene	10.372	91	848401	111.34	ug/L	97
60) Styrene	10.415	104	642559	118.51	ug/L	98
61) Bromoform	10.433	173	170457	120.05	ug/L	97
62) Isopropylbenzene	10.646	105	1059421	109.83	ug/L	98
65) Bromobenzene	10.956	156	255205	99.20	ug/L	86
66) n-Propylbenzene	10.987	91	1201239	97.71	ug/L	97
67) 1,1,2,2-Tetrachloroethane	11.041	83	306207	97.13	ug/L	96
68) 2-Chlorotoluene	11.114	126	234244	99.61	ug/L	97
69) 1,3,5-Trimethylbenzene	11.151	105	863093	97.64	ug/L	98
70) 1,2,3-Trichloropropane	11.145	110	111214	95.58	ug/L	96
71) t-1,4-Dichloro-2-butene	11.181	88	51769	108.47	ug/L	93
72) 4-Chlorotoluene	11.242	91	721994	99.58	ug/L	95
73) tert-Butylbenzene	11.400	91	472004	100.30	ug/L	96
74) 1,2,4-Trimethylbenzene	11.455	105	869693	98.11	ug/L	99
75) sec-Butylbenzene	11.540	105	1045783	99.68	ug/L	98
76) 4-Isopropyltoluene	11.650	119	890642	101.96	ug/L	99
77) 1,3-Dichlorobenzene	11.704	146	464345	97.03	ug/L	98
78) 1,4-Dichlorobenzene	11.771	146	464868	98.36	ug/L	97
79) n-Butylbenzene	11.966	91	768302	102.10	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	434657	99.21	ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	91004	116.34	ug/L	87
82) Hexachlorobutadiene	13.213	223	70914	101.06	ug/L	96
83) 1,2,4-Trichlorobenzene	13.231	180	294426	110.53	ug/L	95
84) Naphthalene	13.505	128	1049457	113.07	ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	293236	104.45	ug/L	99

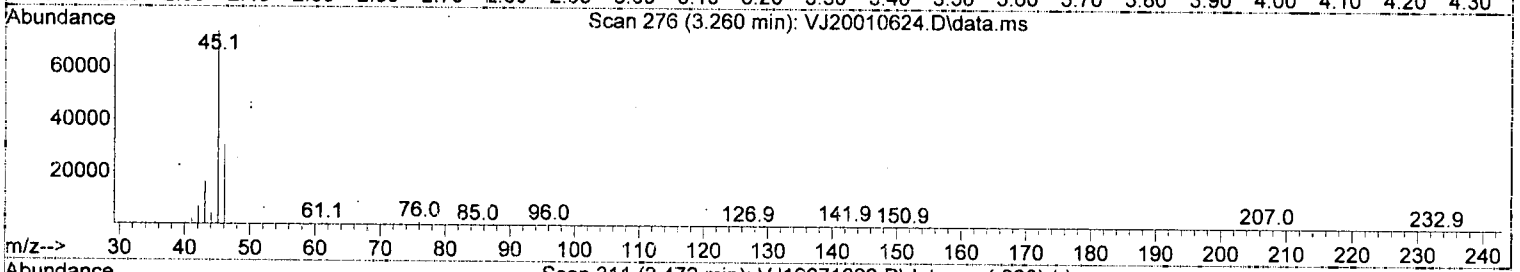
(#) = qualifier out of range (m) = manual integration (+) = signals summed

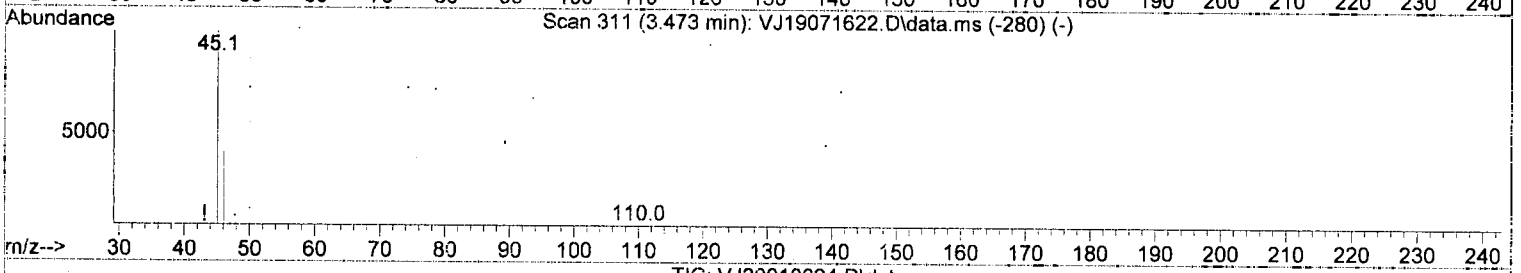
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(8) Ethanol

3.260min (-0.006) 3168.52 ug/L

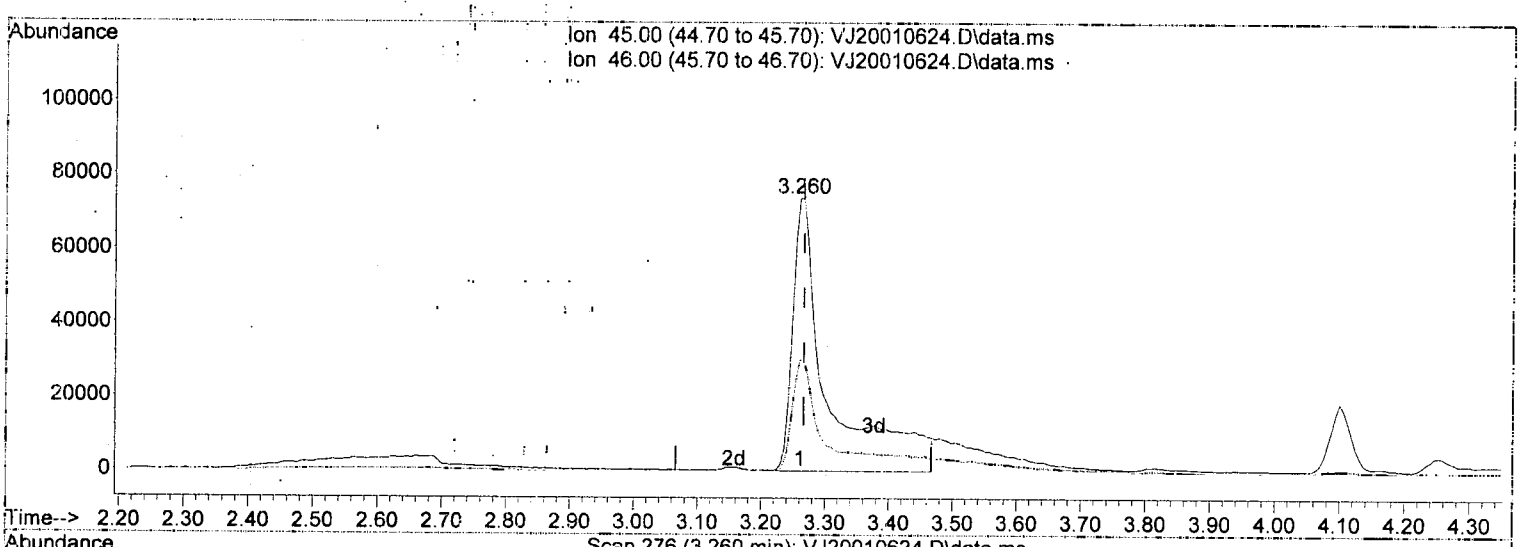
response 213066

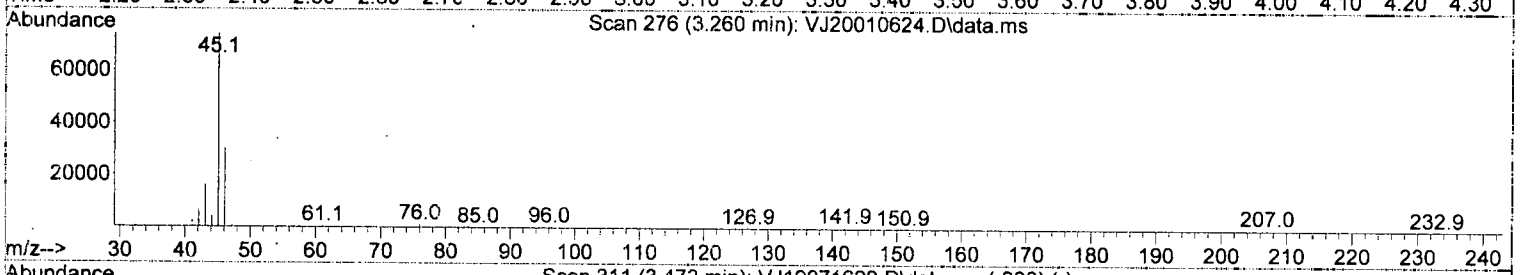
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	40.99
0.00	0.00	0.00
0.00	0.00	0.00

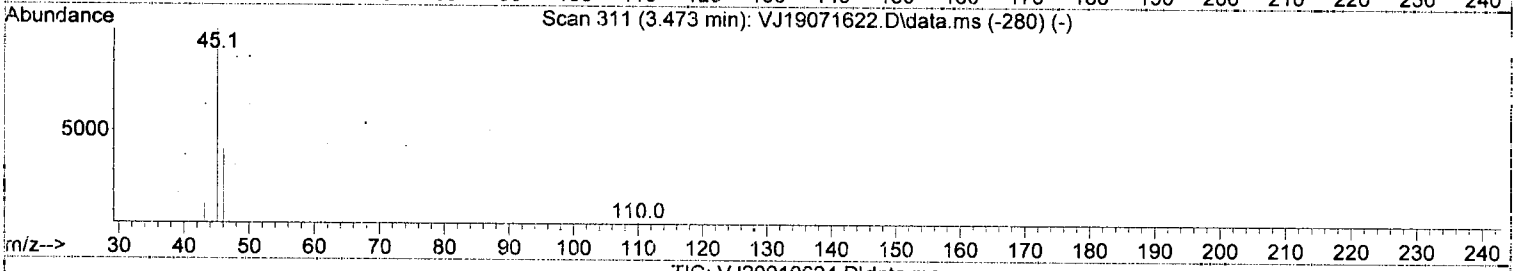
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(8) Ethanol

3.260min (-0.006) 4310.30 ug/L m

response 289845

Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	40.99
0.00	0.00	0.00
0.00	0.00	0.00

1/7/20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
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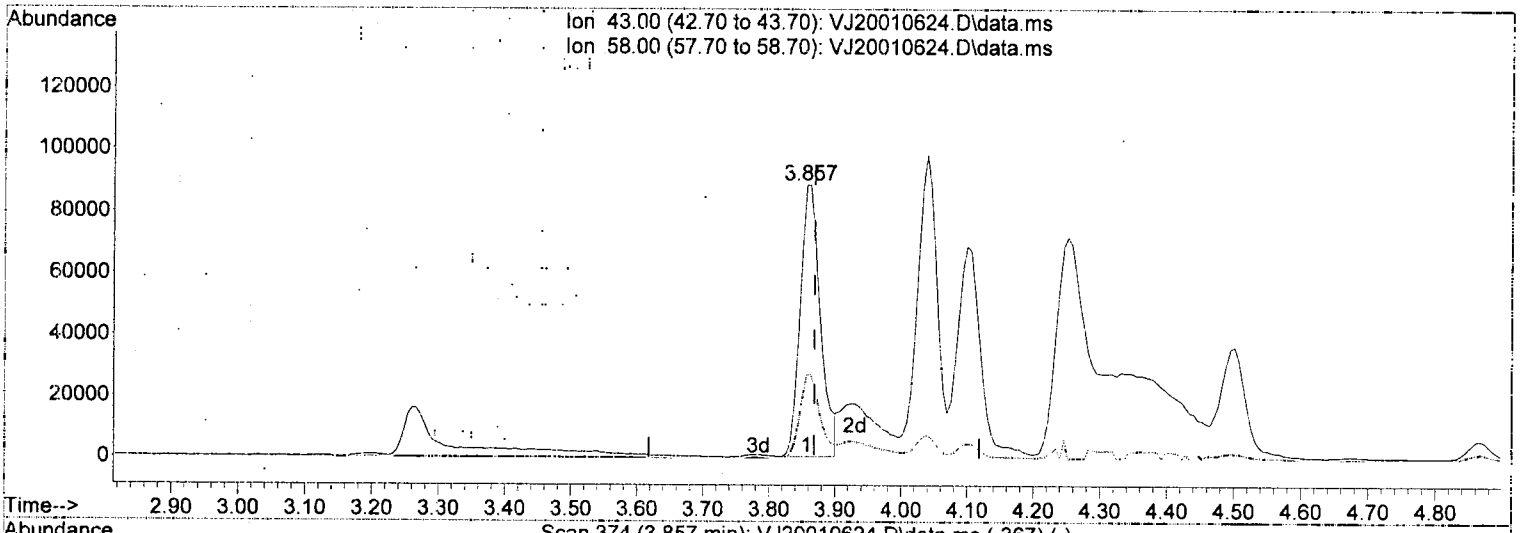
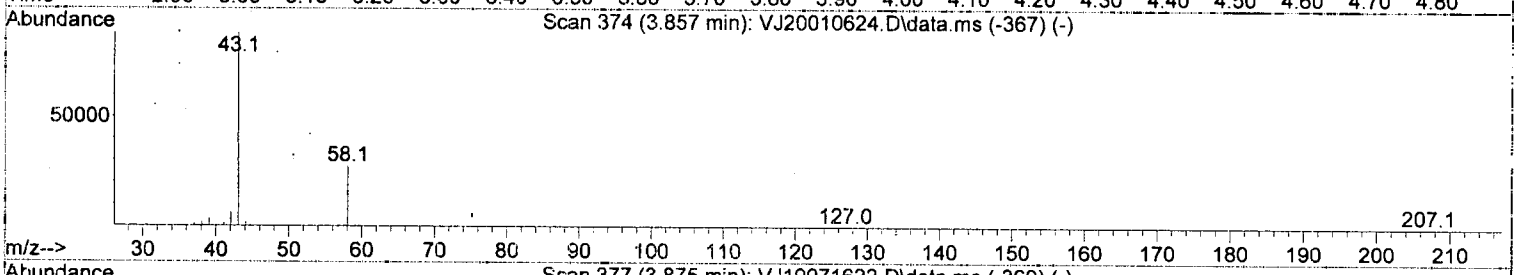
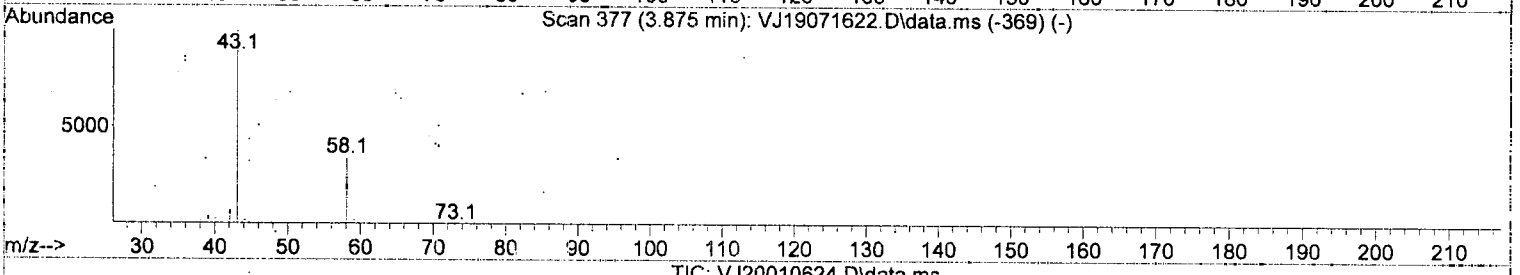






TIC: VJ20010624.D\data.ms

(14) Acetone

3.857min (-0.011) 143.93 ug/L

MI

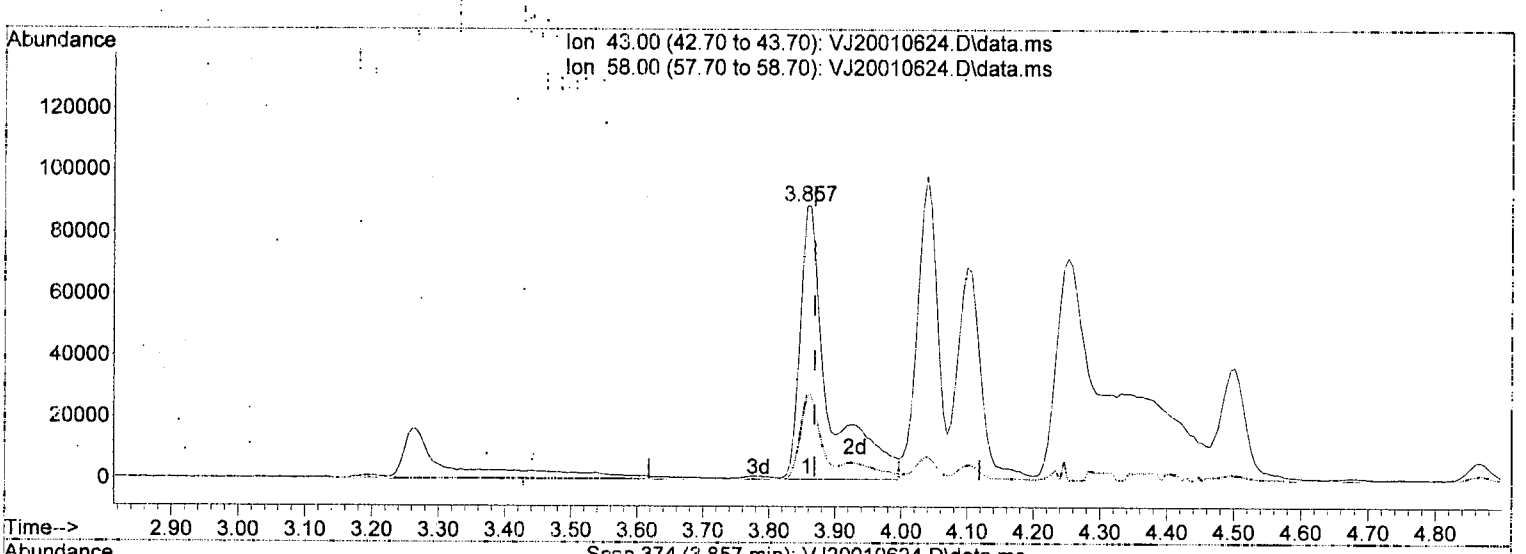
response 188554

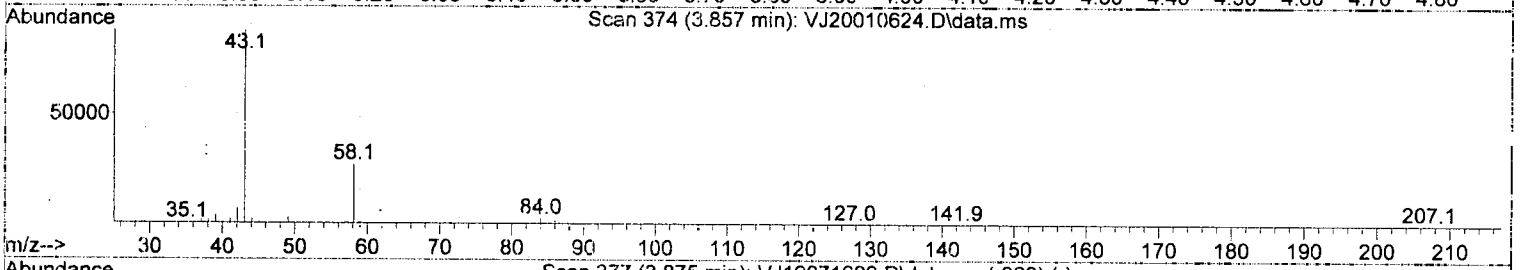
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.73
0.00	0.00	0.00
0.00	0.00	0.00

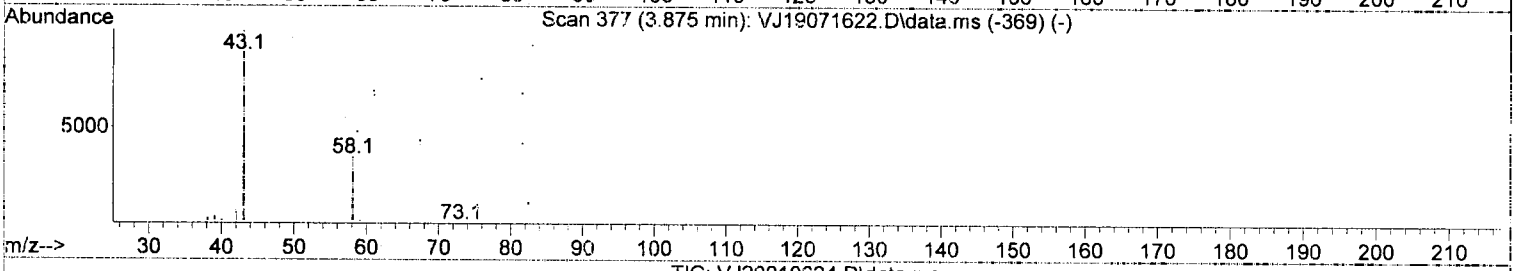
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(14) Acetone

3.857min (-0.011) 202.92 ug/L m

response 265824

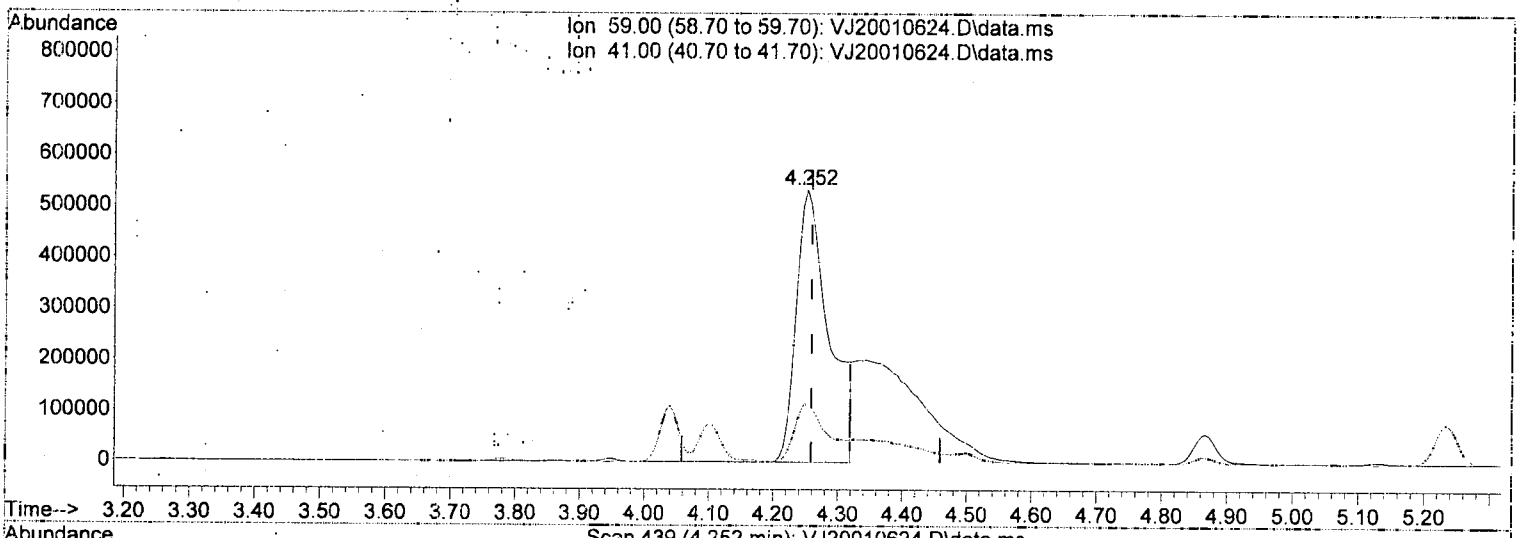
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.60
0.00	0.00	0.00
0.00	0.00	0.00

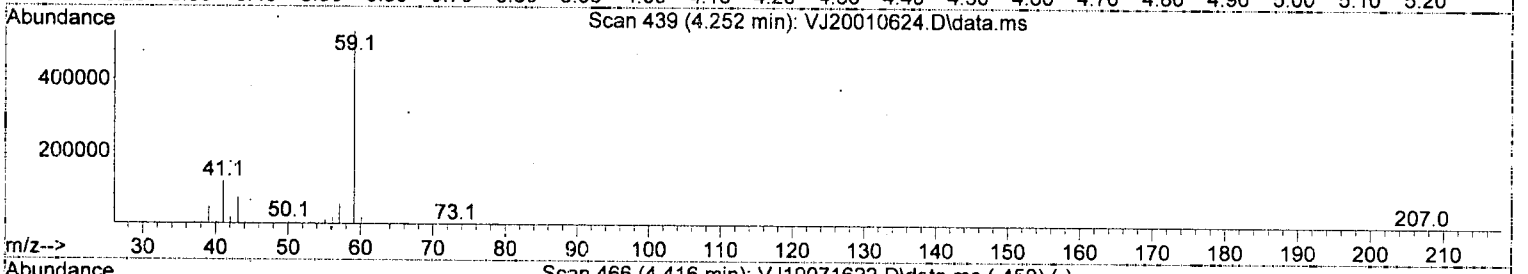
1/7/20

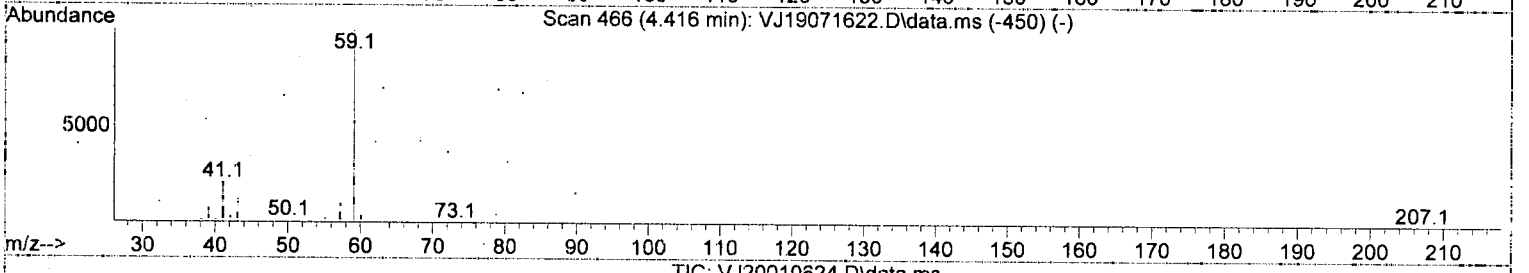
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 2838.00 ug/L

response 1882043

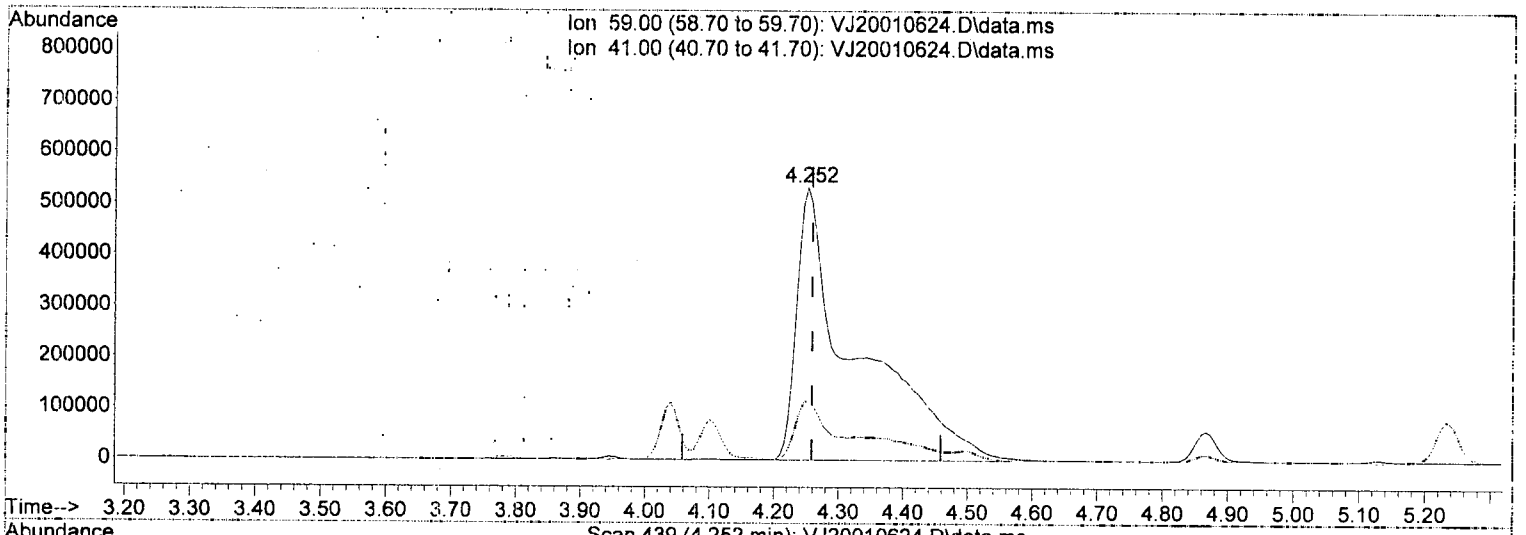
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	22.05#
0.00	0.00	0.00
0.00	0.00	0.00

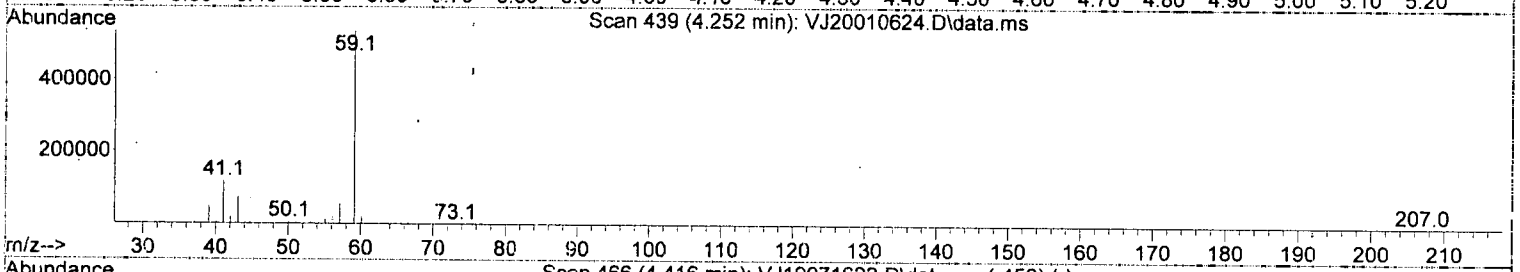
MI

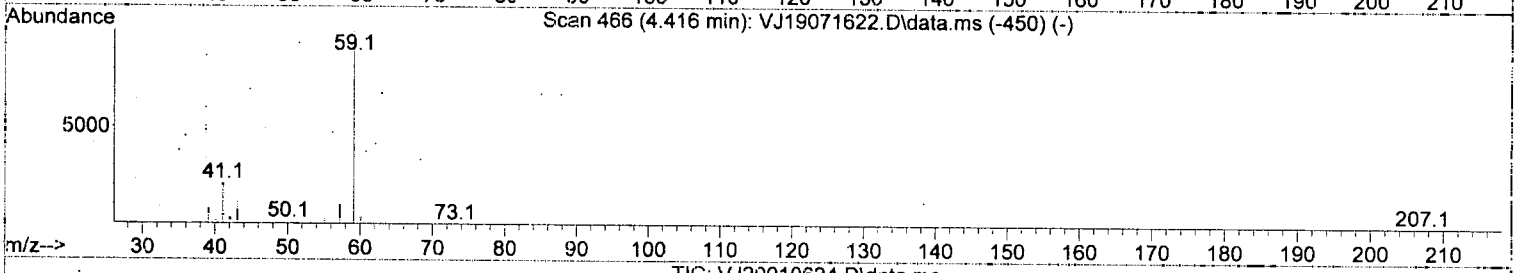
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(18) tert-Butanol (TBA)

4.252min (-0.006) 5119.98 ug/L m

response 3395354

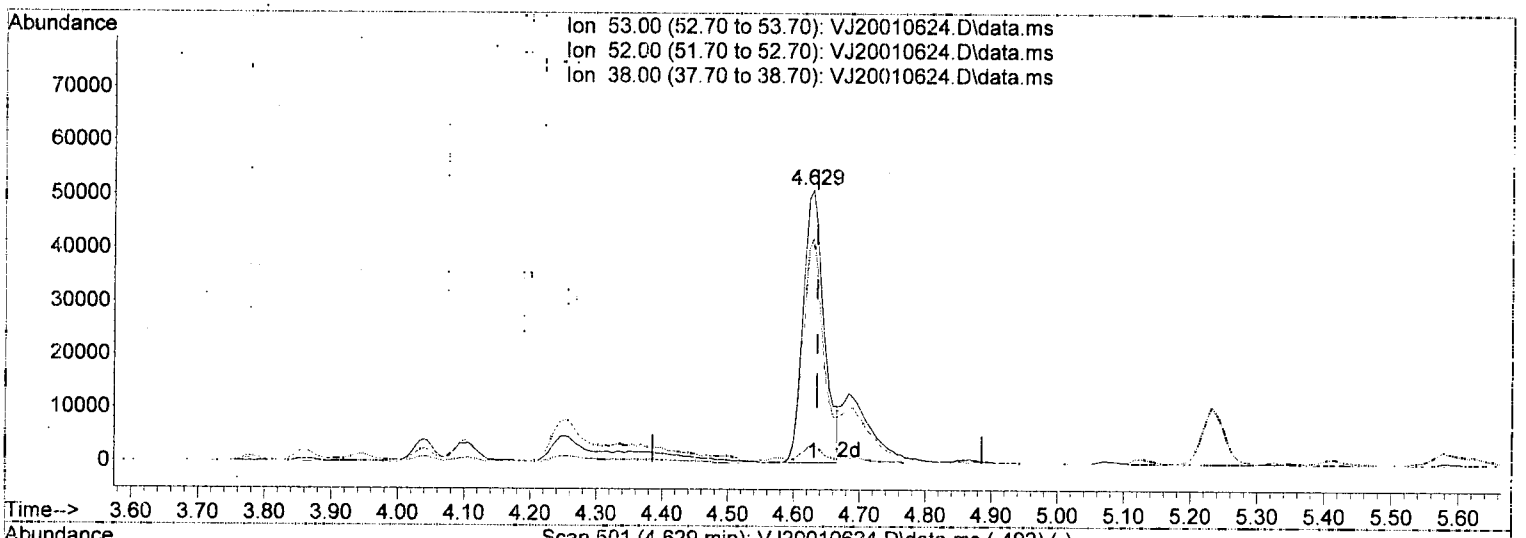
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	22.05#
0.00	0.00	0.00
0.00	0.00	0.00

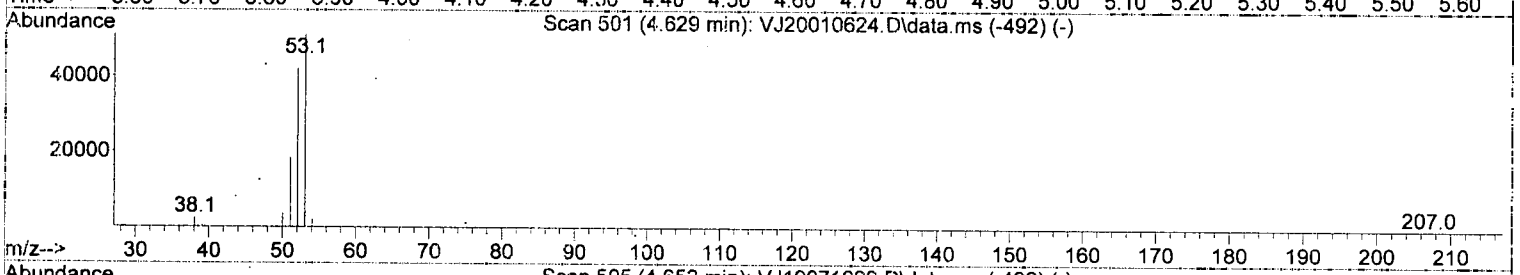
1/7/20

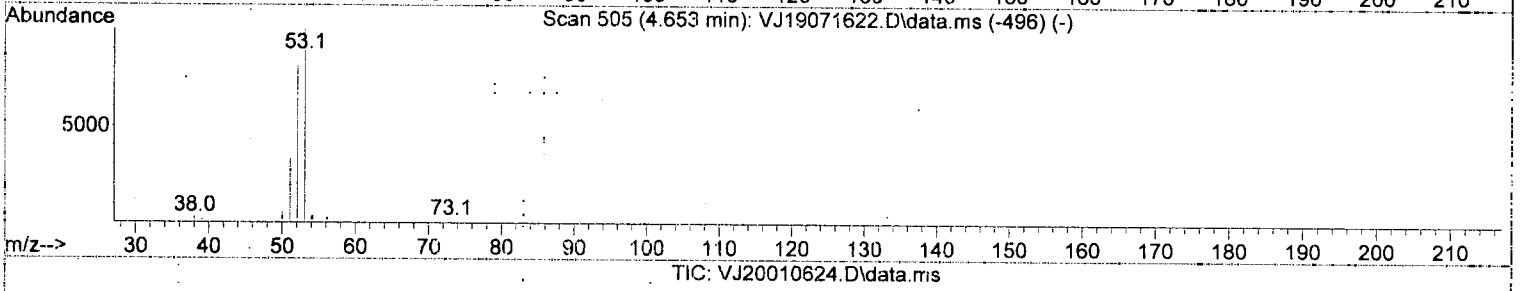
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 76.34 ug/L

response 112841

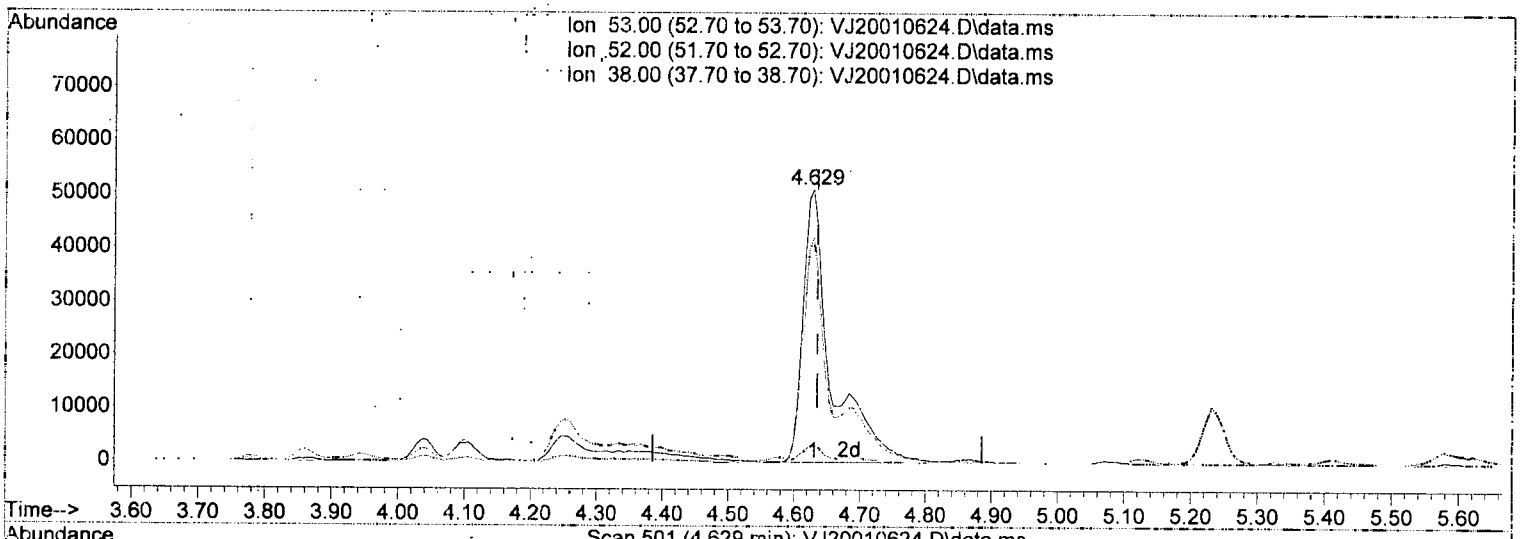
MI

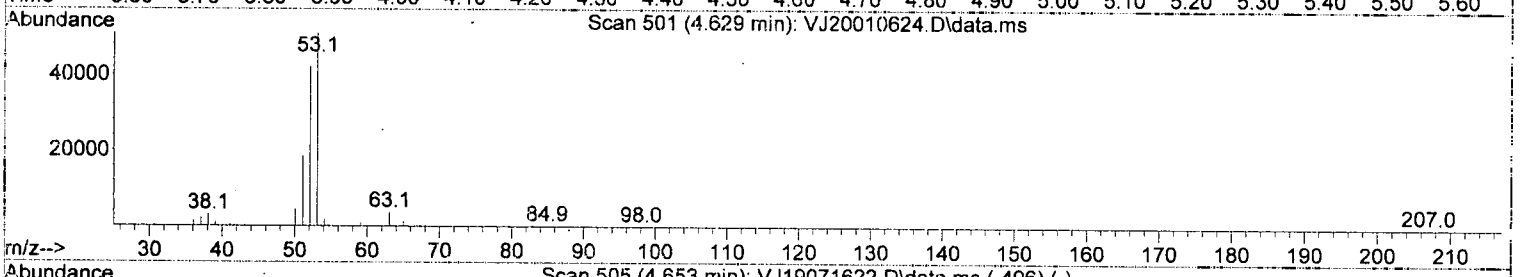
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	82.36
38.00	5.50	4.89
0.00	0.00	0.00

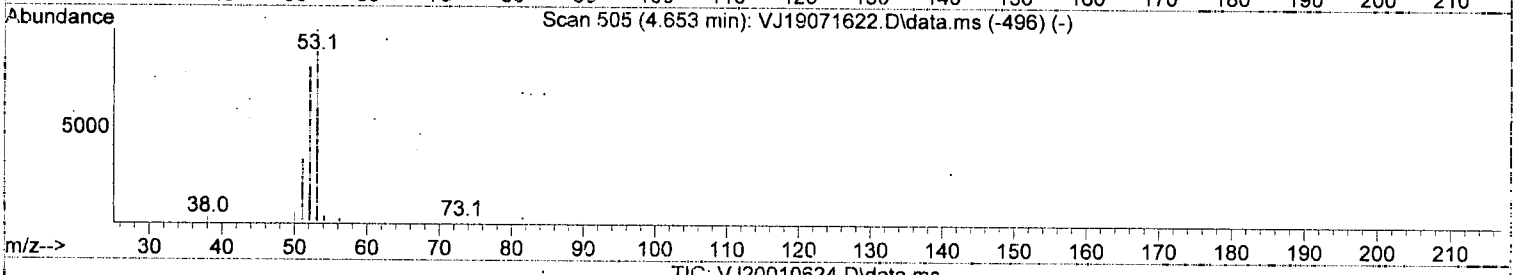
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 104.40 ug/L m

response 154316

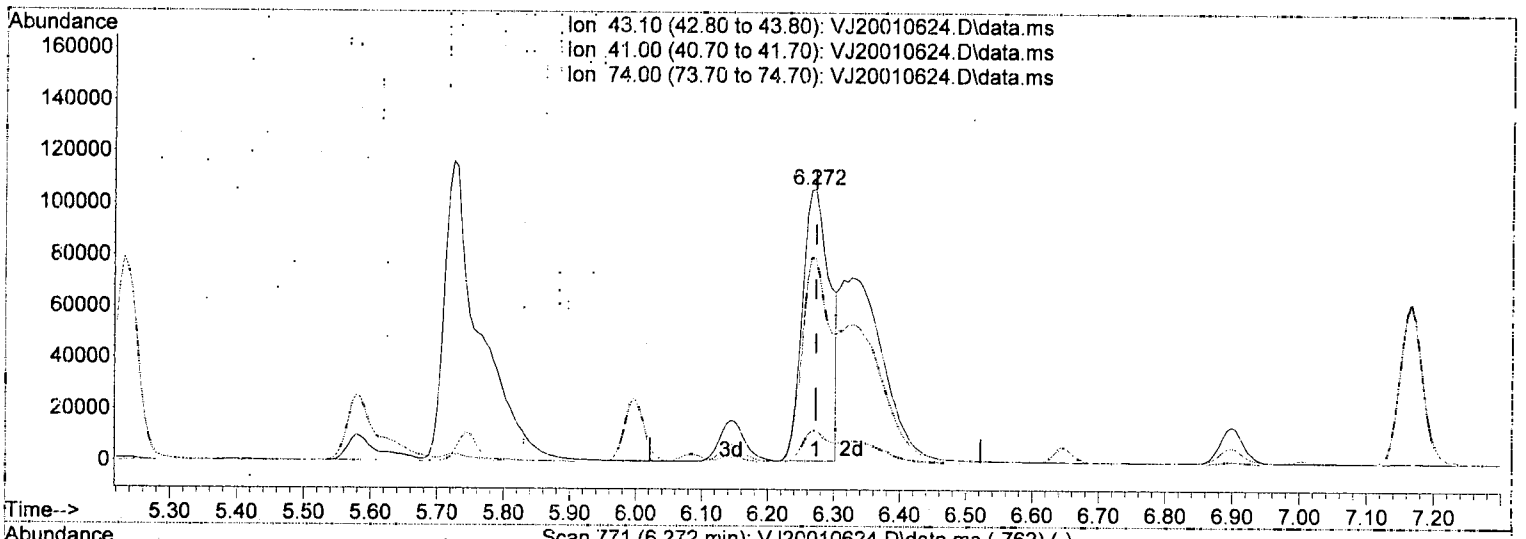
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	82.36
38.00	5.50	6.37
0.00	0.00	0.00

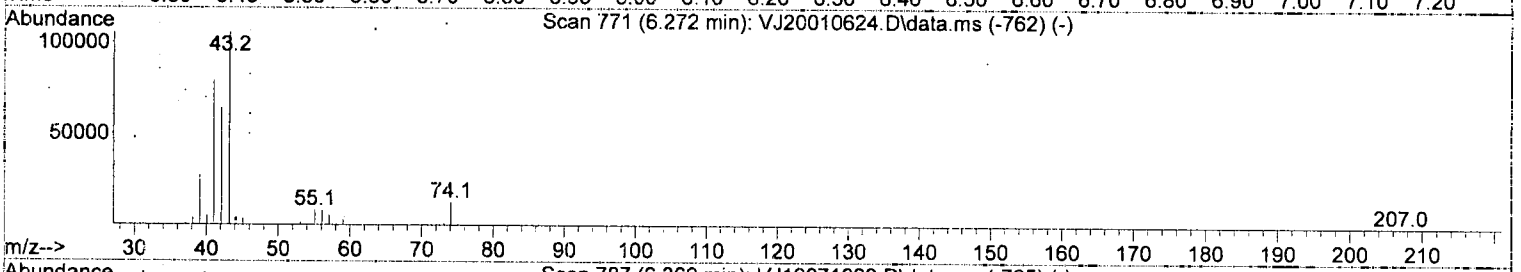
1/7/20

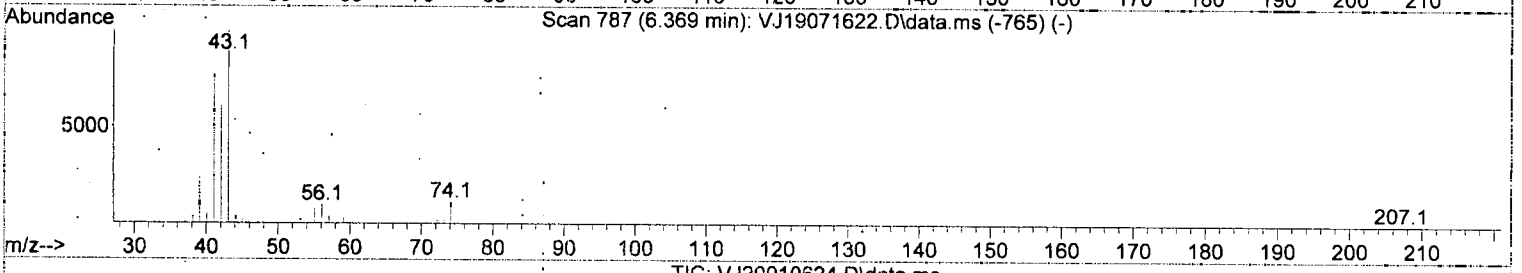
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(36) iso-Butyl Alcohol

6.272min (0.000) 1352.06 ug/L

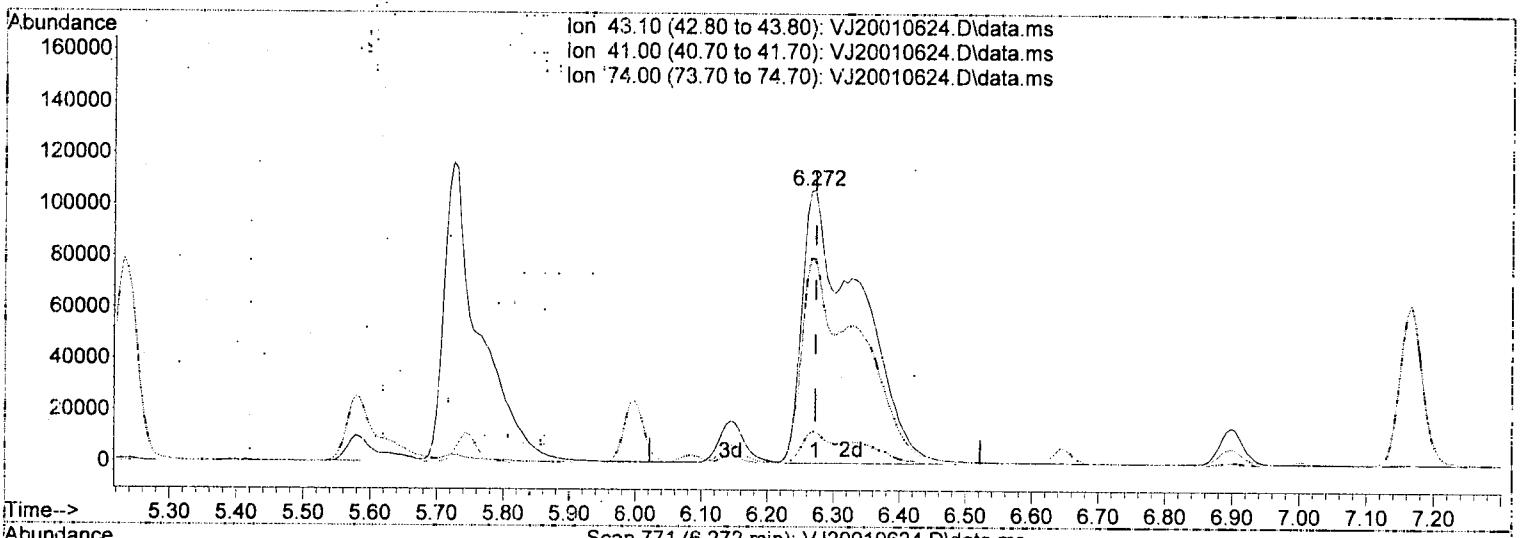
response 306318

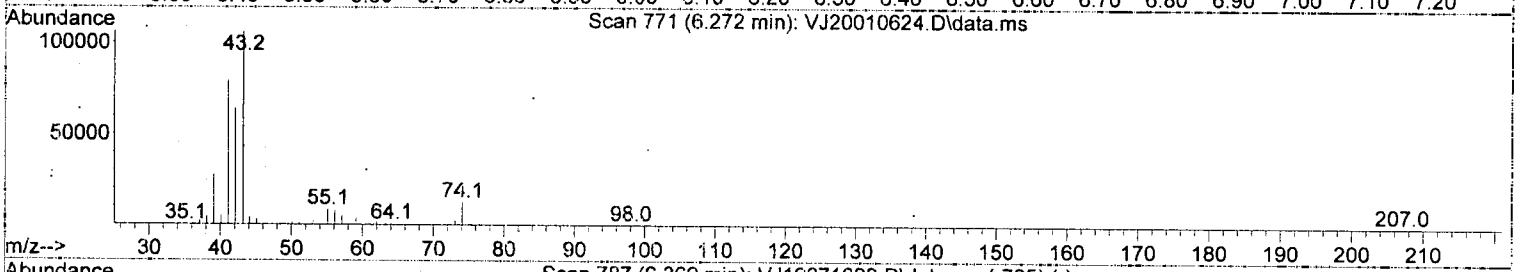
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	75.02
74.00	11.60	11.95
0.00	0.00	0.00

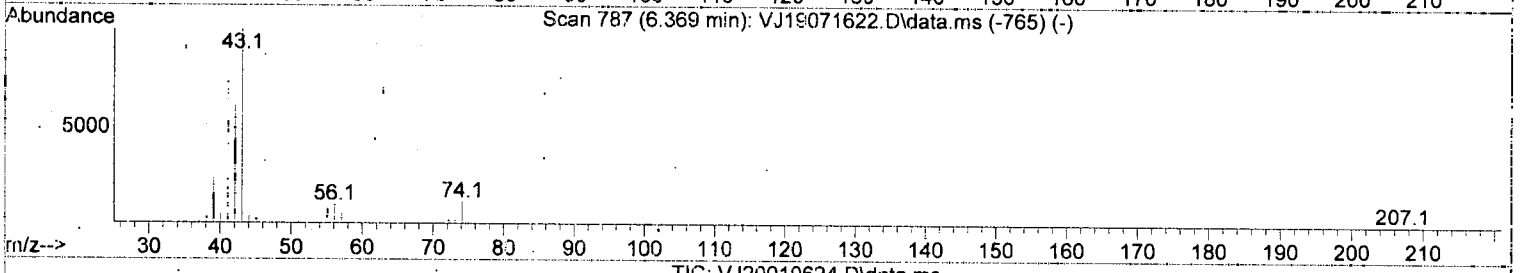
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010624.D\data.ms

(36) iso-Butyl Alcohol

6.272min (0.000) 2831.07 ug/L m

response 641400

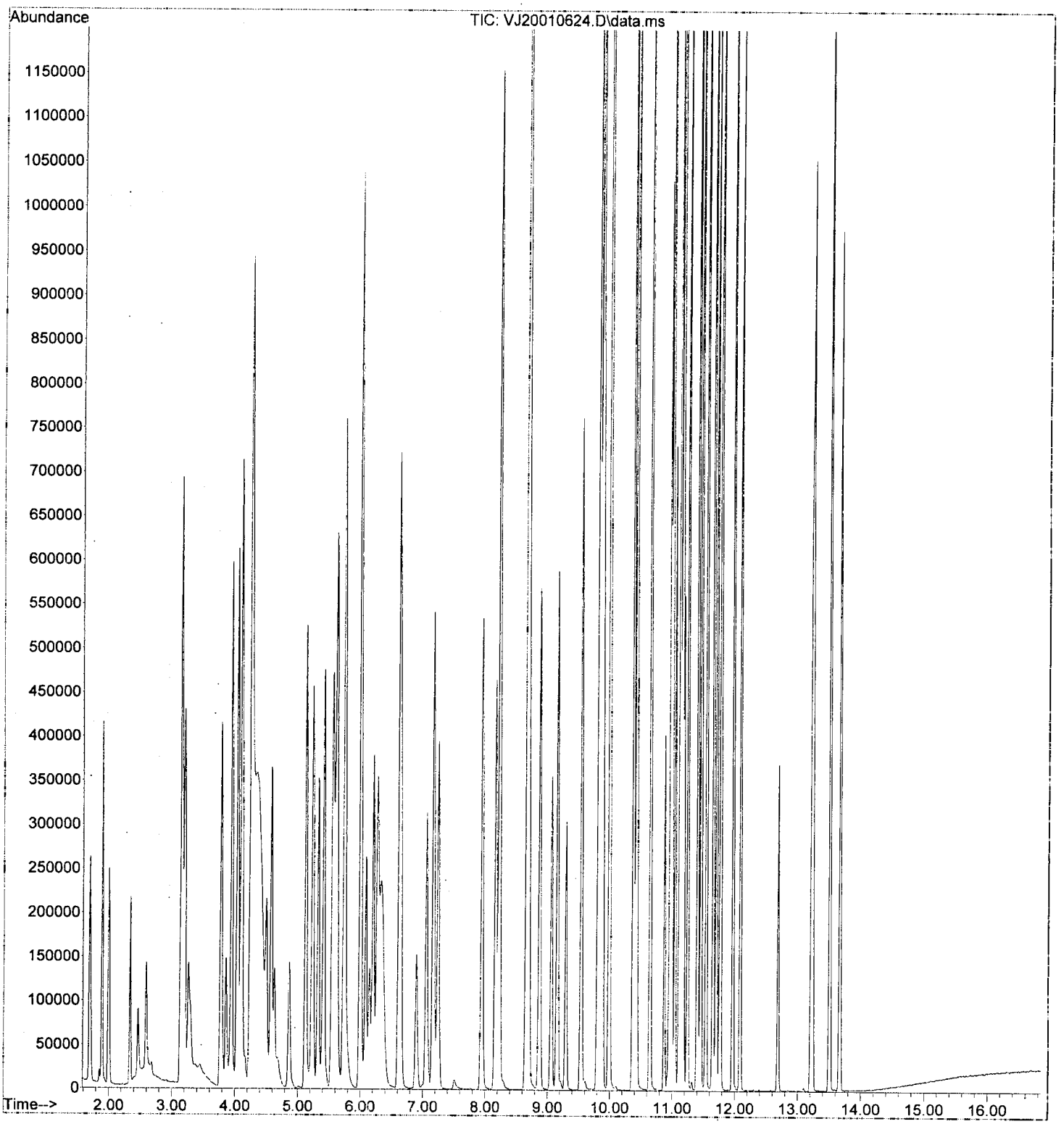
Ion	Exp%	Act%
43.10	100.00	100.00
41.00	71.80	74.96
74.00	11.60	11.89
0.00	0.00	0.00

1/7/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010624.D
Acq On : 6 Jan 2020 9:41 pm
Operator : tb
Sample : 0A06051-CALA
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 07 11:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010625.D
Acq On : 6 Jan 2020 10:08 pm
Operator : tb
Sample : 0A06051-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 15 Sample Multiplier: 1

NR

Quant Time: Jan 08 10:51:37 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.083	99	108180	50.00 ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	268908	50.00 ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	117506	50.00 ug/L		0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.596	111	89567	51.25 ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	318641	50.49 ug/L		0.00
45) Toluene-d8 (S)	8.164	98	371918	49.89 ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	92515	51.00 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.703	85	657	0.31 ug/L	#	51
3) Chloromethane	1.898	50	6266	2.02 ug/L		95
4) Vinyl Chloride	2.001	62	199	0.09 ug/L	#	46
5) Bromomethane	2.342	96	7500	3.76 ug/L		95
6) Chloroethane	2.457	64	137	0.24 ug/L	#	1
8) Ethanol	3.236	45	128	Below Cal	#	29
9) 1,1-Dichloroethene	3.133	61	433	0.16 ug/L	#	32
10) Carbon Disulfide	3.157	76	3387	0.72 ug/L		80
11) Freon 113	3.187	101	621	0.32 ug/L		88
12) Iodomethane	3.297	142	3063	7.93 ug/L		82
13) Methylene Chloride	3.777	84	3256	0.52 ug/L		94
14) Acetone	3.869	43	2199	1.61 ug/L		89
15) t-1,2-Dichloroethene	3.948	61	883	0.27 ug/L		95
18) tert-Butanol (TBA)	4.282	59	717	1.17 ug/L	#	46
31) 1,1-Dichloropropene	5.749	75	748	0.24 ug/L		90
32) 2-Butanone (MEK)	5.742	43	3079	1.43 ug/L		86
33) Benzene	5.998	78	1123	0.11 ug/L		56
36) iso-Butyl Alcohol	6.320	43	1991	8.59 ug/L		78
38) Trichloroethene (TCE)	6.606	130	256	0.11 ug/L	#	53
46) Toluene	8.225	91	1448	0.14 ug/L		92
47) Tetrachloroethene (PCE)	8.663	166	993	0.41 ug/L		86
55) Chlorobenzene	9.818	112	1134	0.18 ug/L		81
56) Ethylbenzene	9.855	91	2045	0.19 ug/L		86
58) m,p-Xylenes (2)	9.989	91	3352	0.45 ug/L		96
59) o-Xylene	10.372	91	960	0.14 ug/L		91
60) Styrene	10.415	104	513	0.31 ug/L		80
62) Isopropylbenzene	10.646	105	1880	0.21 ug/L		93
65) Bromobenzene	10.962	156	394	0.18 ug/L		97
66) n-Propylbenzene	10.993	91	3852	0.38 ug/L		95
68) 2-Chlorotoluene	11.108	126	311	0.16 ug/L		88
69) 1,3,5-Trimethylbenzene	11.151	105	1928	0.28 ug/L		96
72) 4-Chlorotoluene	11.242	91	2093	0.35 ug/L		94
73) tert-Butylbenzene	11.400	91	1137	0.30 ug/L		82
74) 1,2,4-Trimethylbenzene	11.455	105	1994	0.29 ug/L		92
75) sec-Butylbenzene	11.540	105	3207	0.39 ug/L		99
76) 4-Isopropyltoluene	11.650	119	2637	0.39 ug/L		94
77) 1,3-Dichlorobenzene	11.704	146	1656	0.42 ug/L		92
78) 1,4-Dichlorobenzene	11.771	146	2158	0.50 ug/L		78
79) n-Butylbenzene	11.966	91	3640	0.58 ug/L		97
80) 1,2-Dichlorobenzene	12.088	146	1033	0.29 ug/L		95
82) Hexachlorobutadiene	13.213	223	618	1.06 ug/L		92
83) 1,2,4-Trichlorobenzene	13.237	180	1906	0.85 ug/L		79
84) Naphthalene	13.505	128	3048	0.47 ug/L		86

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010625.D
Acq On : 6 Jan 2020 10:08 pm
Operator : tb
Sample : 0A06051-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 08 10:51:37 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

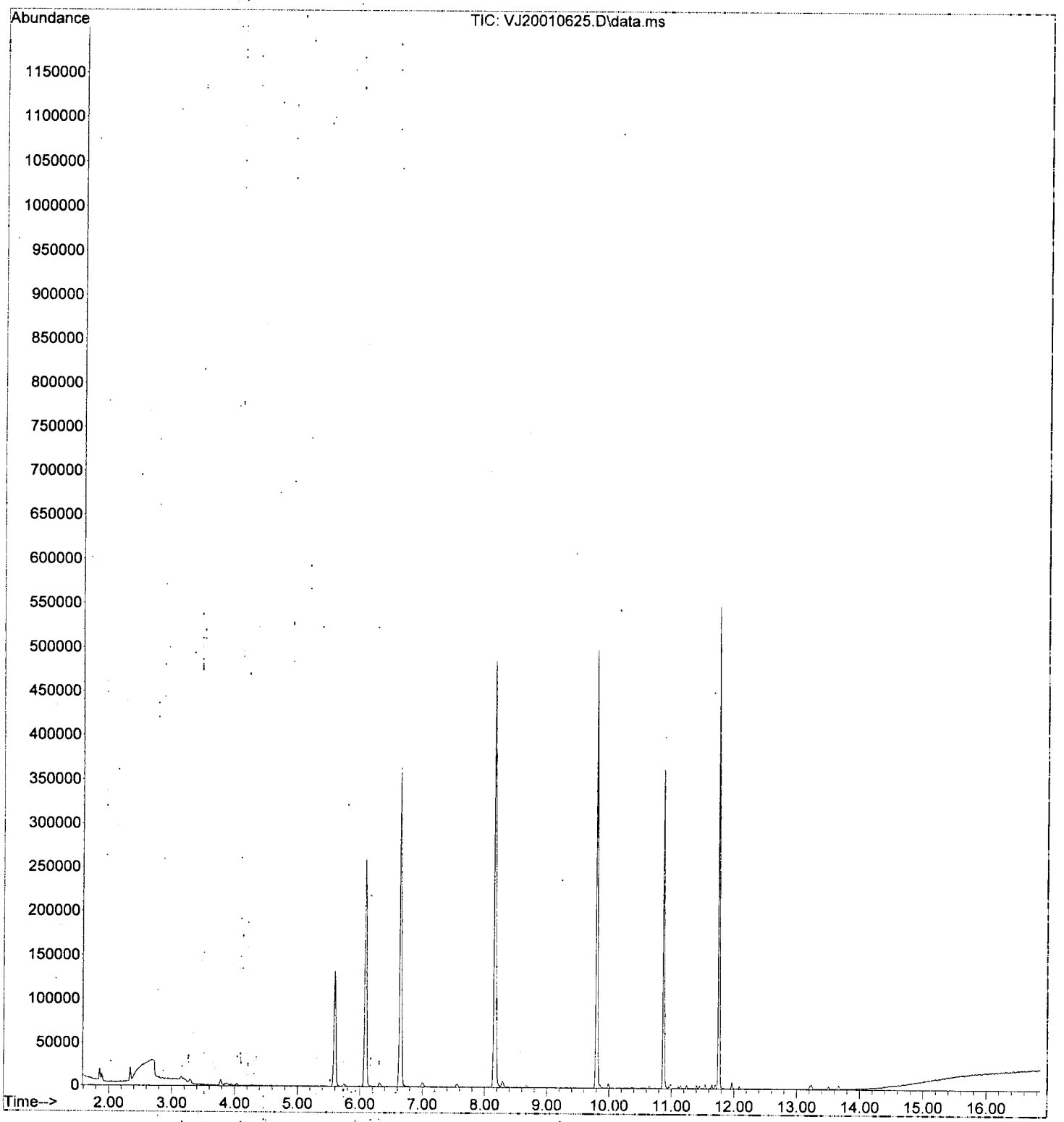
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
85) 1,2,3-Trichlorobenzene	13.669	180	1527	0.67	ug/L	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010625.D
Acq On : 6 Jan 2020 10:08 pm
Operator : tb
Sample : 0A06051-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 08 10:51:37 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

1/7/20

Quant Time: Jan 07 15:06:26 2020
Quant Method : C:\msdchem\1\methods\~~VJ200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.083	99	113880	50.00	ug/L	0.00
43) Chlorobenzene-d5 (I)	9.800	117	270707	50.00	ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	138986	50.00	ug/L	0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.590	111	92653	51.74	ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.643	114	336999	51.48	ug/L	0.00
45) Toluene-d8 (S)	8.164	98	377155	49.43	ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.877	174	101679	47.38	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	d	
3) Chloromethane	0.000		0	N.D.	d	
4) Vinyl Chloride	0.000		0	N.D.	d	
5) Bromomethane	0.000		0	N.D.	d	
6) Chloroethane	0.000		0	N.D.	d	
7) Trichlorofluoromethane	0.000		0	N.D.	d	
8) Ethanol	0.000		0	N.D.	d	
9) 1,1-Dichloroethene	3.133	61	532160	199.96	ug/L	97
10) Carbon Disulfide	3.145	76	997437	213.93	ug/L	98
11) Freon 113	3.187	101	413088	198.97	ug/L	98
12) Iodomethane	3.279	142	71908	171.67	ug/L	93
13) Methylene Chloride	3.771	84	426237	187.09	ug/L	100
14) Acetone	3.857	43	551814m	410.08	ug/L	
15) t-1,2-Dichloroethene	3.936	61	670587	201.29	ug/L	99
16) n-Hexane	4.033	86	115656	215.01	ug/L	96
17) Methyl-tert-butyl-ether	4.094	73	1739636	210.08	ug/L	95
18) tert-Butanol (TBA)	0.000		0	N.D.	d	
19) Diisopropyl ether (DIPE)	0.000		0	N.D.	d	
20) 1,1-Dichloroethane	4.574	63	778036	198.95	ug/L	99
21) Acrylonitrile	4.623	53	311398m	205.09	ug/L	
22) Ethyl-tert-butyl ether...	0.000		0	N.D.	d	
23) c-1,2-Dichloroethene	5.122	61	665136	203.56	ug/L	99
24) 2,2-Dichloropropane	5.231	77	717593	198.58	ug/L	97
25) Bromochloromethane	5.323	49	362865	184.60	ug/L	98
26) Chloroform	5.408	83	835972	194.99	ug/L	96
27) Carbon Tetrachloride	5.548	117	697816	224.32	ug/L	96
28) Tetrahydrofuran	5.578	42	299591	214.13	ug/L	95
29) 1,1,1-Trichloroethane	5.615	97	839286	205.54	ug/L	98
31) 1,1-Dichloropropene	5.742	75	719241	210.95	ug/L	97
32) 2-Butanone (MEK)	5.724	43	860392	408.36	ug/L	99
33) Benzene	5.992	78	2104798	200.87	ug/L	99
34) tert-Amyl methyl ether...	0.000		0	N.D.	d	
35) 1,2-Dichloroethane (EDC)	6.199	62	729497	195.37	ug/L	99
36) iso-Butyl Alcohol	6.272	43	1304391	5605.17	ug/L	98
38) Trichloroethene (TCE)	6.612	130	540121	213.08	ug/L	97
39) tert-Amyl ethyl ether ...	0.000		0	N.D.	d	
40) Dibromomethane	7.056	93	295836	197.25	ug/L	96
41) 1,2-Dichloropropane	7.166	63	513536	210.37	ug/L	93
42) Bromodichloromethane	7.239	83	673068	224.90	ug/L	97
44) c-1,3-Dichloropropene	7.945	75	788701	215.93	ug/L	97
46) Toluene	8.218	91	2113193	198.81	ug/L	98
47) Tetrachloroethene (PCE)	8.669	166	525373	202.66	ug/L	94
48) 4-Methyl-2-Pentanone (...	8.663	43	1392617	440.35	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 15:06:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

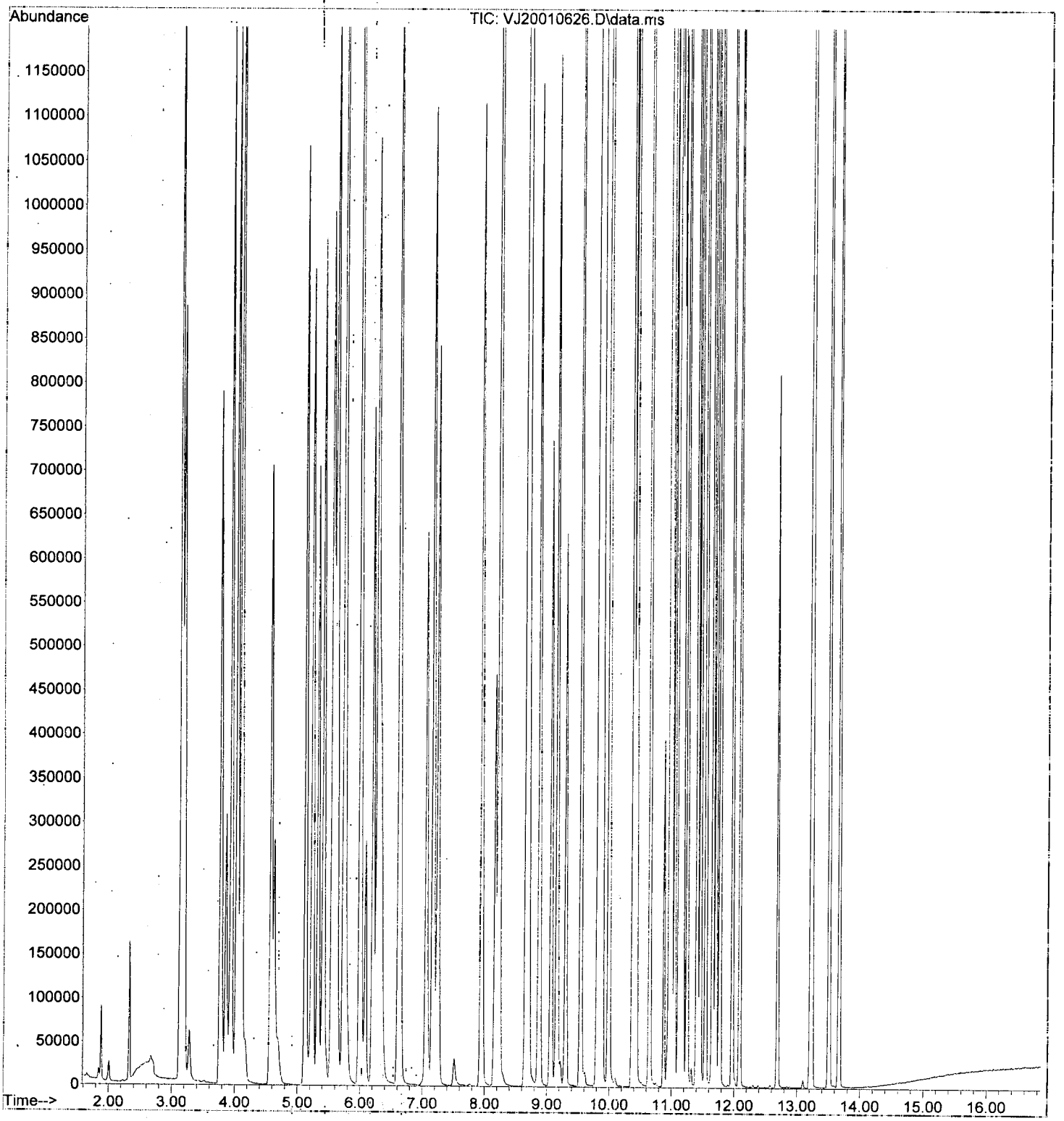
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	742175	207.87	ug/L	98
50) 1,1,2-Trichloroethane	8.869	97	439402	197.87	ug/L	100
51) Dibromochloromethane	9.058	129	475554	234.15	ug/L	99
52) 1,3-Dichloropropane	9.155	76	792112	204.93	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	481376	216.23	ug/L	99
54) 2-Hexanone	9.533	43	1114091	488.49	ug/L	99
55) Chlorobenzene	9.818	112	1265574	196.26	ug/L	98
56) Ethylbenzene	9.849	91	2266469	202.20	ug/L	100
57) 1,1,1,2-Tetrachloroethane	9.879	131	452718	208.60	ug/L	99
58) m,p-Xylenes (2)	9.989	91	3397624	408.48	ug/L	99
59) o-Xylene	10.372	91	1721459	220.76	ug/L	97
60) Styrene	10.415	104	1328257	239.38	ug/L	98
61) Bromoform	10.433	173	358978	247.05	ug/L	98
62) Isopropylbenzene	10.646	105	2132542	216.03	ug/L	99
65) Bromobenzene	10.956	156	521478	192.72	ug/L	88
66) n-Propylbenzene	10.993	91	2406935	186.13	ug/L	99
67) 1,1,2,2-Tetrachloroethane	11.041	83	627455	189.22	ug/L	97
68) 2-Chlorotoluene	11.114	126	477290	192.97	ug/L	98
69) 1,3,5-Trimethylbenzene	11.151	105	1711211	184.05	ug/L	97
70) 1,2,3-Trichloropropane	11.145	110	227473	185.87	ug/L	94
71) t-1,4-Dichloro-2-butene	11.181	88	108766	216.67	ug/L	90
72) 4-Chlorotoluene	11.242	91	1463967	191.97	ug/L	95
73) tert-Butylbenzene	11.400	91	960546	194.05	ug/L	94
74) 1,2,4-Trimethylbenzene	11.455	105	1736316	186.23	ug/L	98
75) sec-Butylbenzene	11.540	105	2093887	189.76	ug/L	98
76) 4-Isopropyltoluene	11.650	119	1802226	196.15	ug/L	98
77) 1,3-Dichlorobenzene	11.704	146	940100	186.76	ug/L	98
78) 1,4-Dichlorobenzene	11.771	146	951168	191.34	ug/L	97
79) n-Butylbenzene	11.966	91	1537990	194.32	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	895922	194.42	ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	200017	243.11	ug/L	90
82) Hexachlorobutadiene	13.213	223	144234	195.42	ug/L	95
83) 1,2,4-Trichlorobenzene	13.231	180	622345	222.13	ug/L	95
84) Naphthalene	13.505	128	2224076	227.82	ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	618452	209.45	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 15:06:26 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ~~200106S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

1/7/20

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	113880	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	270707	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	138986	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	92653	51.74	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.643	114	336999	51.48	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	377155	49.43	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	101679	47.38	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	1173	0.58	ug/L		73
3) Chloromethane	1.879	50	64059	21.06	ug/L		99
4) Vinyl Chloride	2.007	62	18387	7.53	ug/L		92
5) Bromomethane	2.330	96	70871	54.80	ug/L		99
6) Chloroethane	2.451	64	989	1.85	ug/L	#	8
7) Trichlorofluoromethane	2.585	101	651	0.77	ug/L		84
8) Ethanol	3.273	45	2779	40.23	ug/L		88
9) 1,1-Dichloroethene	3.133	61	532160	199.96	ug/L		97
10) Carbon Disulfide	3.145	76	997437	213.93	ug/L		98
11) Freon 113	3.187	101	413088	198.97	ug/L		98
12) Iodomethane	3.279	142	71908	171.67	ug/L		93
13) Methylene Chloride	3.771	84	426237	187.09	ug/L		100
14) Acetone	3.857	43	~~435386~~	~~323.56~~	~~ug/L~~		~~98~~ MI
15) t-1,2-Dichloroethene	3.936	61	670587	201.29	ug/L		99
16) n-Hexane	4.033	86	115656	215.01	ug/L		96
17) Methyl-tert-butyl-ether	4.094	73	1739636	210.08	ug/L		95
18) tert-Butanol (TBA)	4.264	59	1655	2.43	ug/L	#	1
19) Diisopropyl ether (DIPE)	4.495	45	673	0.09	ug/L		59
20) 1,1-Dichloroethane	4.574	63	778036	198.95	ug/L		99
21) Acrylonitrile	4.623	53	~~253785~~	~~167.15~~	~~ug/L~~		~~98~~ MI
22) Ethyl-tert-butyl ether...	4.854	59	413	0.05	ug/L	#	38
23) c-1,2-Dichloroethene	5.122	61	665136	203.56	ug/L		99
24) 2,2-Dichloropropane	5.231	77	717593	198.58	ug/L		97
25) Bromochloromethane	5.323	49	362865	184.60	ug/L		98
26) Chloroform	5.408	83	835972	194.99	ug/L		96
27) Carbon Tetrachloride	5.548	117	697816	224.32	ug/L		96
28) Tetrahydrofuran	5.578	42	299591	214.13	ug/L		95
29) 1,1,1-Trichloroethane	5.615	97	839286	205.54	ug/L		98
31) 1,1-Dichloropropene	5.742	75	719241	210.95	ug/L		97
32) 2-Butanone (MEK)	5.724	43	860392	408.36	ug/L		99
33) Benzene	5.992	78	2104798	200.87	ug/L		99
34) tert-Amyl methyl ether...	6.150	73	650	0.10	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.199	62	729497	195.37	ug/L		99
36) iso-Butyl Alcohol	6.272	43	1304391	5605.17	ug/L		98
38) Trichloroethene (TCE)	6.612	130	540121	213.08	ug/L		97
39) tert-Amyl ethyl ether ...	6.892	59	131	0.03	ug/L	#	21
40) Dibromomethane	7.056	93	295836	197.25	ug/L		96
41) 1,2-Dichloropropane	7.166	63	513536	210.37	ug/L		93
42) Bromodichloromethane	7.239	83	673068	224.90	ug/L		97
44) c-1,3-Dichloropropene	7.945	75	788701	215.93	ug/L		97
46) Toluene	8.218	91	2113193	198.31	ug/L		98
47) Tetrachloroethene (PCE)	8.669	166	525373	202.66	ug/L		94
48) 4-Methyl-2-Pentanone (...	8.663	43	1392617	440.35	ug/L		96

Not spiked

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration

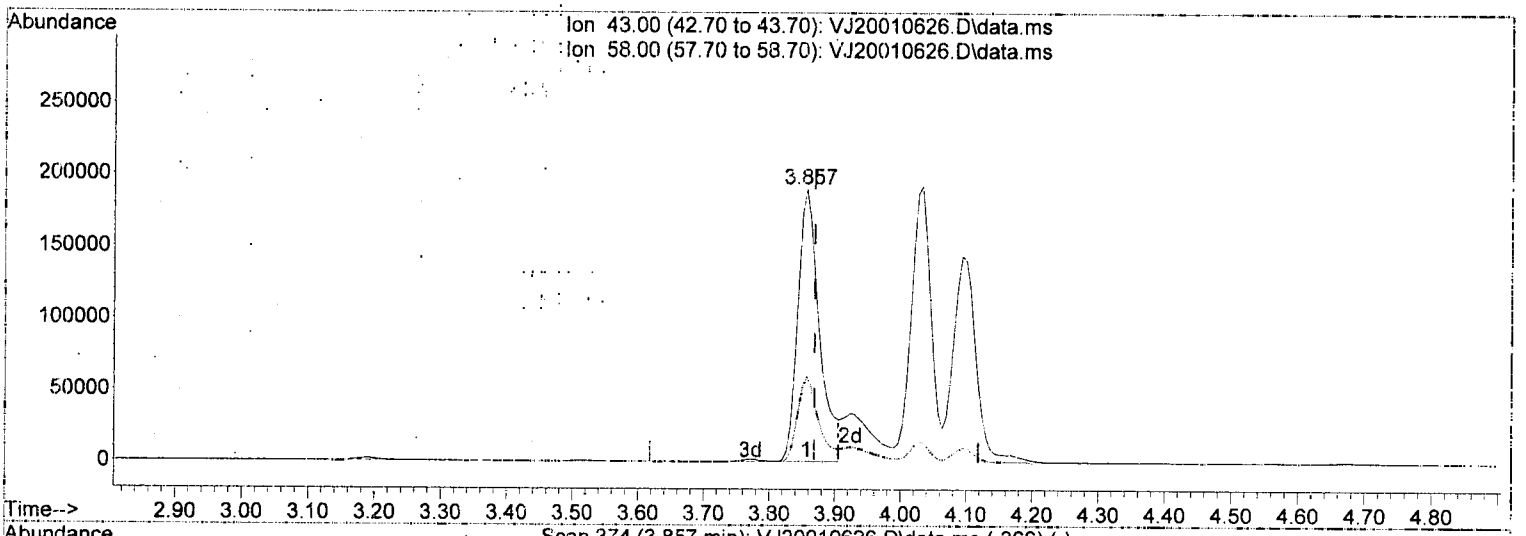
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	742175	207.87	ug/L	98
50) 1,1,2-Trichloroethane	8.869	97	439402	197.87	ug/L	100
51) Dibromochloromethane	9.058	129	475554	234.15	ug/L	99
52) 1,3-Dichloropropane	9.155	76	792112	204.93	ug/L	99
53) 1,2-Dibromoethane (EDB)	9.295	107	481376	216.23	ug/L	99
54) 2-Hexanone	9.533	43	1114091	488.49	ug/L	99
55) Chlorobenzene	9.818	112	1265574	196.26	ug/L	98
56) Ethylbenzene	9.849	91	2266469	202.20	ug/L	100
57) 1,1,1,2-Tetrachloroethane	9.879	131	452718	208.60	ug/L	99
58) m,p-Xylenes (2)	9.989	91	3397624	408.48	ug/L	99
59) o-Xylene	10.372	91	1721459	220.76	ug/L	97
60) Styrene	10.415	104	1328257	239.38	ug/L	98
61) Bromoform	10.433	173	358978	247.05	ug/L	98
62) Isopropylbenzene	10.646	105	2132542	216.03	ug/L	99
65) Bromobenzene	10.956	156	521478	192.72	ug/L	88
66) n-Propylbenzene	10.993	91	2406935	186.13	ug/L	99
67) 1,1,2,2-Tetrachloroethane	11.041	83	627455	189.22	ug/L	97
68) 2-Chlorotoluene	11.114	126	477290	192.97	ug/L	98
69) 1,3,5-Trimethylbenzene	11.151	105	1711211	184.05	ug/L	97
70) 1,2,3-Trichloropropane	11.145	110	227473	185.87	ug/L	94
71) t-1,4-Dichloro-2-butene	11.181	88	108766	216.67	ug/L	90
72) 4-Chlorotoluene	11.242	91	1463967	191.97	ug/L	95
73) tert-Butylbenzene	11.400	91	960546	194.05	ug/L	94
74) 1,2,4-Trimethylbenzene	11.455	105	1736316	186.23	ug/L	98
75) sec-Butylbenzene	11.540	105	2093887	189.76	ug/L	98
76) 4-Isopropyltoluene	11.650	119	1802226	196.15	ug/L	98
77) 1,3-Dichlorobenzene	11.704	146	940100	186.76	ug/L	98
78) 1,4-Dichlorobenzene	11.771	146	951168	191.34	ug/L	97
79) n-Butylbenzene	11.966	91	1537990	194.32	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	895922	194.42	ug/L	99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	200017	248.11	ug/L	90
82) Hexachlorobutadiene	13.213	223	144234	196.42	ug/L	95
83) 1,2,4-Trichlorobenzene	13.231	180	622345	222.13	ug/L	95
84) Naphthalene	13.505	128	2224076	227.82	ug/L	98
85) 1,2,3-Trichlorobenzene	13.669	180	618452	209.45	ug/L	98

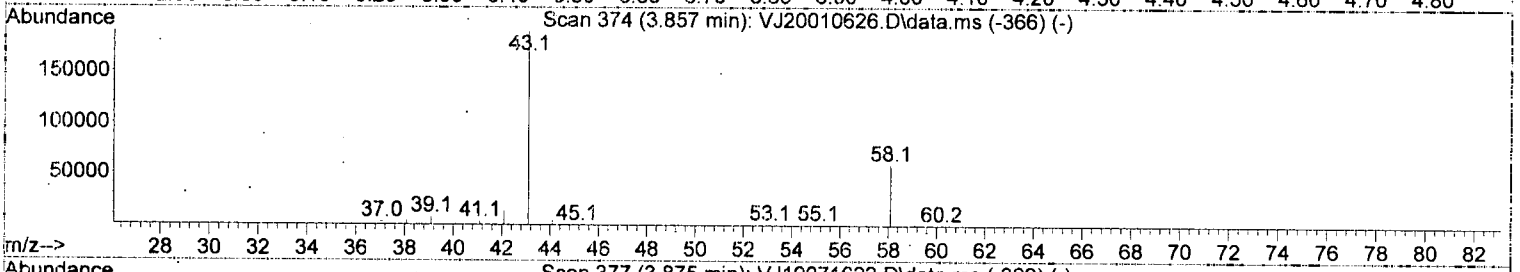
(#) = qualifier out of range (m) = manual integration (+) = signals summed

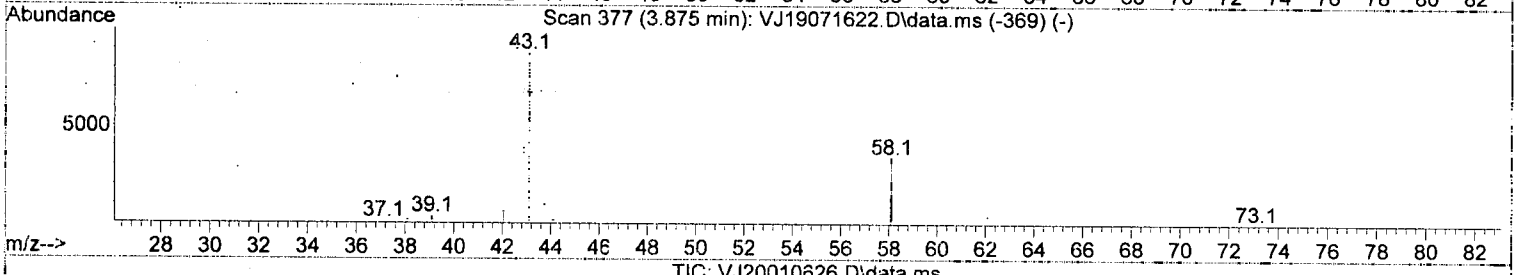
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010626.D\data.ms

(14) Acetone

3.857min (-0.011) 323.56 ug/L

response 435386

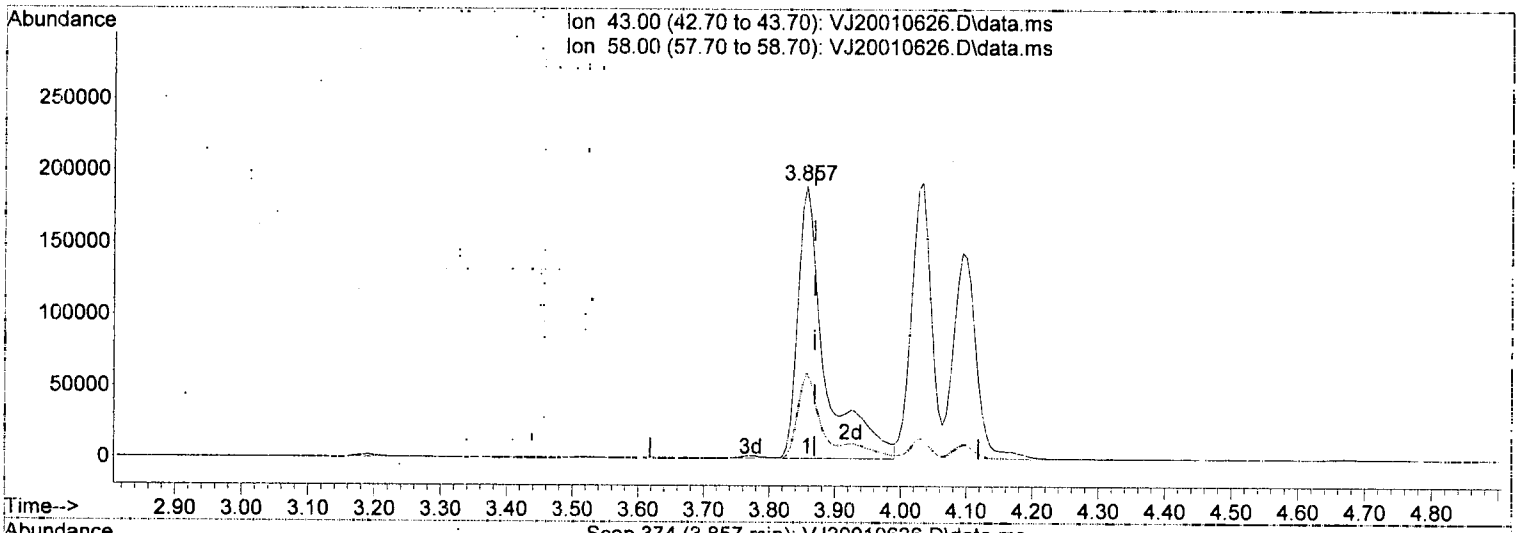
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.17
0.00	0.00	0.00
0.00	0.00	0.00

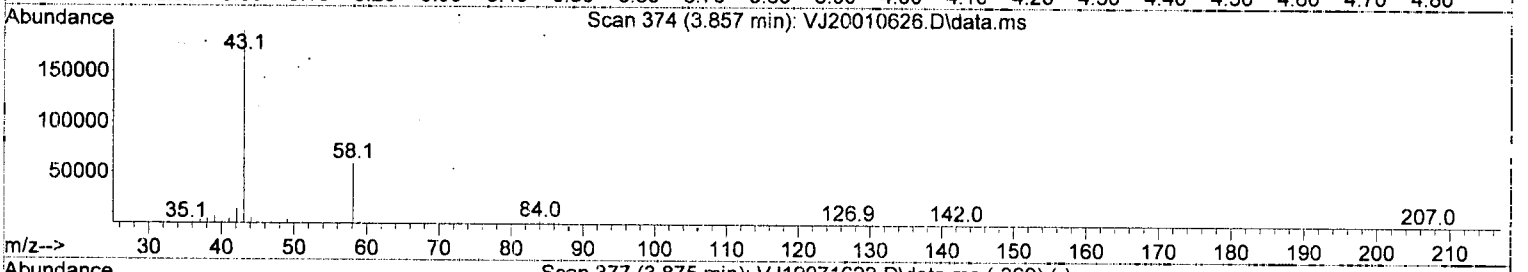
MI

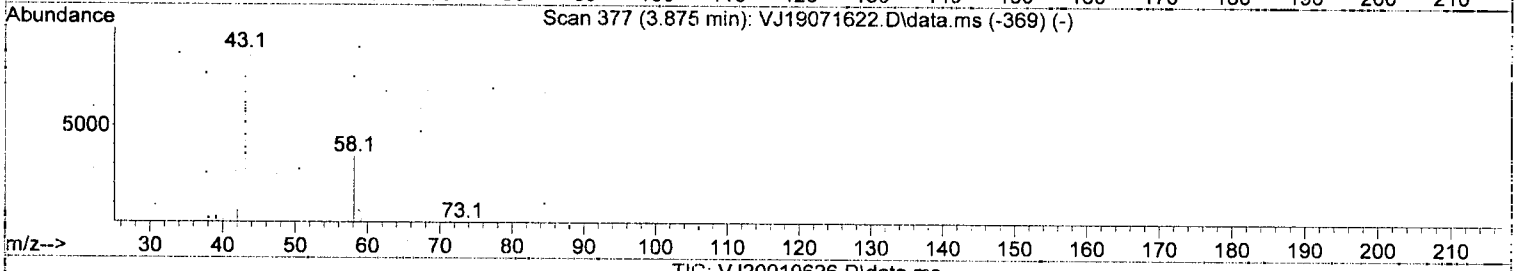
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration







TIC: VJ20010626.D\data.ms

(14) Acetone

3.857min (-0.011) 410.08 ug/L (m)

response 551814

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.12
0.00	0.00	0.00
0.00	0.00	0.00

1/7/20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
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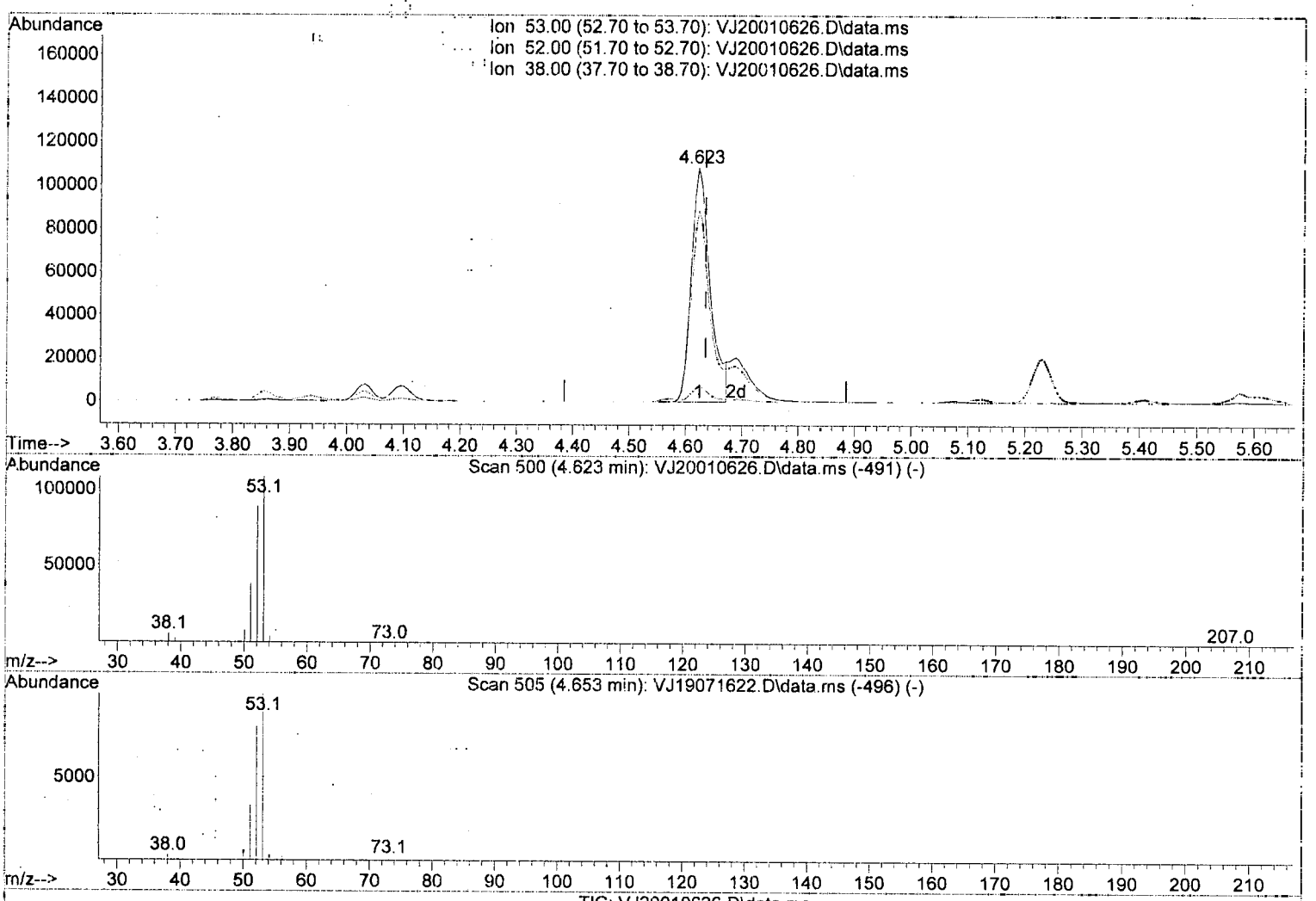

TIC: VJ20010626.D\data.ms

(21) Acrylonitrile

4.623min (-0.012) 167.15 ug/L

response 253785

Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	81.86
38.00	5.50	5.39
0.00	0.00	0.00

MI

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
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Quant Title : EPA 8260C: Volatile Organic Compounds
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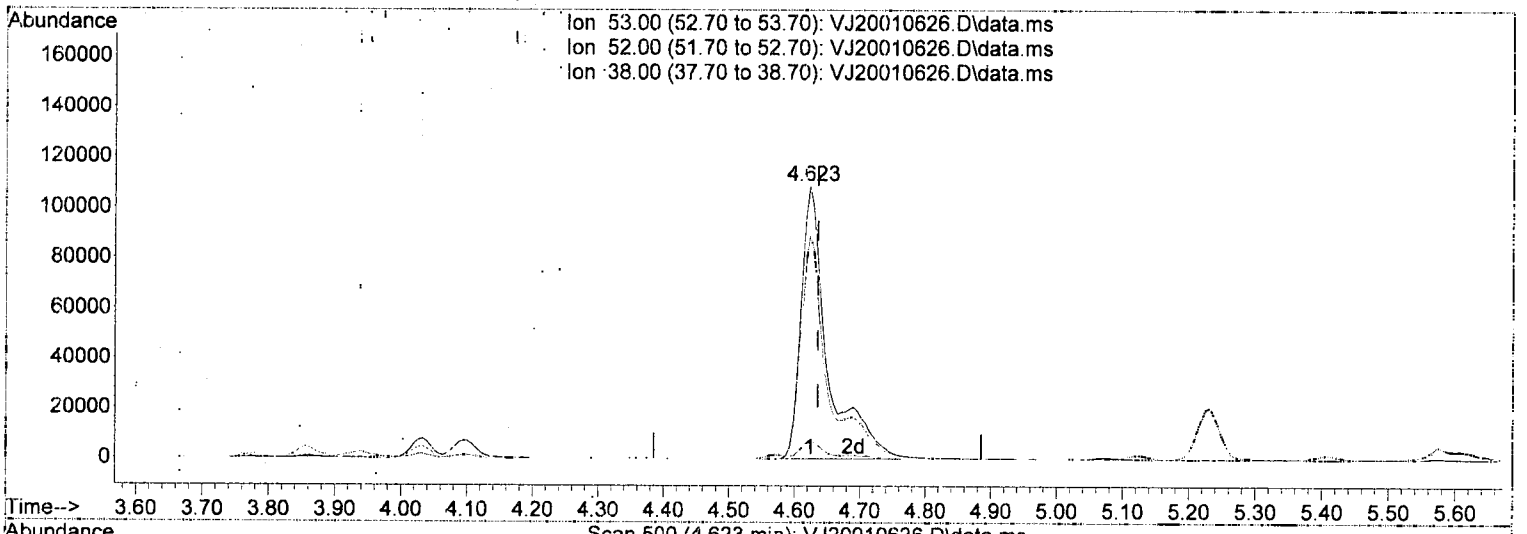
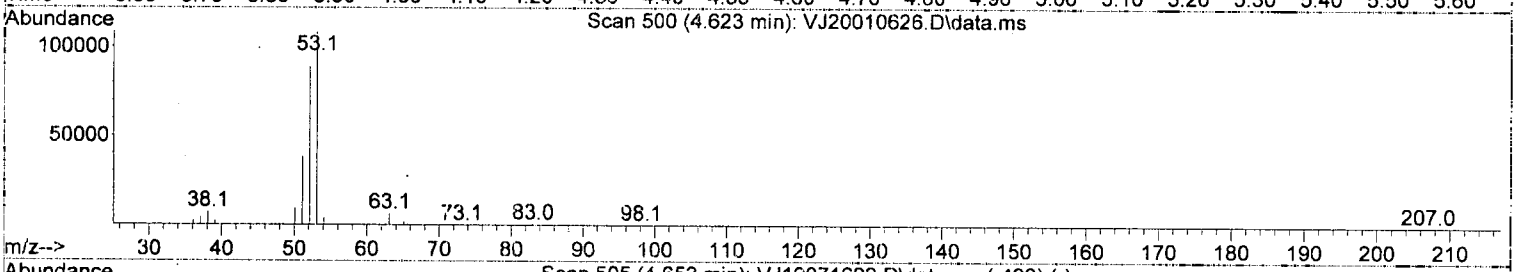
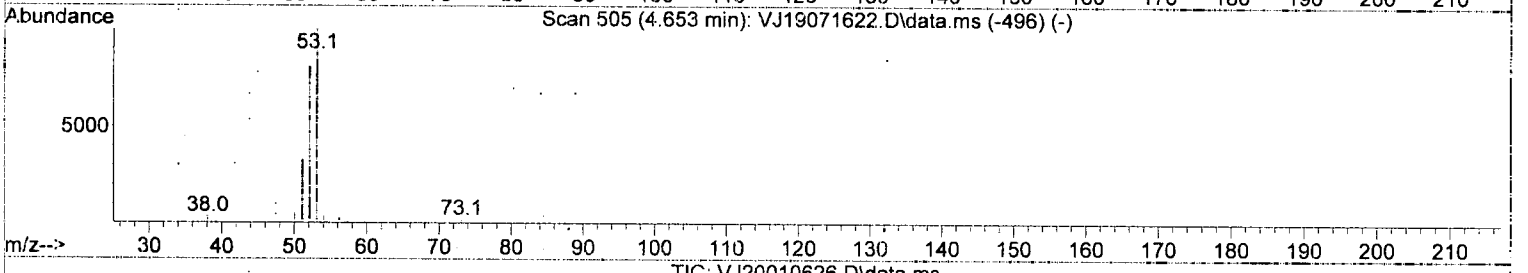






TIC: VJ20010626.D\data.ms

(21) Acrylonitrile

4.623min (-0.012) 205.09 ug/L m

response 311398

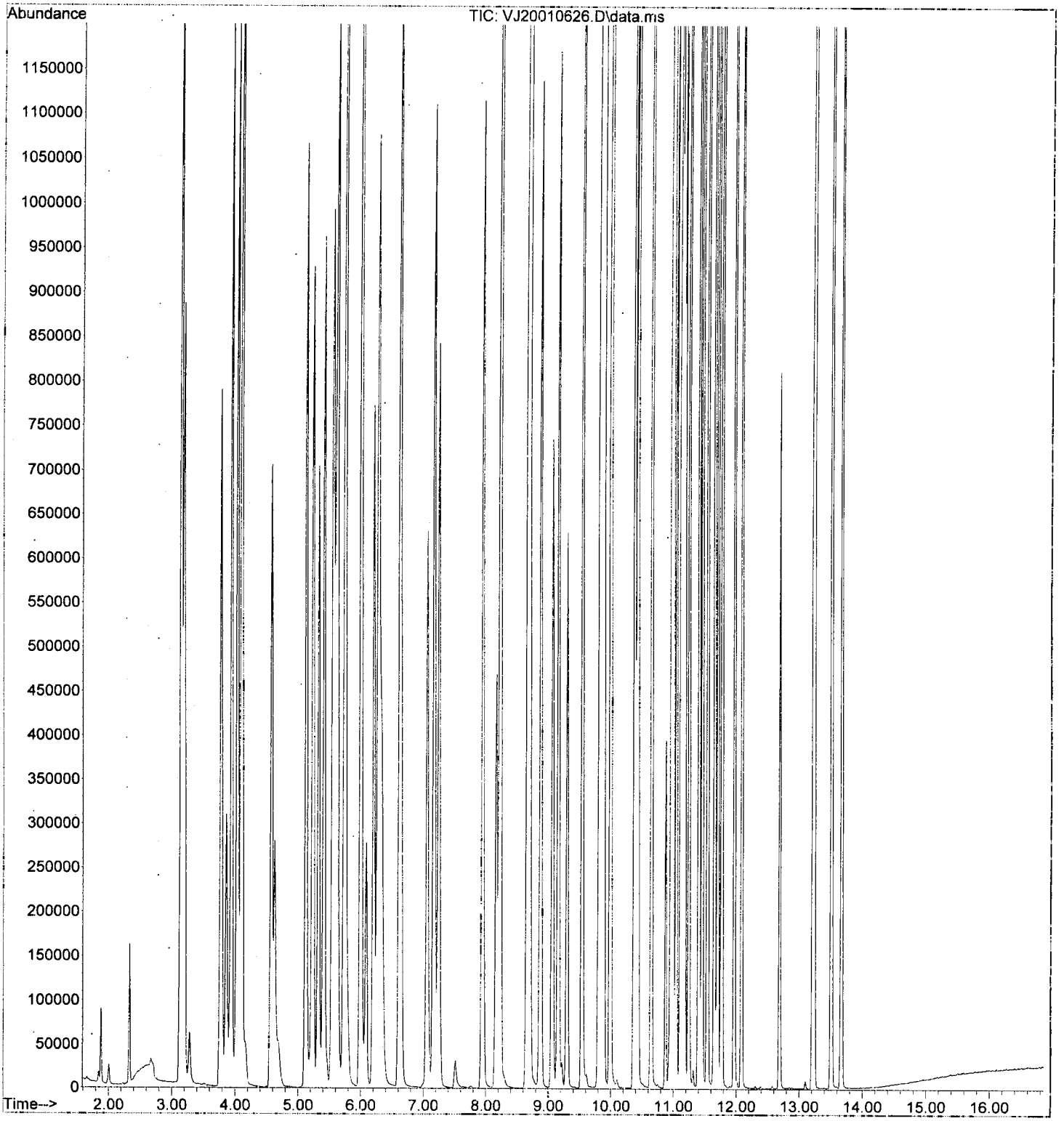
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	81.86
38.00	5.50	6.60
0.00	0.00	0.00

1/7/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010626.D
Acq On : 6 Jan 2020 10:34 pm
Operator : tb
Sample : 0A06051-CALB
Misc : 1X 5mL 50ppb DI+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 07 11:53:56 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 11:52:33 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010627.D
Acq On : 6 Jan 2020 11:01 pm
Operator : tb
Sample : 0A06051-IBL4
Misc : 1X | 5mL | DI+MeOH
ALS Vial : 17 | Sample Multiplier: 1

Quant Time: Jan 08 10:51:40 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.083	99	113663	50.00 ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	282838	50.00 ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	125972	50.00 ug/L		0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.596	111	93322	50.82 ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	338233	51.01 ug/L		0.00
45) Toluene-d8 (S)	8.164	98	389727	49.71 ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	99058	50.94 ug/L		0.00
Target Compounds						Qvalue
3) Chloromethane	1.898	50	7870	2.41 ug/L		99
5) Bromomethane	2.342	96	8320	4.14 ug/L		98
6) Chloroethane	2.451	64	57	0.10 ug/L	#	17
8) Ethanol	3.236	45	209	Below Cal	#	29
9) 1,1-Dichloroethene	3.145	61	957	0.35 ug/L		88
10) Carbon Disulfide	3.151	76	7075	1.43 ug/L		94
11) Freon 113	3.199	101	1429	0.70 ug/L		98
12) Iodomethane	3.291	142	7499	17.06 ug/L		87
13) Methylene Chloride	3.777	84	3507	0.56 ug/L		92
14) Acetone	3.881	43	2803	1.95 ug/L		86
15) t-1,2-Dichloroethene	3.948	61	1726	0.51 ug/L		98
16) n-Hexane	4.039	86	122	0.24 ug/L	#	47
18) tert-Butanol (TBA)	4.282	59	484	0.75 ug/L	#	46
23) c-1,2-Dichloroethene	5.122	61	566	0.18 ug/L		89
27) Carbon Tetrachloride	5.554	117	311	0.10 ug/L		87
29) 1,1,1-Trichloroethane	5.627	97	378	0.10 ug/L	#	25
31) 1,1-Dichloropropene	5.755	75	1690	0.52 ug/L		89
32) 2-Butanone (MEK)	5.742	43	3488	1.55 ug/L		93
33) Benzene	6.004	78	2038	0.20 ug/L		90
35) 1,2-Dichloroethane (EDC)	6.205	62	330	0.09 ug/L	#	49
36) iso-Butyl Alcohol	6.314	43	2303	9.46 ug/L		93
38) Trichloroethene (TCE)	6.618	130	1127	0.46 ug/L		86
44) c-1,3-Dichloropropene	7.945	75	335	0.09 ug/L	#	55
46) Toluene	8.218	91	2892	0.26 ug/L		99
47) Tetrachloroethene (PCE)	8.669	166	2085	0.81 ug/L		88
49) t-1,3-Dichloropropene	8.699	75	486	0.14 ug/L	#	45
54) 2-Hexanone	9.545	43	205	0.95 ug/L	#	32
55) Chlorobenzene	9.812	112	2389	0.36 ug/L		68
56) Ethylbenzene	9.855	91	4050	0.36 ug/L		94
58) m,p-Xylenes (2)	9.989	91	6497	0.83 ug/L		95
59) o-Xylene	10.366	91	1854	0.25 ug/L		88
60) Styrene	10.415	104	1284	0.43 ug/L		90
62) Isopropylbenzene	10.646	105	3552	0.37 ug/L		91
65) Bromobenzene	10.962	156	933	0.39 ug/L		80
66) n-Propylbenzene	10.993	91	7876	0.72 ug/L		98
68) 2-Chlorotoluene	11.108	126	1002	0.49 ug/L		99
69) 1,3,5-Trimethylbenzene	11.151	105	4163	0.56 ug/L		96
72) 4-Chlorotoluene	11.242	91	4216	0.67 ug/L		96
73) tert-Butylbenzene	11.400	91	2132	0.52 ug/L		96
74) 1,2,4-Trimethylbenzene	11.455	105	3923	0.53 ug/L		97
75) sec-Butylbenzene	11.540	105	6645	0.75 ug/L		99
76) 4-Isopropyltoluene	11.650	119	5593	0.77 ug/L		93
77) 1,3-Dichlorobenzene	11.704	146	3708	0.87 ug/L		91

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010627.D
Acq On : 6 Jan 2020 11:01 pm
Operator : tb
Sample : 0A06051-IBL4
Misc : 1X 5mL DI+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 08 10:51:40 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

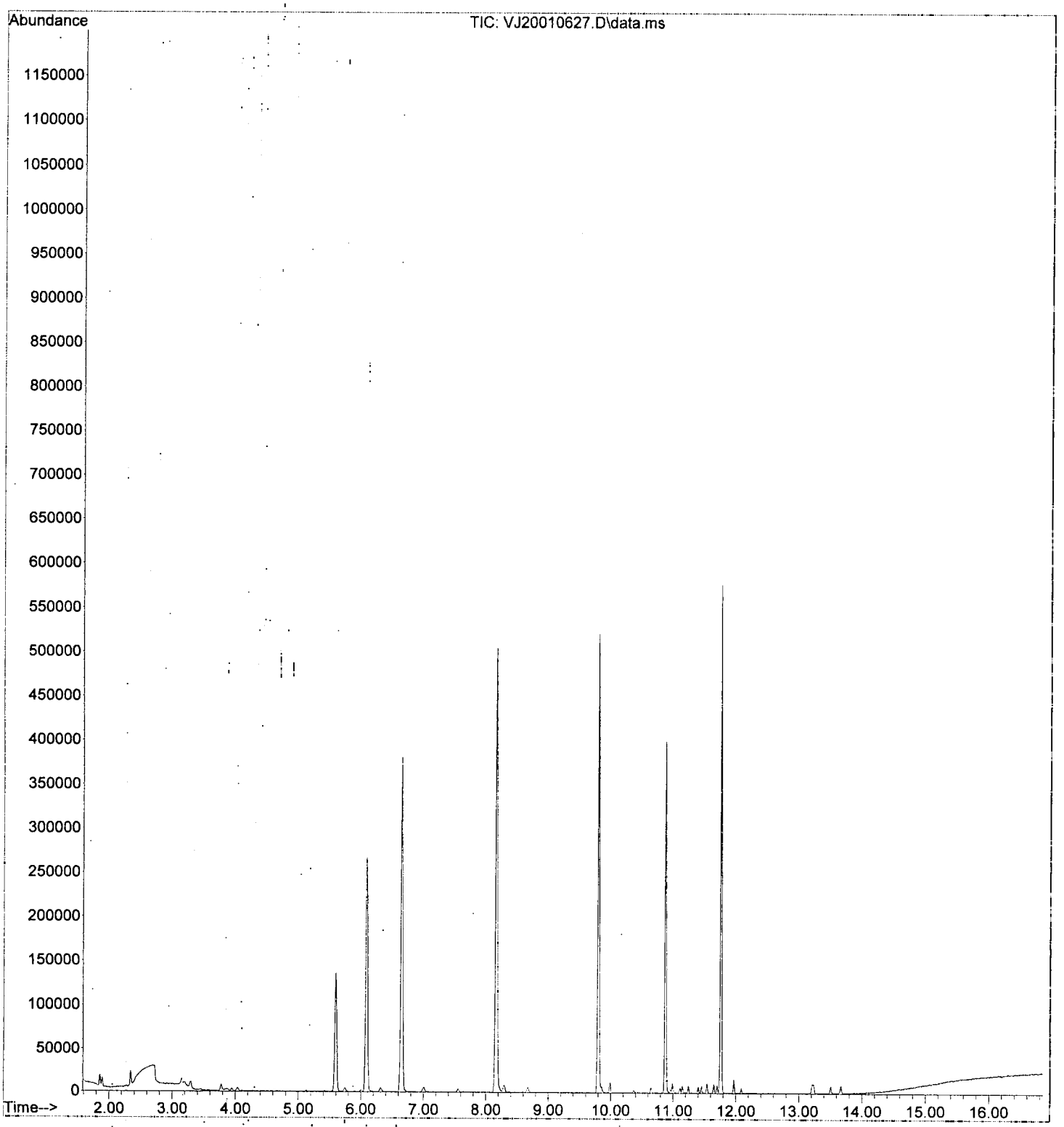
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) 1,4-Dichlorobenzene	11.771	146	3976	0.87	ug/L	89
79) n-Butylbenzene	11.966	91	7693	1.14	ug/L	96
80) 1,2-Dichlorobenzene	12.088	146	2176	0.56	ug/L	97
82) Hexachlorobutadiene	13.213	223	1275	2.03	ug/L	92
83) 1,2,4-Trichlorobenzene	13.237	180	3806	1.59	ug/L	96
84) Naphthalene	13.505	128	6535	0.83	ug/L	98
85) 1,2,3-Trichlorobenzene	13.663	180	3249	1.34	ug/L	94

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010627.D
Acq On : 6 Jan 2020 11:01 pm
Operator : tb
Sample : 0A06051-IBL4
Misc : 1X 5mL DI+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 08 10:51:40 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010628.D
Acq On : 6 Jan 2020 11:28 pm
Operator : tb
Sample : 0A06051-IBL5
Misc : 1X, 5mL, DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 08 10:51:43 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13.2020
Response via : Initial Calibration

NR

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	107910	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	265943	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	117788	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	90186	51.74	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	320476	50.91	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	371517	50.39	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	94425	51.93	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	5351	1.73	ug/L		94
5) Bromomethane	2.342	96	6306	2.69	ug/L		98
6) Chloroethane	2.476	64	56	0.10	ug/L	#	1
8) Ethanol	3.279	45	3447	1.51	ug/L		86
9) 1,1-Dichloroethene	3.139	61	319	0.12	ug/L	#	73
10) Carbon Disulfide	3.151	76	2860	0.61	ug/L		83
11) Freon 113	3.200	101	425	0.22	ug/L		85
12) Iodomethane	3.291	142	5244	13.02	ug/L		92
13) Methylene Chloride	3.778	84	3150	0.48	ug/L		98
14) Acetone	3.869	43	2519	1.85	ug/L		98
15) t-1,2-Dichloroethene	3.942	61	576	0.18	ug/L		86
18) tert-Butanol (TBA)	4.264	59	194	0.32	ug/L	#	46
31) 1,1-Dichloropropene	5.749	75	513	0.17	ug/L	#	39
32) 2-Butanone (MEK)	5.736	43	2872	1.34	ug/L		86
36) iso-Butyl Alcohol	6.320	43	1895	8.20	ug/L		88
38) Trichloroethene (TCE)	6.612	130	323	0.14	ug/L	#	79
46) Toluene	8.225	91	964	0.09	ug/L		87
47) Tetrachloroethene (PCE)	8.669	166	793	0.33	ug/L		94
55) Chlorobenzene	9.812	112	708	0.11	ug/L	#	9
56) Ethylbenzene	9.849	91	1371	0.13	ug/L		87
58) m,p-Xylenes (2)	9.989	91	2226	0.30	ug/L		94
59) o-Xylene	10.366	91	663	0.10	ug/L		95
60) Styrene	10.421	104	429	0.29	ug/L		72
62) Isopropylbenzene	10.646	105	1188	0.13	ug/L		87
65) Bromobenzene	10.956	156	188	0.08	ug/L	#	51
66) n-Propylbenzene	10.987	91	3000	0.29	ug/L		89
68) 2-Chlorotoluene	11.108	126	261	0.14	ug/L		90
69) 1,3,5-Trimethylbenzene	11.151	105	1372	0.20	ug/L		93
72) 4-Chlorotoluene	11.242	91	1342	0.23	ug/L		95
73) tert-Butylbenzene	11.400	91	488	0.13	ug/L		93
74) 1,2,4-Trimethylbenzene	11.455	105	1312	0.19	ug/L		96
75) sec-Butylbenzene	11.540	105	2120	0.26	ug/L		94
76) 4-Isopropyltoluene	11.650	119	1804	0.27	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	1211	0.30	ug/L		96
78) 1,4-Dichlorobenzene	11.771	146	1484	0.35	ug/L		81
79) n-Butylbenzene	11.966	91	2778	0.44	ug/L		94
80) 1,2-Dichlorobenzene	12.082	146	562	0.16	ug/L		93
82) Hexachlorobutadiene	13.207	223	359	0.61	ug/L		86
83) 1,2,4-Trichlorobenzene	13.238	180	1182	0.53	ug/L		75
84) Naphthalene	13.505	128	1660	0.30	ug/L		74
85) 1,2,3-Trichlorobenzene	13.663	180	945	0.42	ug/L		79

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010628.D
Acq On : 6 Jan 2020 11:28 pm
Operator : tb
Sample : 0A06051-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 08 10:51:43 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

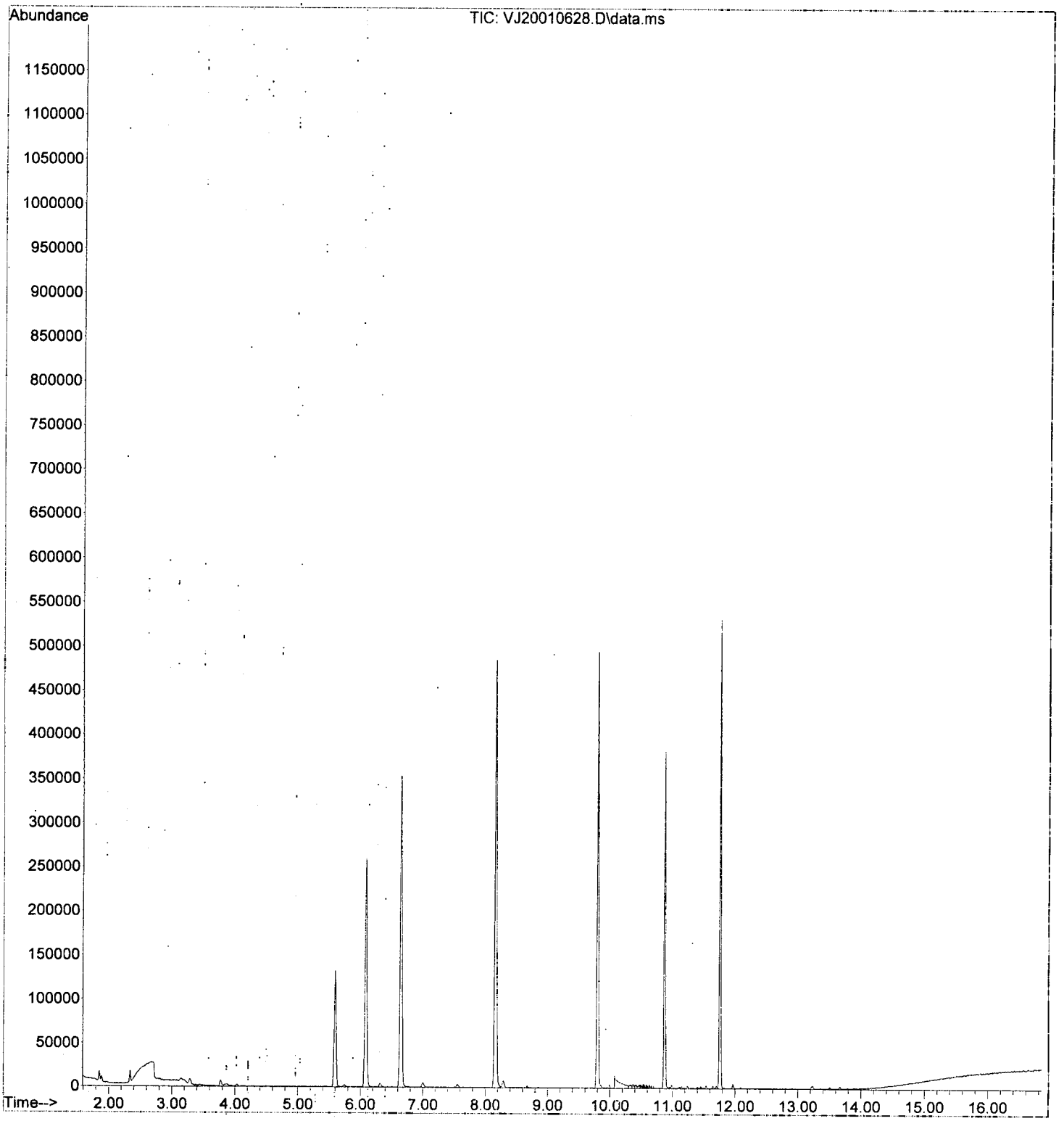
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010628.D
Acq On : 6 Jan 2020 11:28 pm
Operator : tb
Sample : 0A06051-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 08 10:51:43 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

1/8/20

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.083	99	112083	50.00 ug/L	0.00
43) Chlorobenzene-d5 (I)	9.800	117	271117	50.00 ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	129999	50.00 ug/L	0.00
System Monitoring Compounds					
30) Dibromofluoromethane (S)	5.590	111	88313	48.77 ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.649	114	330172	50.50 ug/L	0.00
45) Toluene-d8 (S)	8.164	98	375713	49.99 ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.877	174	98256	48.96 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.685	85	36704	16.82 ug/L	96
3) Chloromethane	1.886	50	64219	19.97 ug/L	99
4) Vinyl Chloride	1.989	62	47883	19.74 ug/L	95
5) Bromomethane	2.336	96	22927	17.30 ug/L	96
6) Chloroethane	2.457	64	10699	18.37 ug/L	91
7) Trichlorofluoromethane	2.585	101	16369	19.03 ug/L	98
8) Ethanol	3.279	45	95750	1376.37 ug/L	90
9) 1,1-Dichloroethene	3.133	61	57923	21.27 ug/L	97
10) Carbon Disulfide	3.145	76	102394	20.93 ug/L	98
11) Freon 113	3.187	101	40701	20.12 ug/L	99
12) Iodomethane	3.285	142	16363	33.02 ug/L	90
13) Methylene Chloride	3.771	84	46878	20.37 ug/L	99
14) Acetone	3.863	43	~~41754~~	~~29.46 ug/L~~	~~100~~ MI 39.80
15) t-1,2-Dichloroethene	3.936	61	69064	20.71 ug/L	96
16) n-Hexane	4.027	86	10441	20.45 ug/L #	89
17) Methyl-tert-butyl-ether	4.100	73	159079	19.37 ug/L	59
18) tert-Butanol (TBA)	4.258	59	882233	1391.07 ug/L #	90
19) Diisopropyl ether (DIPE)	4.501	45	38819	5.31 ug/L	97
20) 1,1-Dichloroethane	4.574	63	82482	21.45 ug/L	98
21) Acrylonitrile	4.629	53	~~21285~~	~~14.74 ug/L~~	~~96~~ MI 19.80
22) Ethyl-tert-butyl ether...	4.866	59	35840	5.15 ug/L	97
23) c-1,2-Dichloroethene	5.122	61	65632	21.15 ug/L	98
24) 2,2-Dichloropropane	5.231	77	64719	18.27 ug/L	98
25) Bromochloromethane	5.323	49	37281	19.42 ug/L	96
26) Chloroform	5.408	83	84256	19.94 ug/L	99
27) Carbon Tetrachloride	5.548	117	62604	20.62 ug/L	96
28) Tetrahydrofuran	5.578	42	26458	19.26 ug/L	96
29) 1,1,1-Trichloroethane	5.615	97	79971	20.55 ug/L	98
31) 1,1-Dichloropropene	5.742	75	66173	20.62 ug/L	98
32) 2-Butanone (MEK)	5.724	43	79533	35.76 ug/L	97
33) Benzene	5.998	78	207197	20.18 ug/L	98
34) tert-Amyl methyl ether...	6.144	73	32676	4.90 ug/L	97
35) 1,2-Dichloroethane (EDC)	6.199	62	72495	19.92 ug/L	99
36) iso-Butyl Alcohol	6.290	43	117397	489.04 ug/L	96
38) Trichloroethene (TCE)	6.619	130	50788	21.03 ug/L	97
39) tert-Amyl ethyl ether ...	6.898	59	24003	5.20 ug/L	90
40) Dibromomethane	7.057	93	28627	19.84 ug/L	95
41) 1,2-Dichloropropane	7.166	63	48900	20.25 ug/L	95
42) Bromodichloromethane	7.239	83	56790	19.87 ug/L	96
44) c-1,3-Dichloropropene	7.945	75	64562	19.07 ug/L	98
46) Toluene	8.219	91	209321	19.71 ug/L	99
47) Tetrachloroethene (PCE)	8.669	166	51675	20.98 ug/L	92
48) 4-Methyl-2-Pentanone (...	8.663	43	115344	36.36 ug/L	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

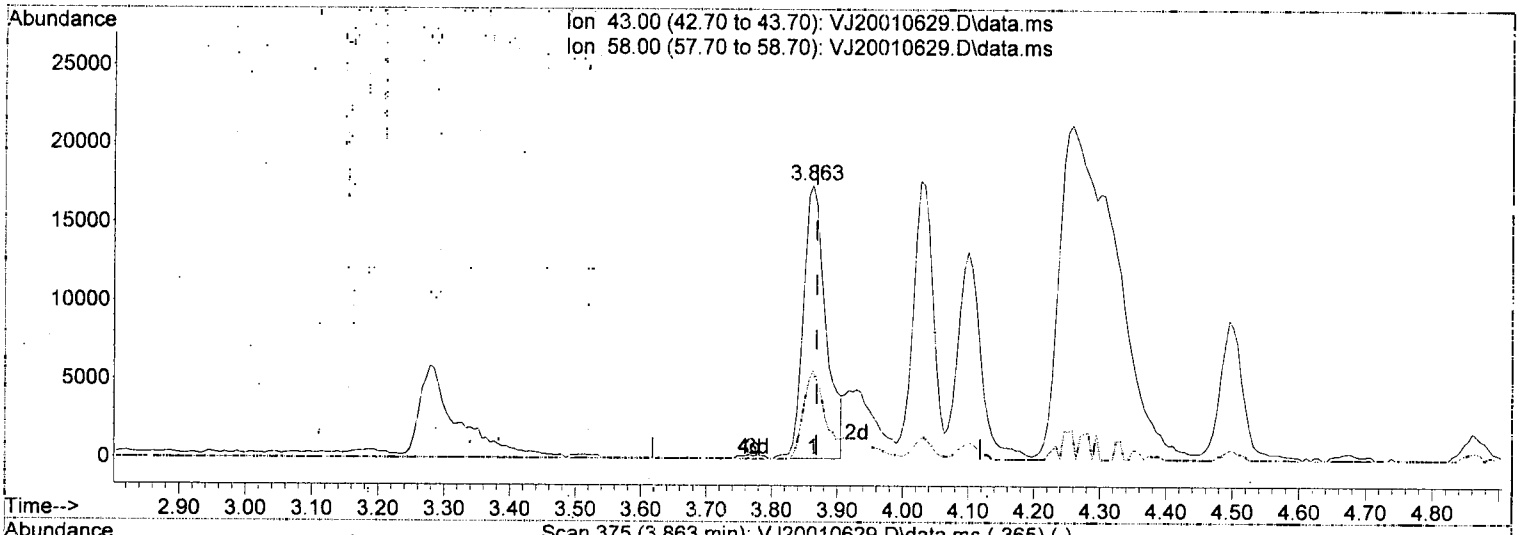
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
49) t-1,3-Dichloropropene	8.693	75	69350	21.47 ug/L		98
50) 1,1,2-Trichloroethane	8.869	97	43388	19.82 ug/L		96
51) Dibromochloromethane	9.058	129	39351	19.42 ug/L		99
52) 1,3-Dichloropropane	9.155	76	75375	20.14 ug/L		99
53) 1,2-Dibromoethane (EDB)	9.295	107	43688	20.03 ug/L		99
54) 2-Hexanone	9.539	43	84677	34.81 ug/L		97
55) Chlorobenzene	9.819	112	125966	19.58 ug/L		98
56) Ethylbenzene	9.849	91	221140	20.61 ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.879	131	43038	19.99 ug/L		98
58) m,p-Xylenes (2)	9.989	91	328224	43.55 ug/L		98
59) o-Xylene	10.372	91	151808	21.69 ug/L		96
60) Styrene	10.415	104	109181	18.54 ug/L		97
61) Bromoform	10.433	173	28061	19.93 ug/L		96
62) Isopropylbenzene	10.646	105	192192	20.85 ug/L		98
65) Bromobenzene	10.956	156	48699	19.87 ug/L		85
66) n-Propylbenzene	10.987	91	225603	19.89 ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.041	83	58290	20.27 ug/L		97
68) 2-Chlorotoluene	11.114	126	43565	20.46 ug/L		96
69) 1,3,5-Trimethylbenzene	11.151	105	166543	21.83 ug/L		95
70) 1,2,3-Trichloropropane	11.145	110	21572	19.87 ug/L		88
71) t-1,4-Dichloro-2-butene	11.181	88	7891	16.88 ug/L	#	87
72) 4-Chlorotoluene	11.242	91	135265	20.73 ug/L		95
73) tert-Butylbenzene	11.400	91	88546	20.90 ug/L		92
74) 1,2,4-Trimethylbenzene	11.455	105	163812	21.58 ug/L		97
75) sec-Butylbenzene	11.540	105	196092	21.44 ug/L		97
76) 4-Isopropyltoluene	11.650	119	164712	22.01 ug/L		98
77) 1,3-Dichlorobenzene	11.704	146	90244	20.59 ug/L		97
78) 1,4-Dichlorobenzene	11.771	146	90991	19.19 ug/L		95
79) n-Butylbenzene	11.966	91	142489	20.38 ug/L		96
80) 1,2-Dichlorobenzene	12.088	146	82301	20.59 ug/L		99
81) 1,2-Dibromo-3-Chloropr...	12.690	157	14361	18.08 ug/L		78
82) Hexachlorobutadiene	13.213	223	13464	20.80 ug/L		93
83) 1,2,4-Trichlorobenzene	13.237	180	49728	20.12 ug/L		97
84) Naphthalene	13.505	128	173056	18.45 ug/L		99
85) 1,2,3-Trichlorobenzene	13.669	180	52751	21.04 ug/L		98

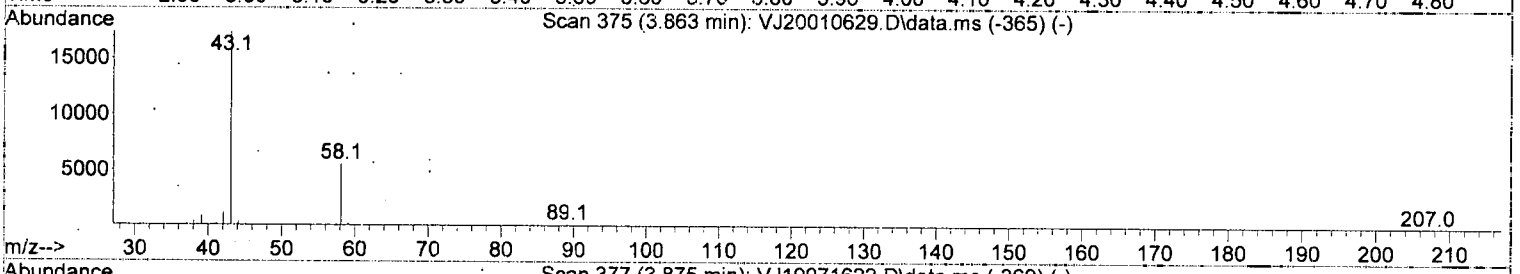
(#) = qualifier out of range (m) = manual integration (+) = signals summed

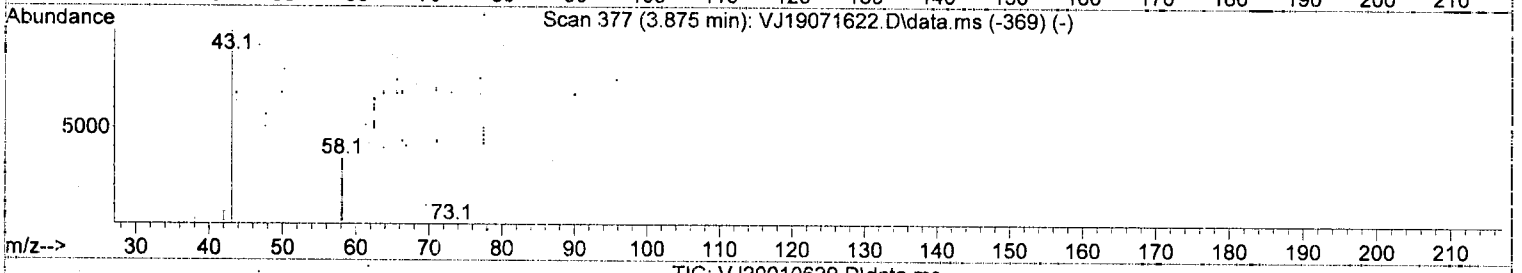
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20010629.D\data.ms

(14) Acetone

3.863min (-0.005) 29.46 ug/L

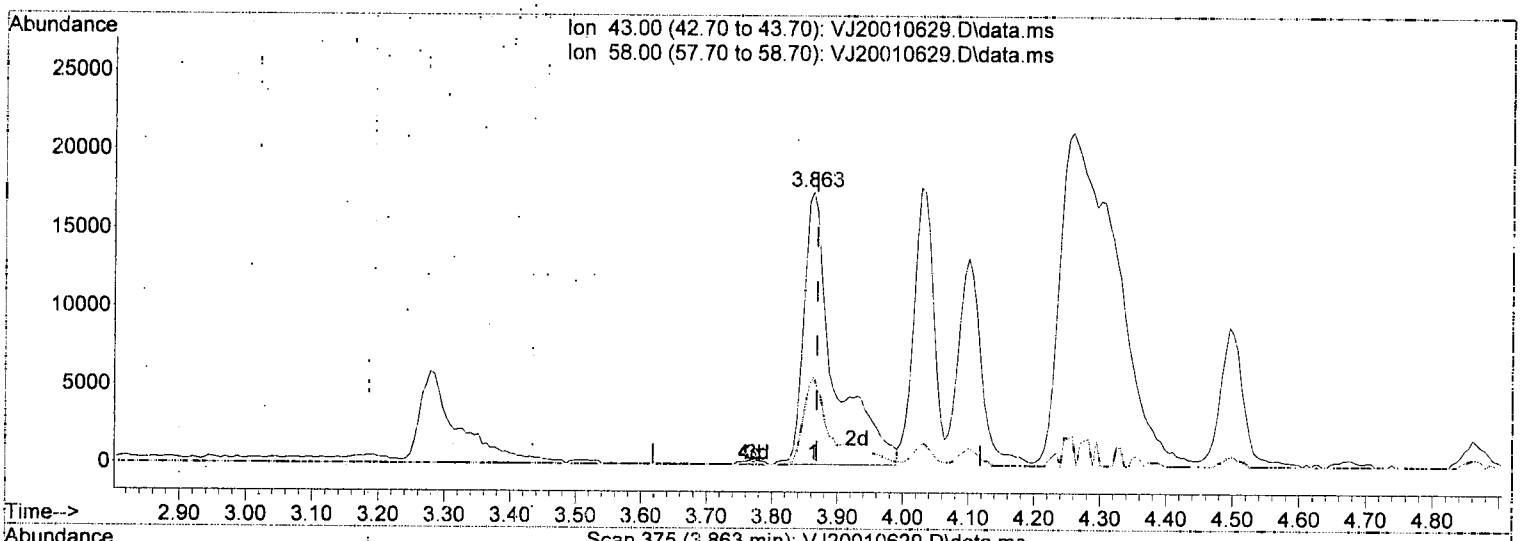
response 41754

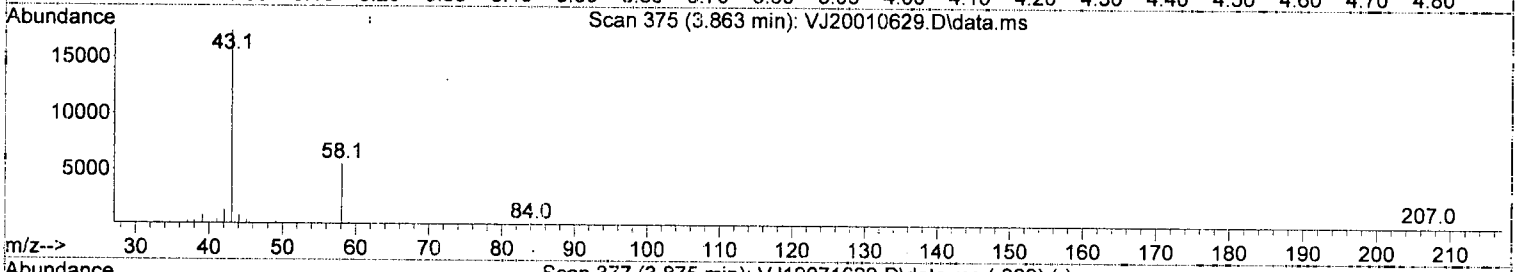
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.12
0.00	0.00	0.00
0.00	0.00	0.00

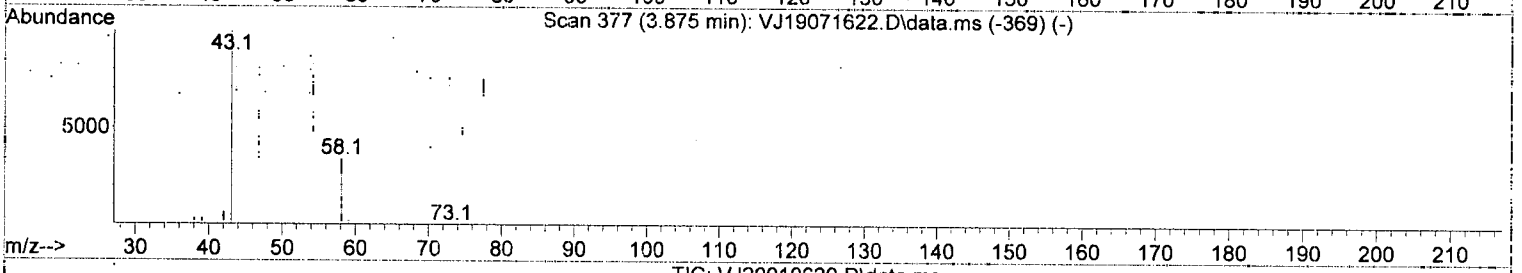
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20010629.D\data.ms

(14) Acetone

3.863min (-0.005) 39.80 ug/L (m)

response 56409

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.12
0.00	0.00	0.00
0.00	0.00	0.00

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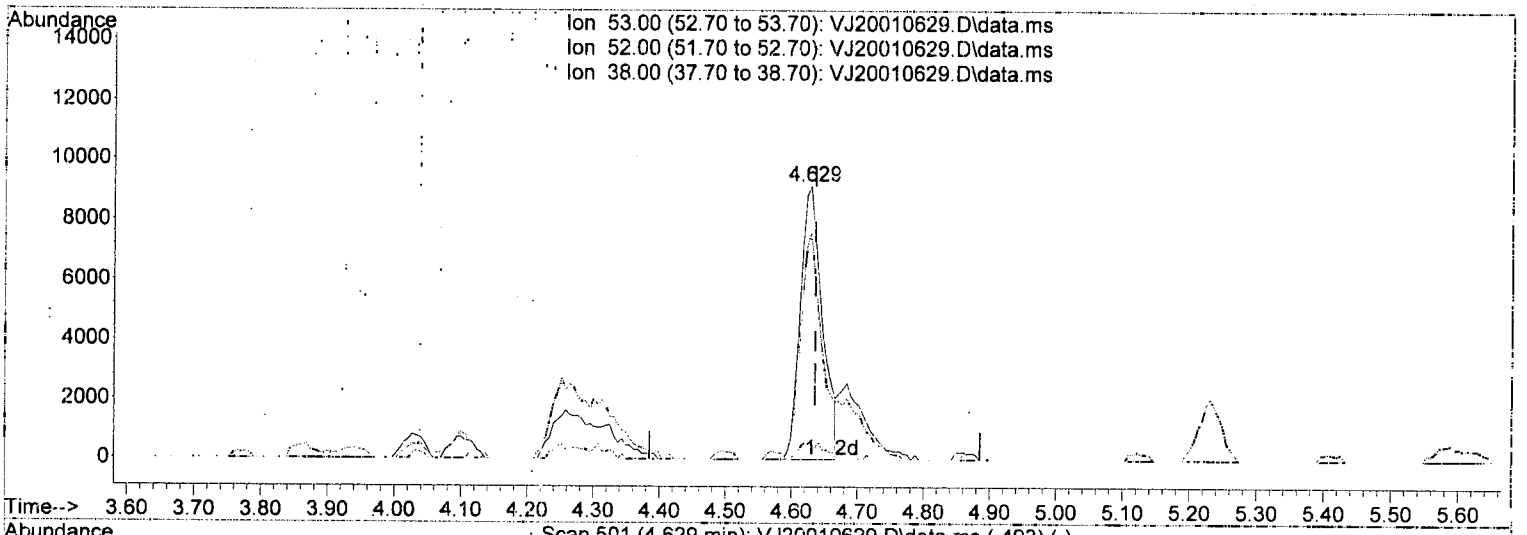
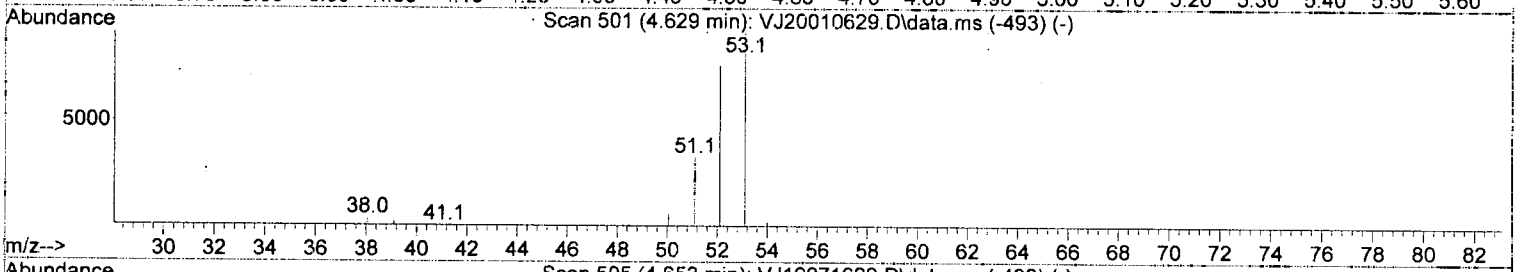
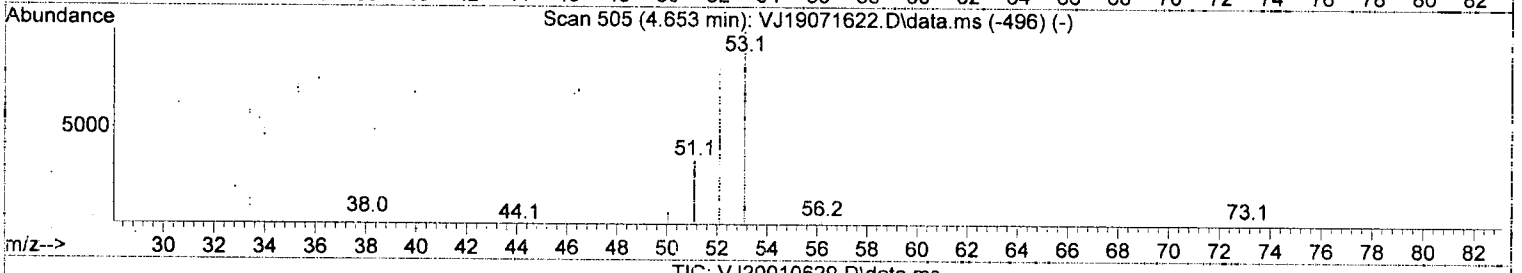
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL ; 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20010629.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 14.74 ug/L

response 21285

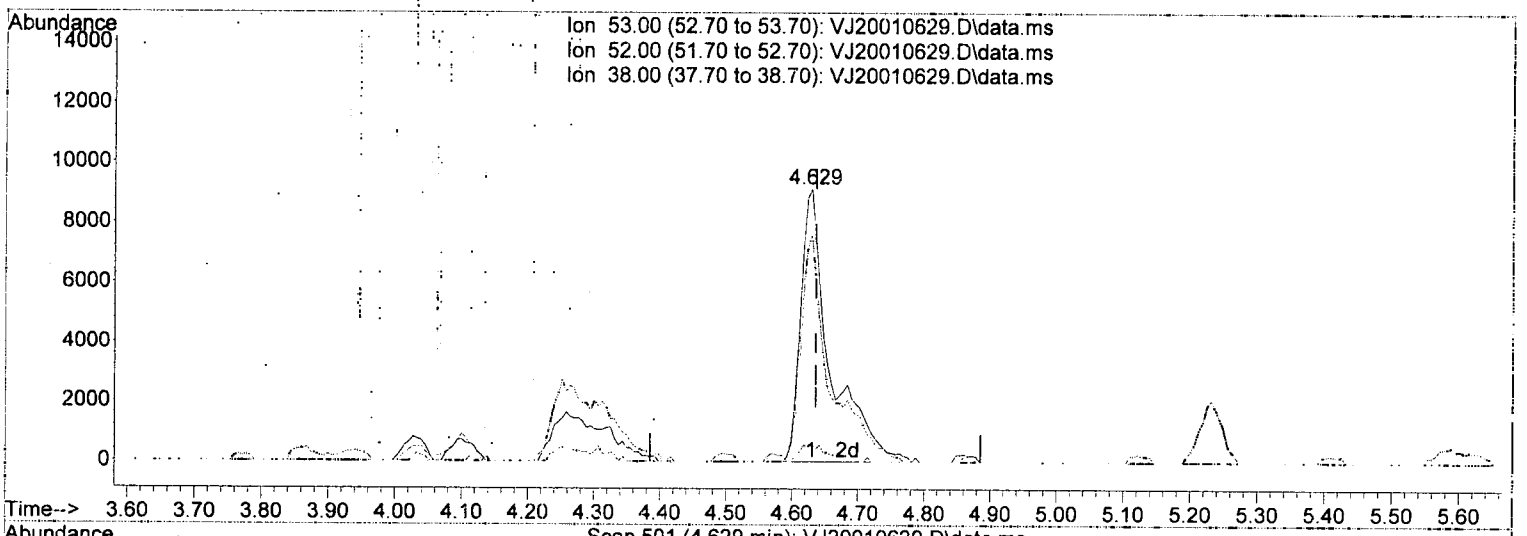
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	83.16
38.00	5.50	4.85
0.00	0.00	0.00

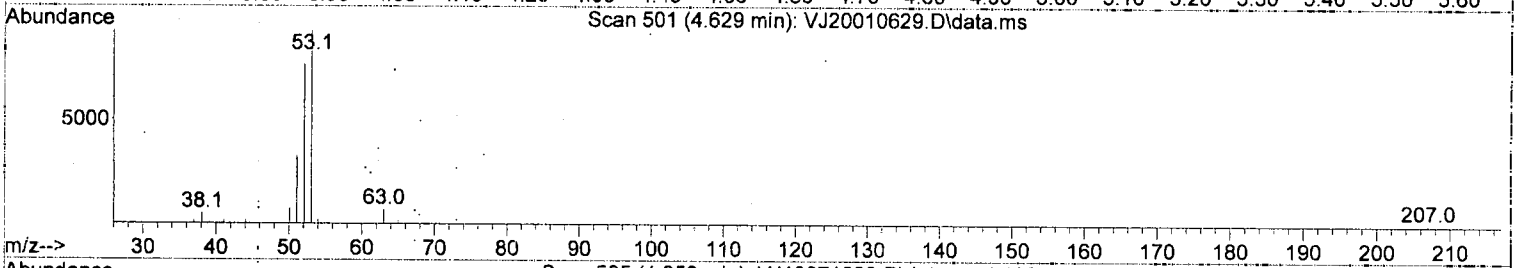
MI

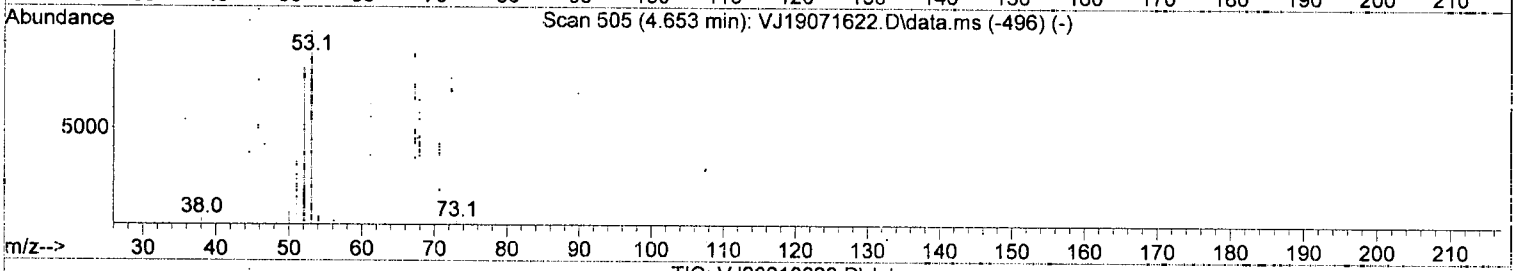
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration







TIC: VJ20010629.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 19.80 ug/L (m)

response 28595

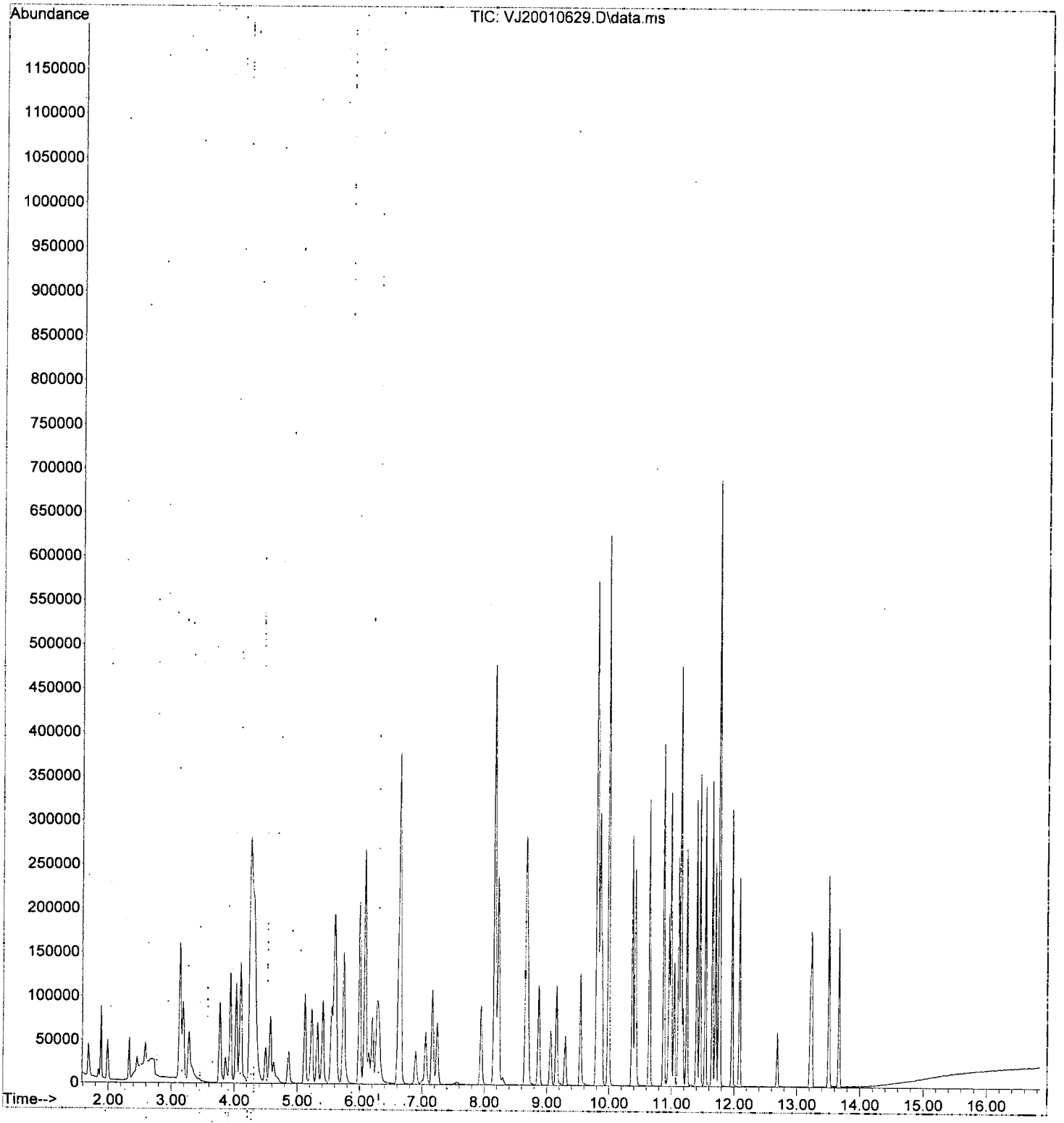
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	83.16
38.00	5.50	7.10
0.00	0.00	0.00

1/8/20

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010629.D
Acq On : 6 Jan 2020 11:55 pm
Operator : tb
Sample : 0A06051-ICV1
Misc : 1X 5mL 20ppb DI+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 10:51:46 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010630.D
Acq On : 7 Jan 2020 12:22 am
Operator : tb
Sample : 0A06051-IBL6
Misc : 1X : 5mL : DI+MeOH
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 08 10:51:49 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration

NR

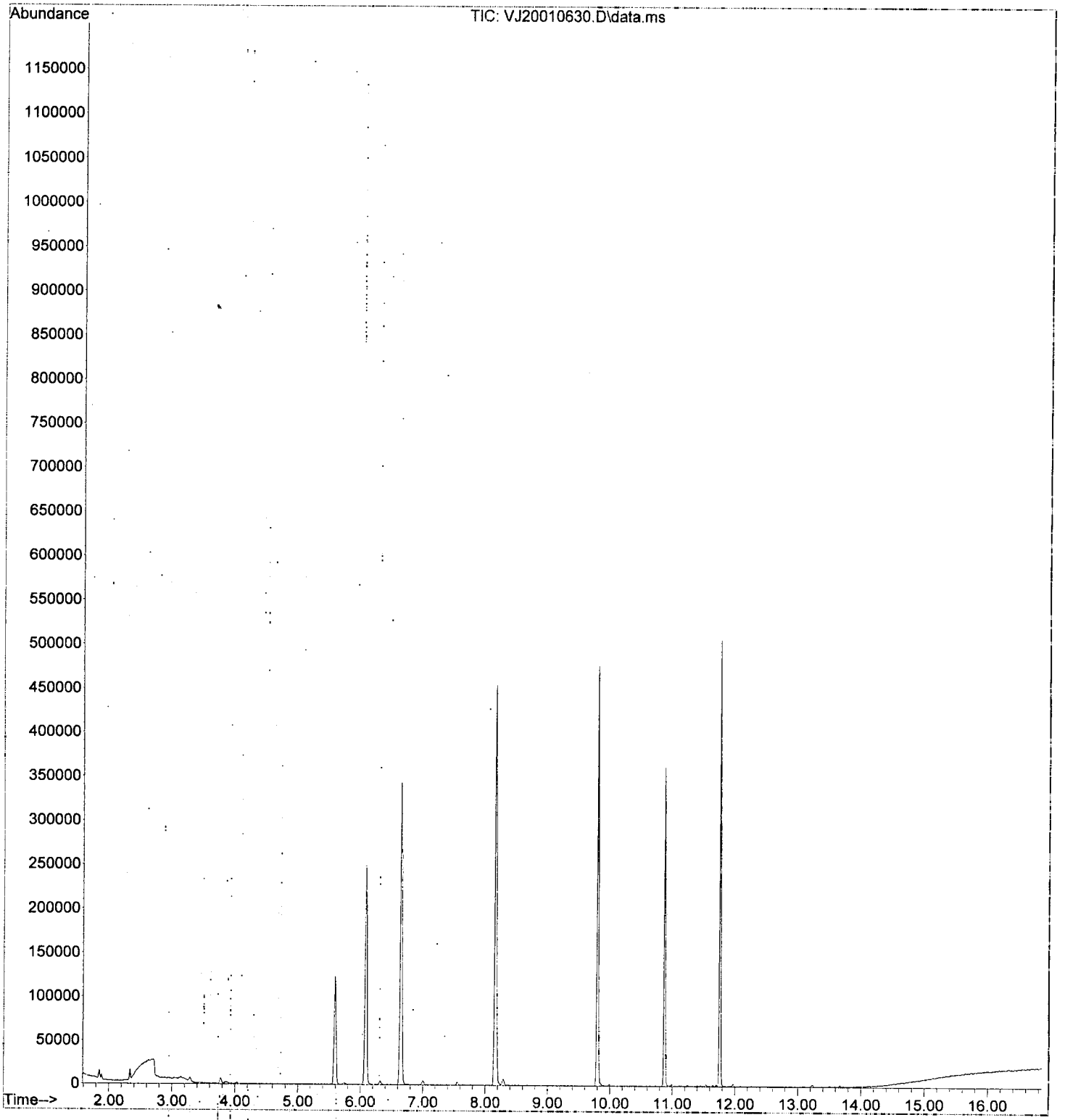
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.083	99	103090	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	255119	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.759	152	113496	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.590	111	83713	50.27	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	305996	50.88	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	352020	49.77	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	89877	51.30	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.885	50	4299	1.45	ug/L		99
5) Bromomethane	2.336	96	5414	2.11	ug/L		98
6) Chloroethane	2.457	64	55	0.10	ug/L	#	1
8) Ethanol	3.291	45	3628	6.70	ug/L		79
10) Carbon Disulfide	3.151	76	1856	0.41	ug/L		53
11) Freon 113	3.187	101	187	0.10	ug/L	#	16
12) Iodomethane	3.291	142	3525	9.45	ug/L		88
13) Methylene Chloride	3.777	84	3123	0.53	ug/L		85
14) Acetone	3.863	43	2354	1.81	ug/L		93
18) tert-Butanol (TBA)	4.270	59	402	0.69	ug/L	#	46
31) 1,1-Dichloropropene	5.742	75	306	0.10	ug/L	#	39
32) 2-Butanone (MEK)	5.742	43	2811	1.37	ug/L		93
36) iso-Butyl Alcohol	6.320	43	1801	8.16	ug/L		85
38) Trichloroethene (TCE)	6.618	130	202	0.09	ug/L	#	12
47) Tetrachloroethene (PCE)	8.675	166	363	0.16	ug/L	#	64
56) Ethylbenzene	9.849	91	991	0.10	ug/L		91
58) m,p-Xylenes (2)	9.989	91	1390	0.20	ug/L		95
60) Styrene	10.415	104	222	0.26	ug/L	#	40
66) n-Propylbenzene	10.986	91	1795	0.18	ug/L		94
68) 2-Chlorotoluene	11.120	126	198	0.11	ug/L	#	29
69) 1,3,5-Trimethylbenzene	11.145	105	785	0.12	ug/L		88
72) 4-Chlorotoluene	11.242	91	928	0.16	ug/L		80
73) tert-Butylbenzene	11.400	91	367	0.10	ug/L	#	85
74) 1,2,4-Trimethylbenzene	11.455	105	867	0.13	ug/L		85
75) sec-Butylbenzene	11.540	105	1356	0.17	ug/L		94
76) 4-Isopropyltoluene	11.650	119	1082	0.17	ug/L		93
77) 1,3-Dichlorobenzene	11.704	146	791	0.21	ug/L		88
78) 1,4-Dichlorobenzene	11.771	146	1025	0.25	ug/L	#	72
79) n-Butylbenzene	11.972	91	1865	0.31	ug/L		99
80) 1,2-Dichlorobenzene	12.088	146	351	0.10	ug/L		72
82) Hexachlorobutadiene	13.207	223	199	0.35	ug/L	#	81
83) 1,2,4-Trichlorobenzene	13.237	180	771	0.36	ug/L		86
84) Naphthalene	13.505	128	1274	0.26	ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	617	0.28	ug/L		93

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010630.D
Acq On : 7 Jan 2020 12:22 am
Operator : tb
Sample : 0A06051-IBL6
Misc : 1X 5mL DI+MeOH
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 08 10:51:49 2020
Quant Method : C:\msdchem\1\methods\VJ200106S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Tue Jan 07 15:08:13 2020
Response via : Initial Calibration



BFB

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Integration File: APEXG.P

Method : C:\msdchem\1\methods\VJ200106G.M
Title : NWTPH-Gx by GC/MS
Last Update : Tue Jan 07 15:45:42 2020

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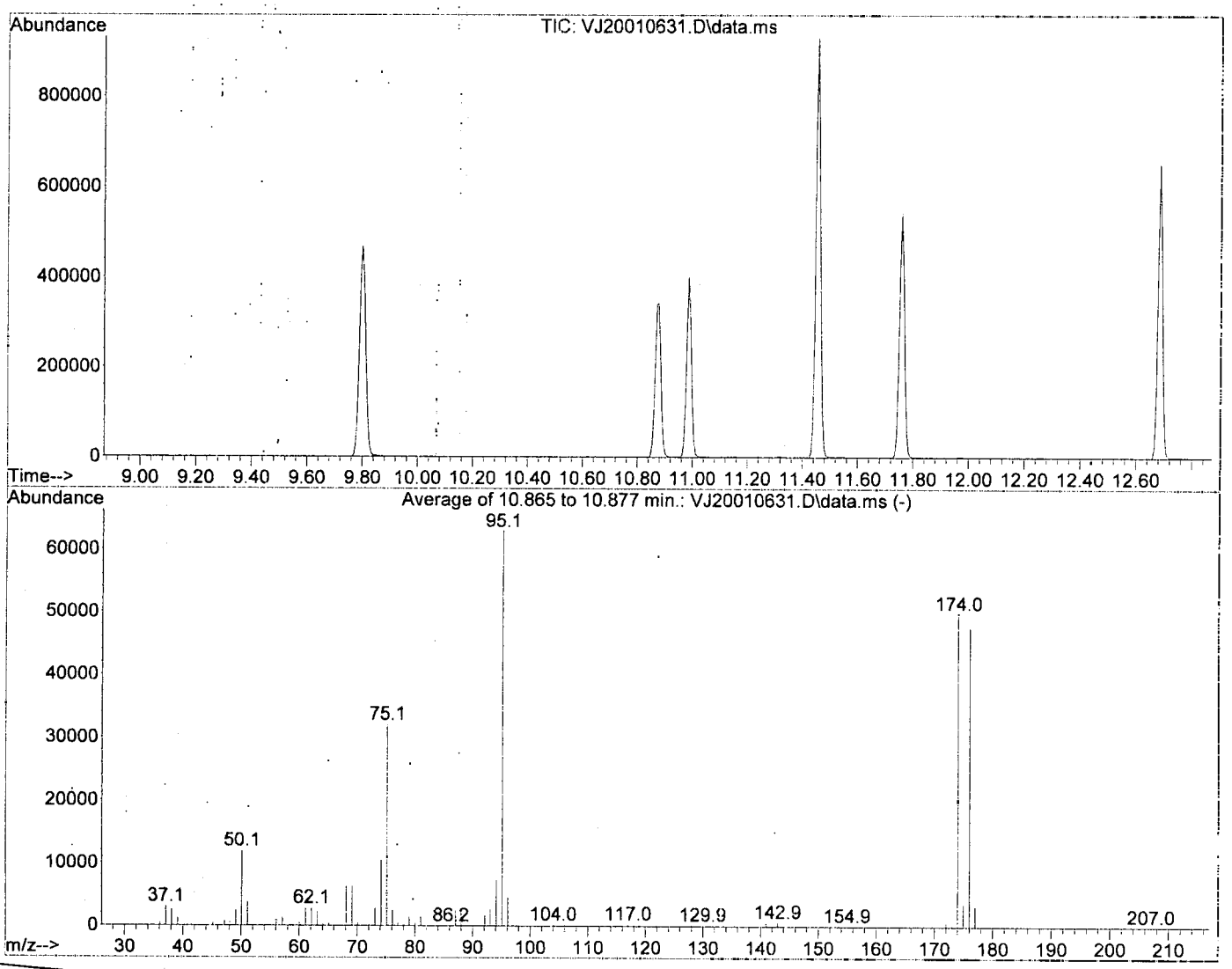


AutoFind: Scans 1526, 1527, 1528; Background Corrected with Scan 1520

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	126.4	63141	PASS
96	95	5	9	7.1	4473	PASS
173	174	0.00	2	0.3	127	PASS
174	95	50	200	79.1	49957	PASS
175	174	5	9	7.2	3614	PASS
176	174	95	105	95.6	47779	PASS
177	176	5	10	6.8	3236	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 08 10:53:19 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

1/8/20

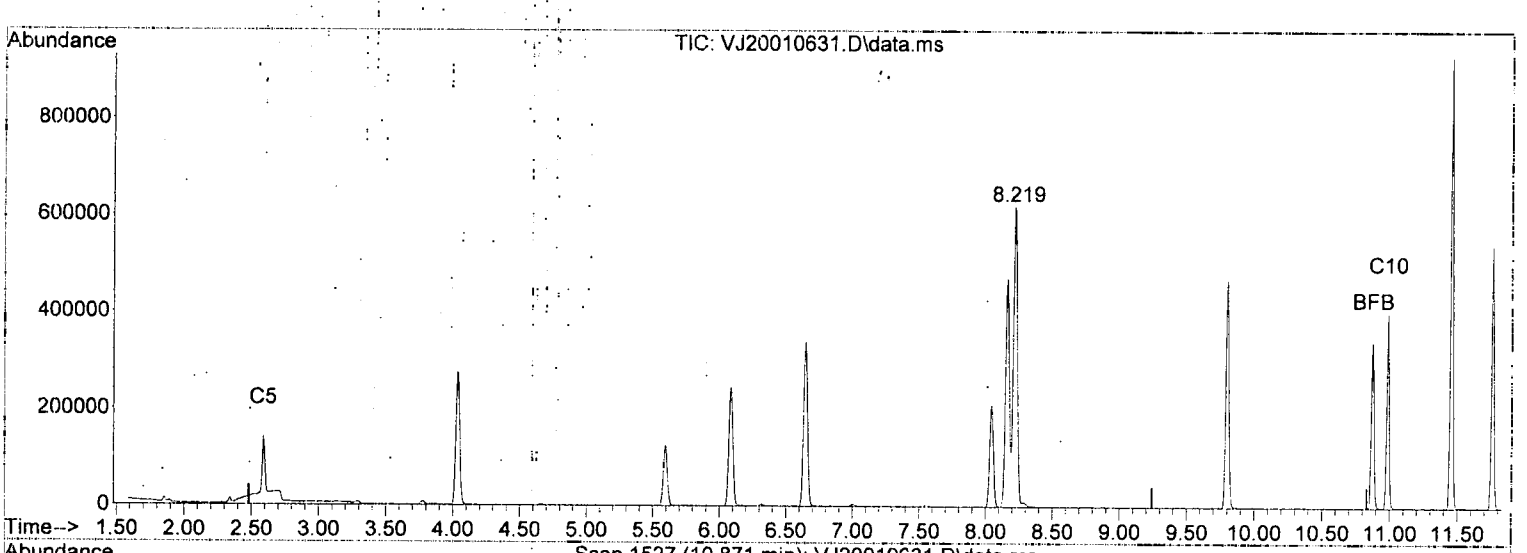
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	182417	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	300538	51.10	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	87539	50.67	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	366983	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	251866	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	183698	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	5014026m	744.98	ug/L	
5) TPHg (C5-C9)	9.239	TIC	3040095m	311.82	ug/L	
6) TPHg (C6-C10)	9.239	TIC	2624461m	334.73	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5408108m	493.52	ug/L	

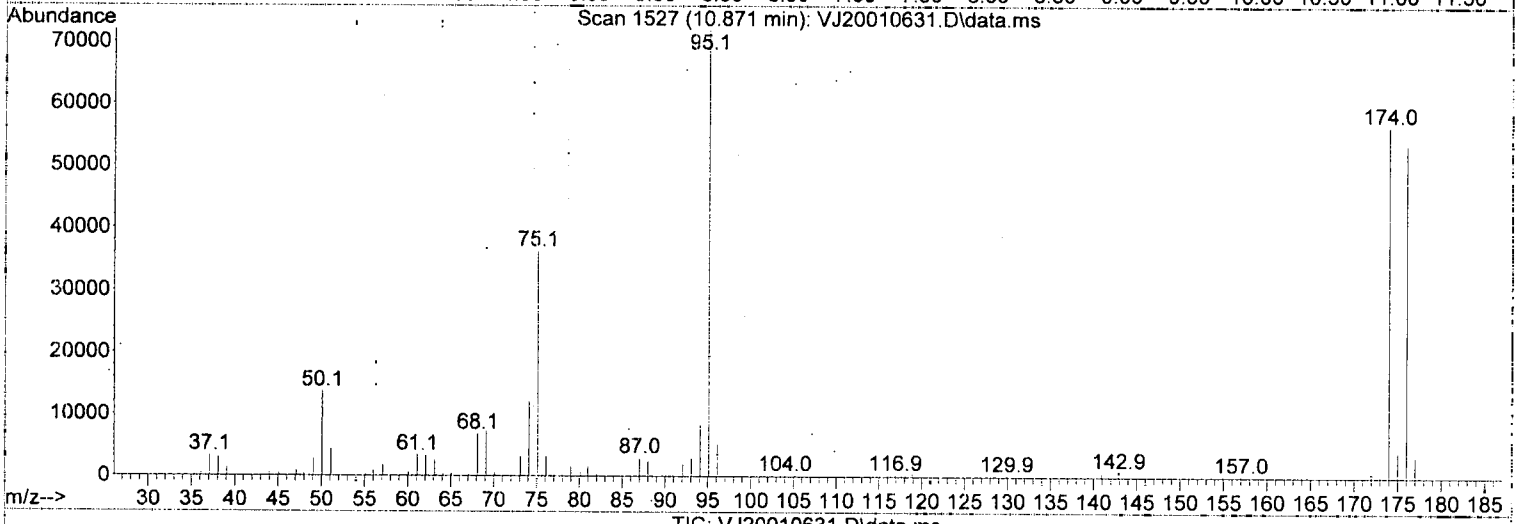
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 08 10:53:19 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20010631.D\data.ms

(5) TPHg (C5-C9) (H)

9.239min (0.000) 311.82 ug/L m

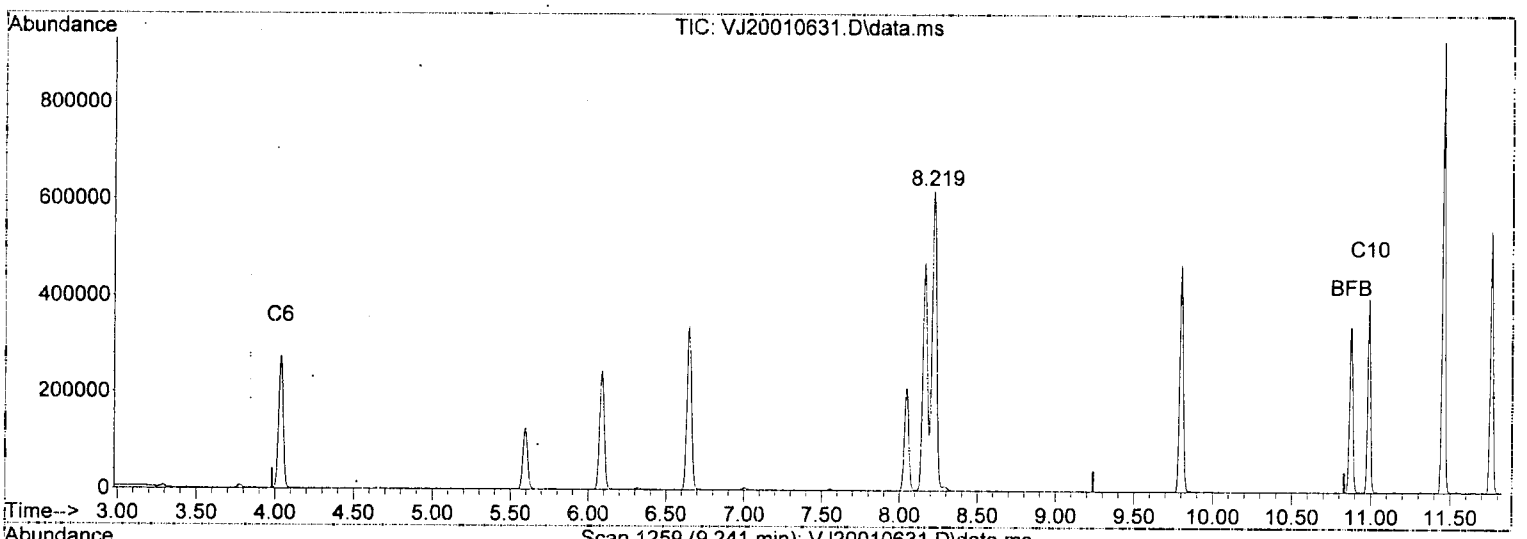
response 3040095

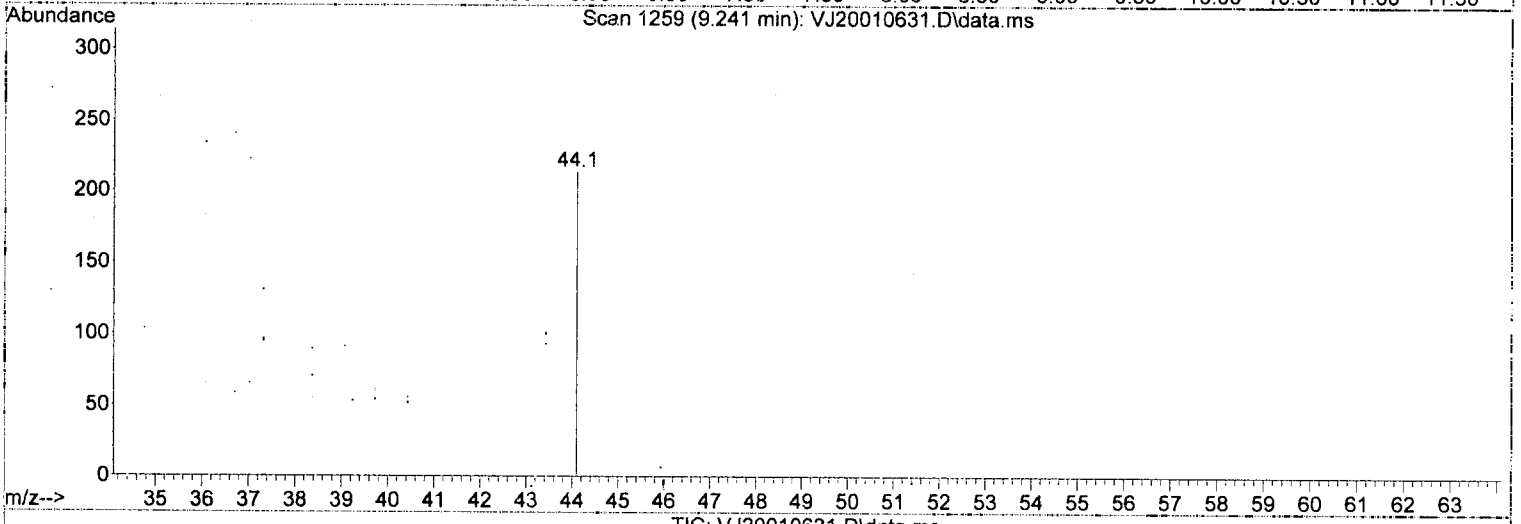
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.20#
0.00	0.00	0.78#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 08 10:53:19 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20010631.D\data.ms

(6) TPHg (C6-C10) (H)

9.239min (0.000) 334.73 ug/L m

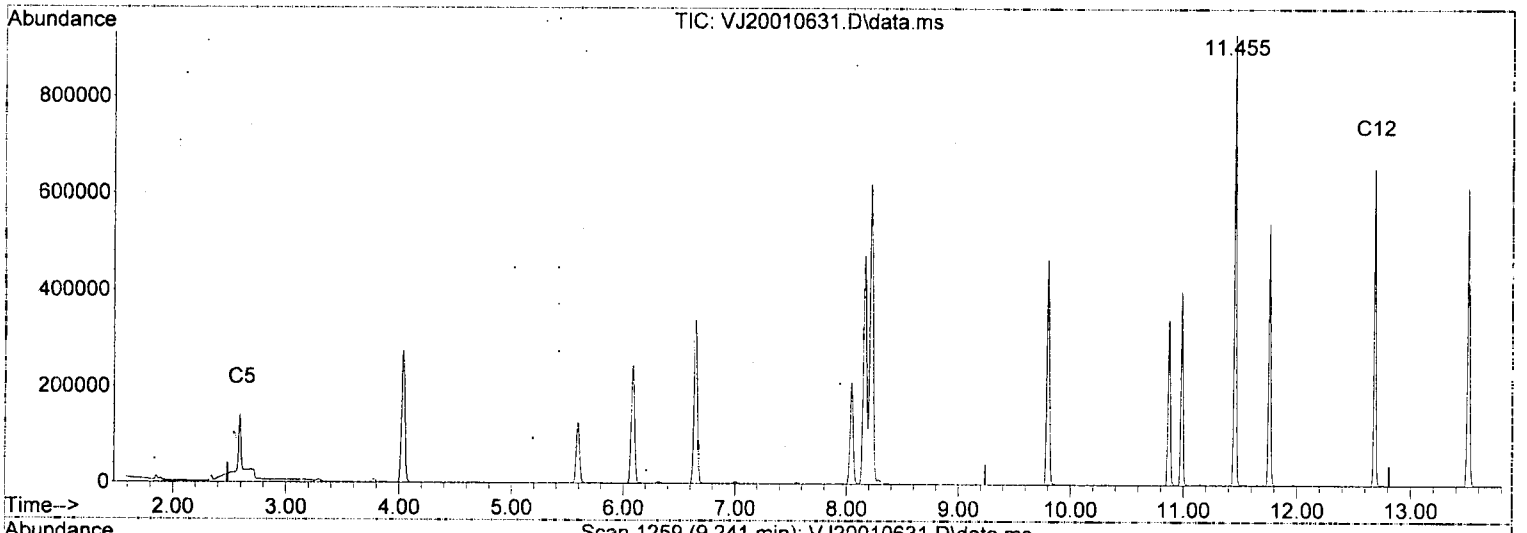
response 2624461

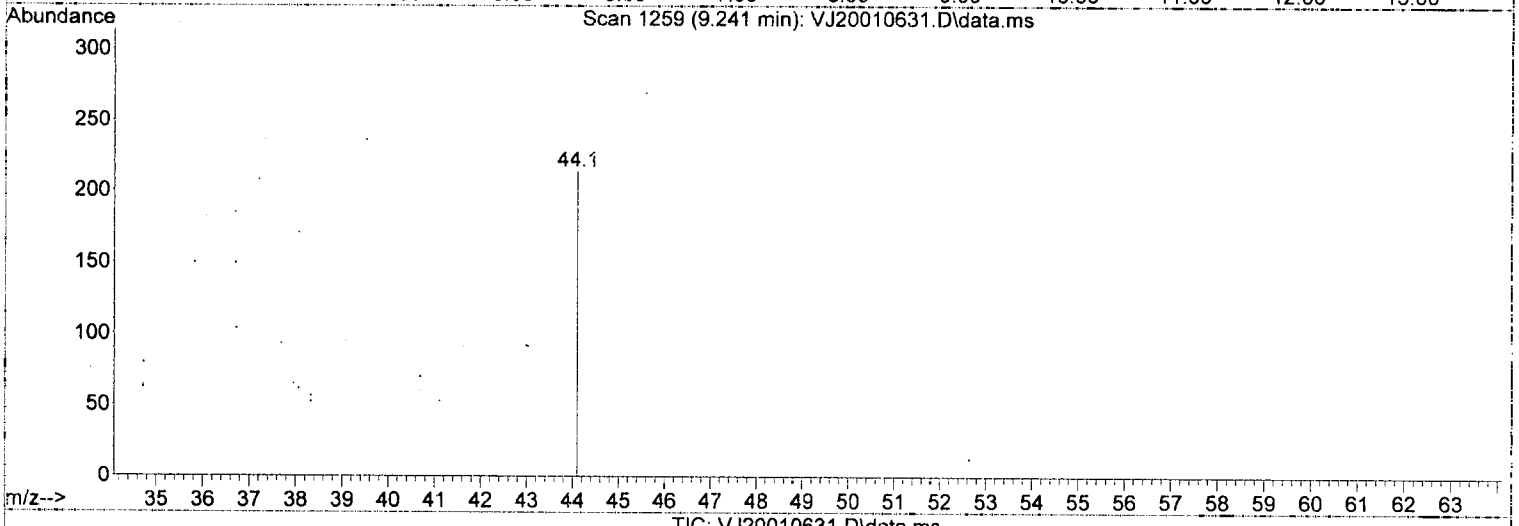
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.39#
0.00	0.00	0.90#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 08 10:53:19 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration





TIC: VJ20010631.D\data.ms

(7) CA-LUFT (C5-C12) (H)

9.239min (0.000) 493.52 ug/L m

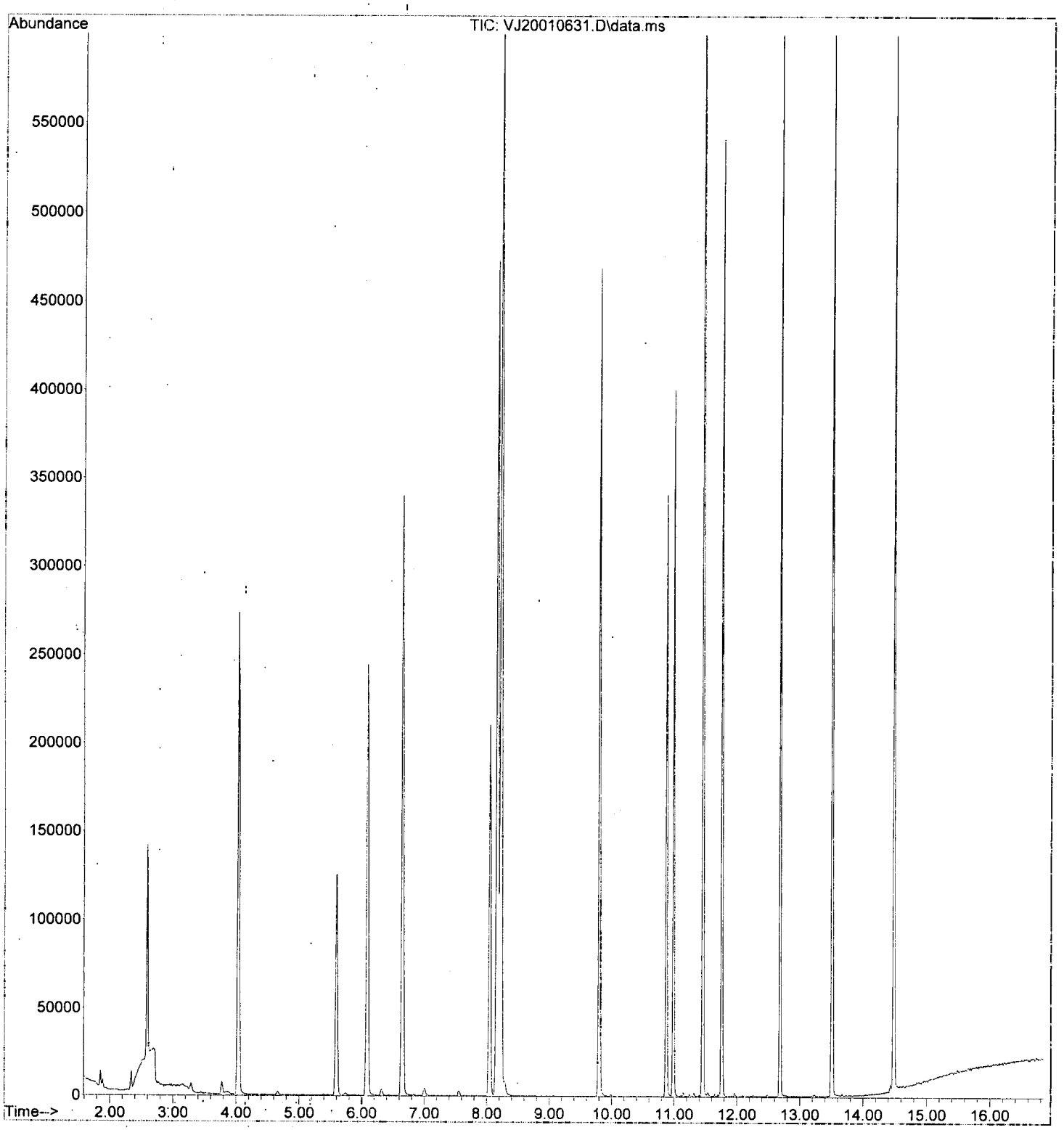
response 5408108

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.68#
0.00	0.00	0.44#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010631.D
Acq On : 7 Jan 2020 12:49 am
Operator : tb
Sample : 0A06051-TUN2 RT
Misc : 1X 5mL DI+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 08 10:53:19 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010632.D
Acq On : 7 Jan 2020 1:16 am
Operator : tb
Sample : 0A06051-IBL7
Misc : 1X 5mL DI+MeOH
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 08 10:53:45 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

NR

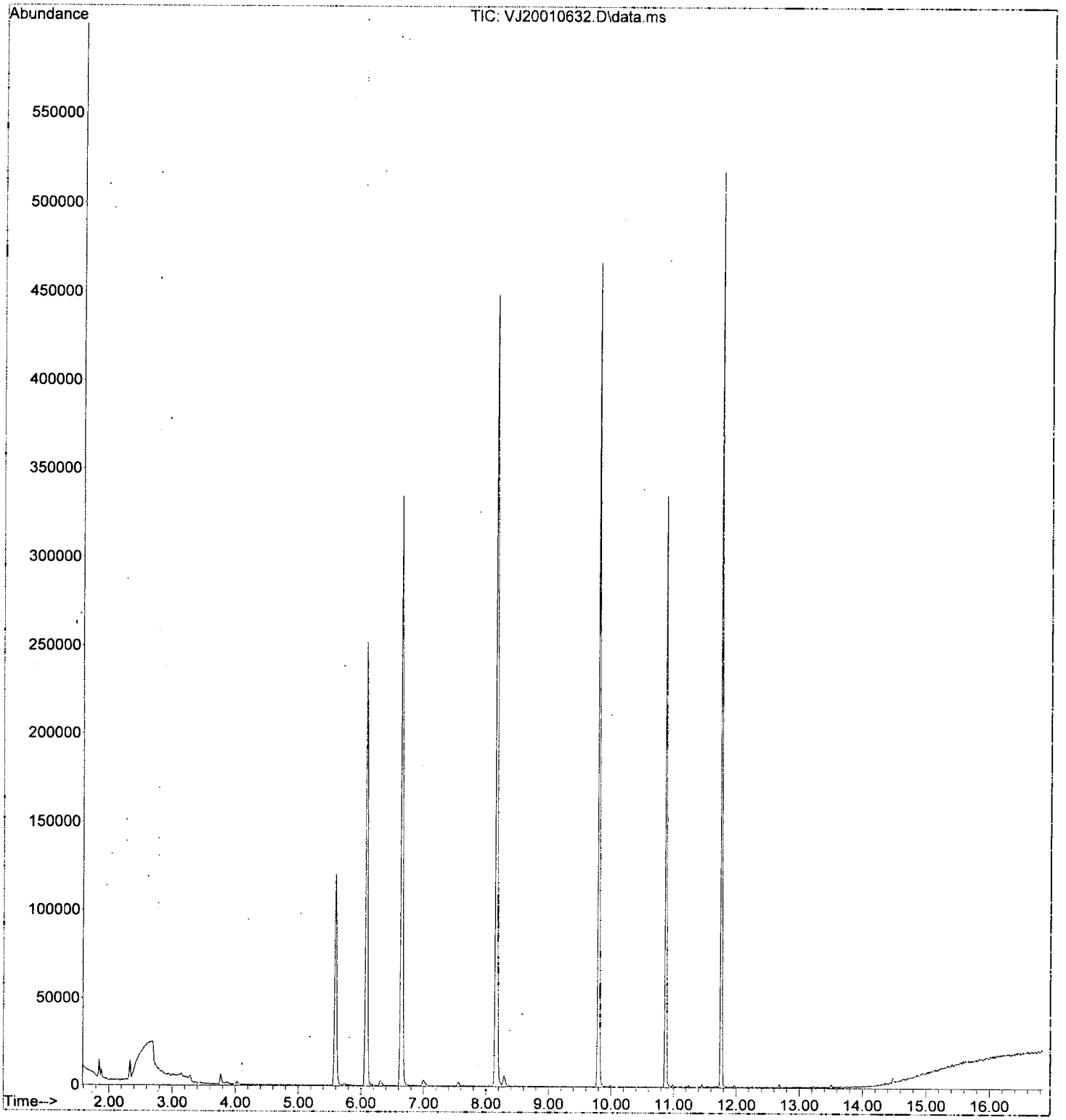
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	186332	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	304914	50.75	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	88137	49.94	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	349823	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	250507	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	174210	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	98720m	32.26	ug/L	
5) TPHg (C5-C9)	9.239	TIC	358890m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	339181m	23.97	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	389474m	3.36	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010632.D
Acq On : 7 Jan 2020 1:16 am
Operator : tb
Sample : 0A06051-IBL7
Misc : 1X 5mL DI+MeOH
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 08 10:53:45 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

1/8/20

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	6.083	168	181663	50.00 ug/L	-0.01
System Monitoring Compounds					
2) 1,4-Difluorobenzene (Sur)	6.649	114	301733	51.52 ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	87195	50.68 ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	348201	0.00 ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	253758	0.00 ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	170730	0.00 ug/L	0.00
Target Compounds					Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	99460m	32.73 ug/L	
5) TPHg (C5-C9)	9.239	TIC	360890m	Below Cal	
6) TPHg (C6-C10)	9.239	TIC	345915m	26.04 ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	396221m	4.98 ug/L	

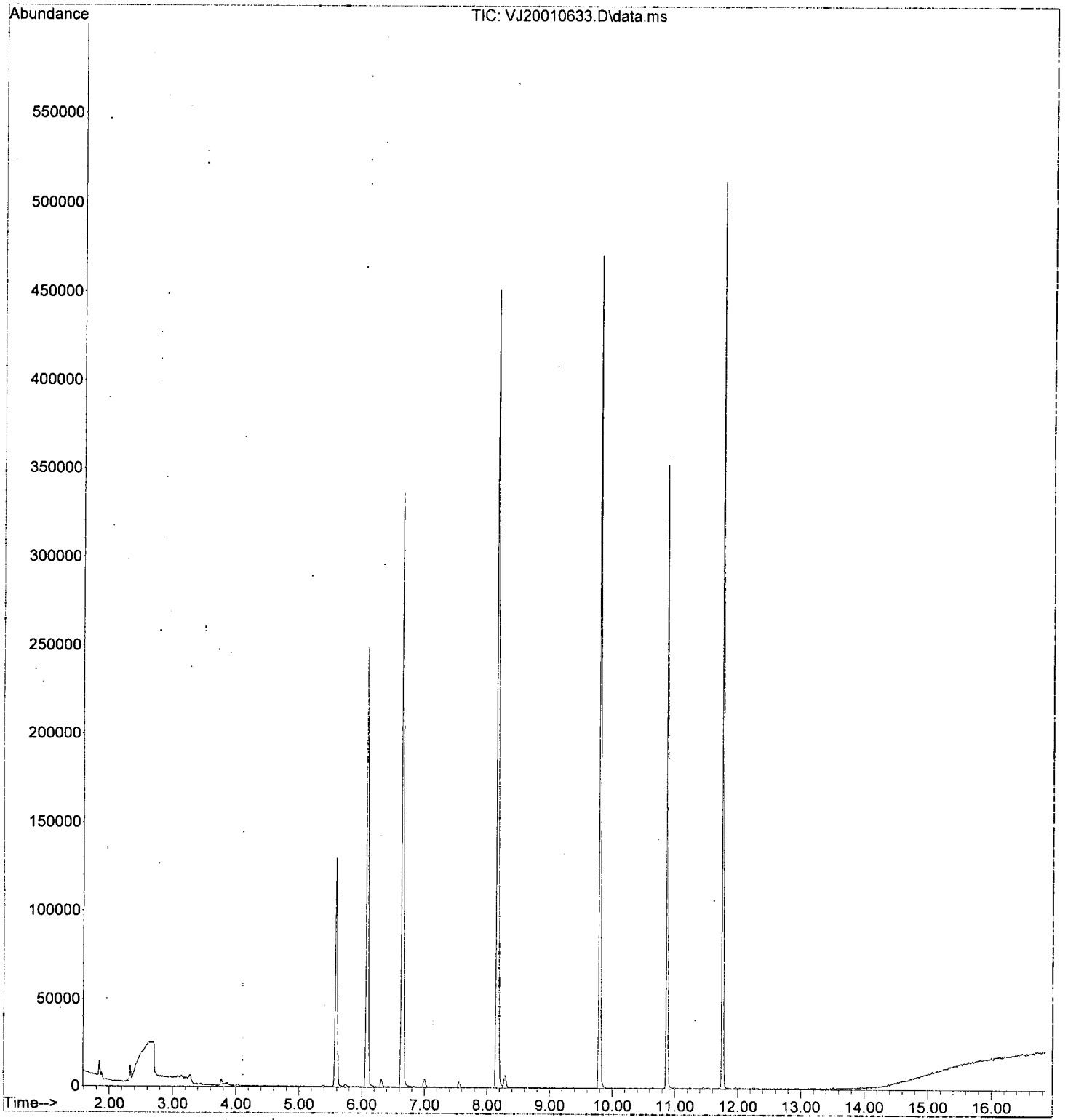
LMDL ↓

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010633.D
Acq On : 7 Jan 2020 1:43 am
Operator : tb
Sample : 0A06051-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 08 10:53:47 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010634.D
Acq On : 7 Jan 2020 2:09 am
Operator : tb
Sample : 0A06051-CALC
Misc : 1X 5mL 50ppb GX DI+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 07 15:41:27 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

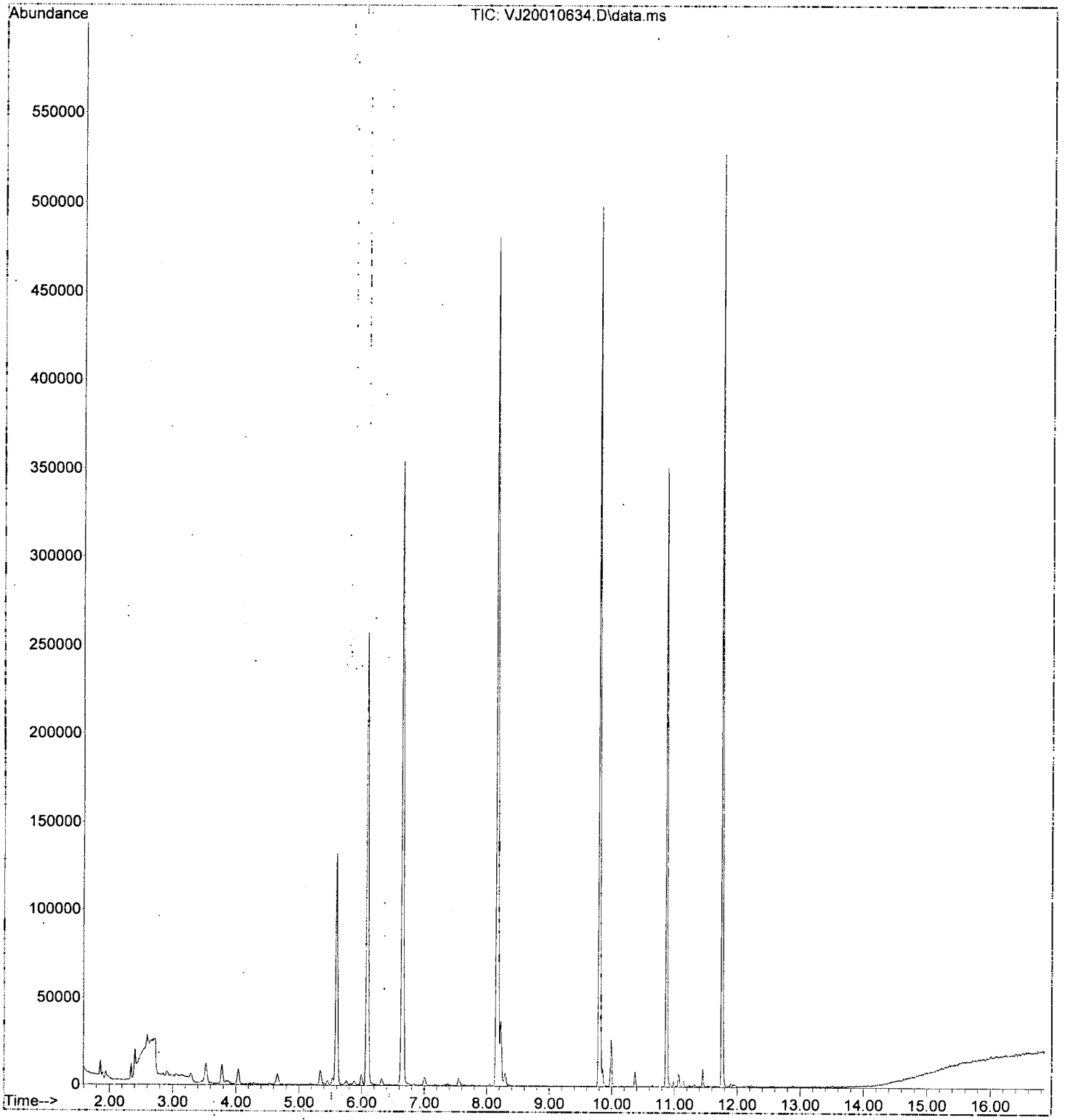
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	189886	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	311513	50.75	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	89937	50.67	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	362450	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	259164	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	177564	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	281399m	43.27	ug/L	
5) TPHg (C5-C9)	9.239	TIC	874353m	96.16	ug/L	
6) TPHg (C6-C10)	9.239	TIC	580106m	74.80	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	936641m	87.74	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010634.D
Acq On : 7 Jan 2020 2:09 am
Operator : tb
Sample : 0A06051-CALC
Misc : 1X 5mL 50ppb GX DI+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 07 15:41:27 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010635.D
Acq On : 7 Jan 2020 2:36 am
Operator : tb
Sample : 0A06051-CALD
Misc : 1X 5mL 100ppb GX DI+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 07 15:41:30 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/7/20

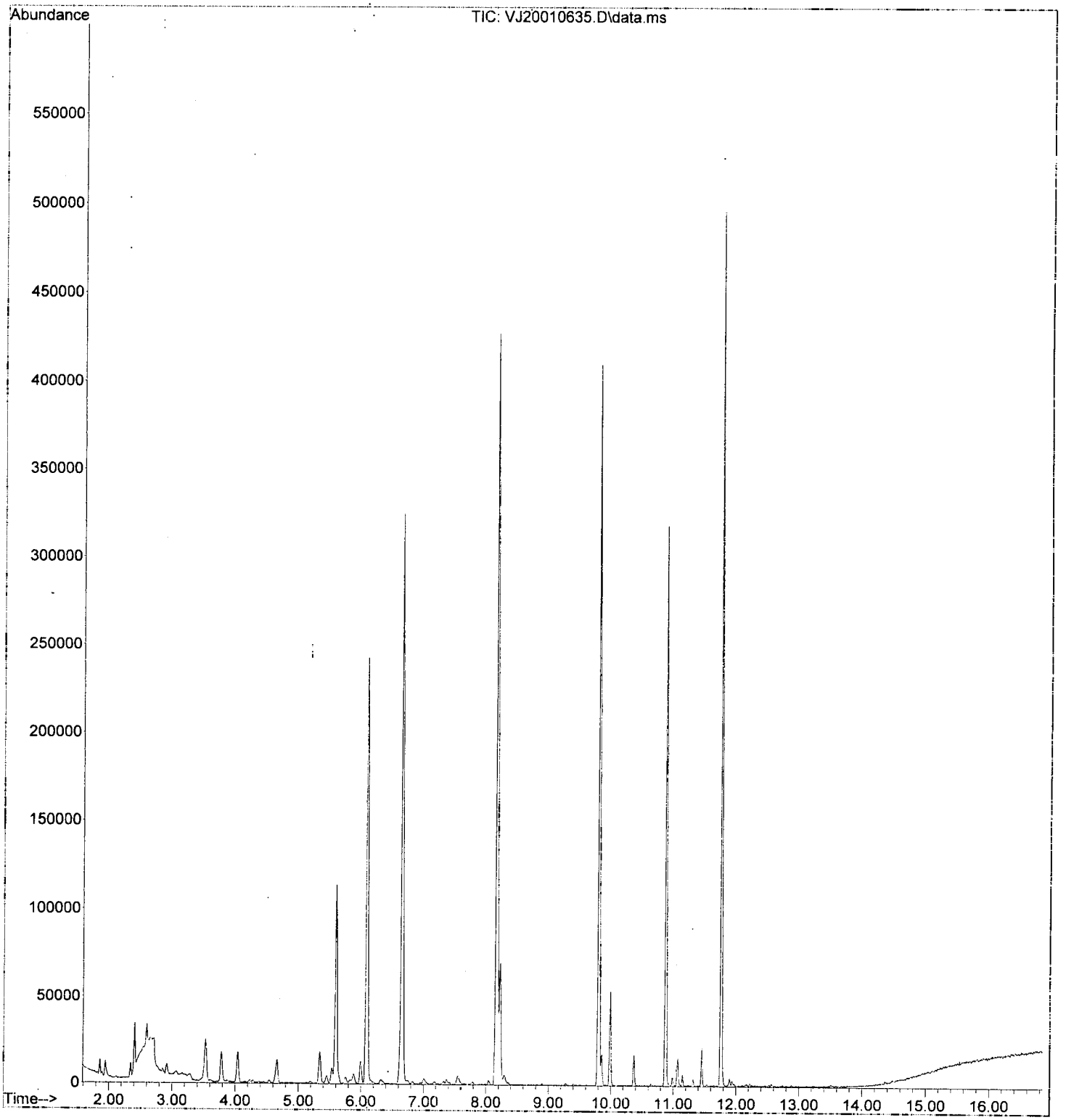
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	179443	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	288672	49.77	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	81750	48.74	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	330854	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	230207	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	167223	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	531697m	86.51	ug/L	
5) TPHg (C5-C9)	9.239	TIC	1249492m	145.41	ug/L	
6) TPHg (C6-C10)	9.239	TIC	852839m	116.37	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	1366640m	135.46	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010635.D
Acq On : 7 Jan 2020 2:36 am
Operator : tb
Sample : 0A06051-CALD
Misc : 1X 5mL 100ppb GX DI+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 07 15:41:30 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010636.D
Acq On : 7 Jan 2020 3:03 am
Operator : tb
Sample : 0A06051-CALE
Misc : 1X 5mL 250ppb GX DI+MeOH
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 07 15:41:32 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

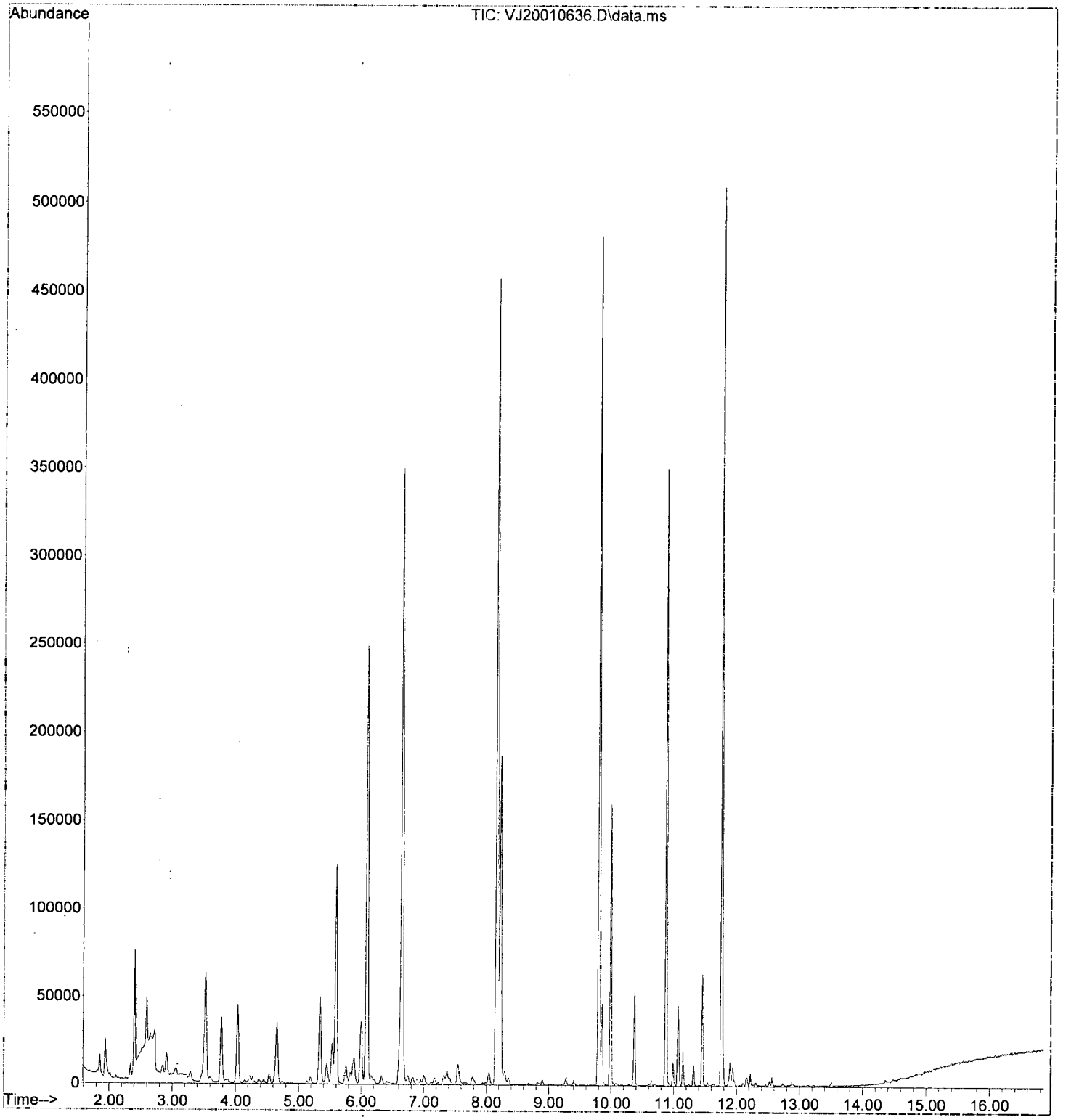
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	186189	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	302044	50.19	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	87530	50.30	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	351964	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	251411	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	172881	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	1506348m	236.21	ug/L	
5) TPHg (C5-C9)	9.239	TIC	2523781m	283.07	ug/L	
6) TPHg (C6-C10)	9.239	TIC	1968325m	258.86	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	2871923m	274.35	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010636.D
Acq On : 7 Jan 2020 3:03 am
Operator : tb
Sample : 0A06051-CALE
Misc : 1X 5mL 250ppb GX DI+MeOH
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 07 15:41:32 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010637.D
Acq On : 7 Jan 2020 3:30 am
Operator : tb
Sample : 0A06051-CALF
Misc : 1X 5mL 500ppb GX DI+MeOH
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 07 15:41:34 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

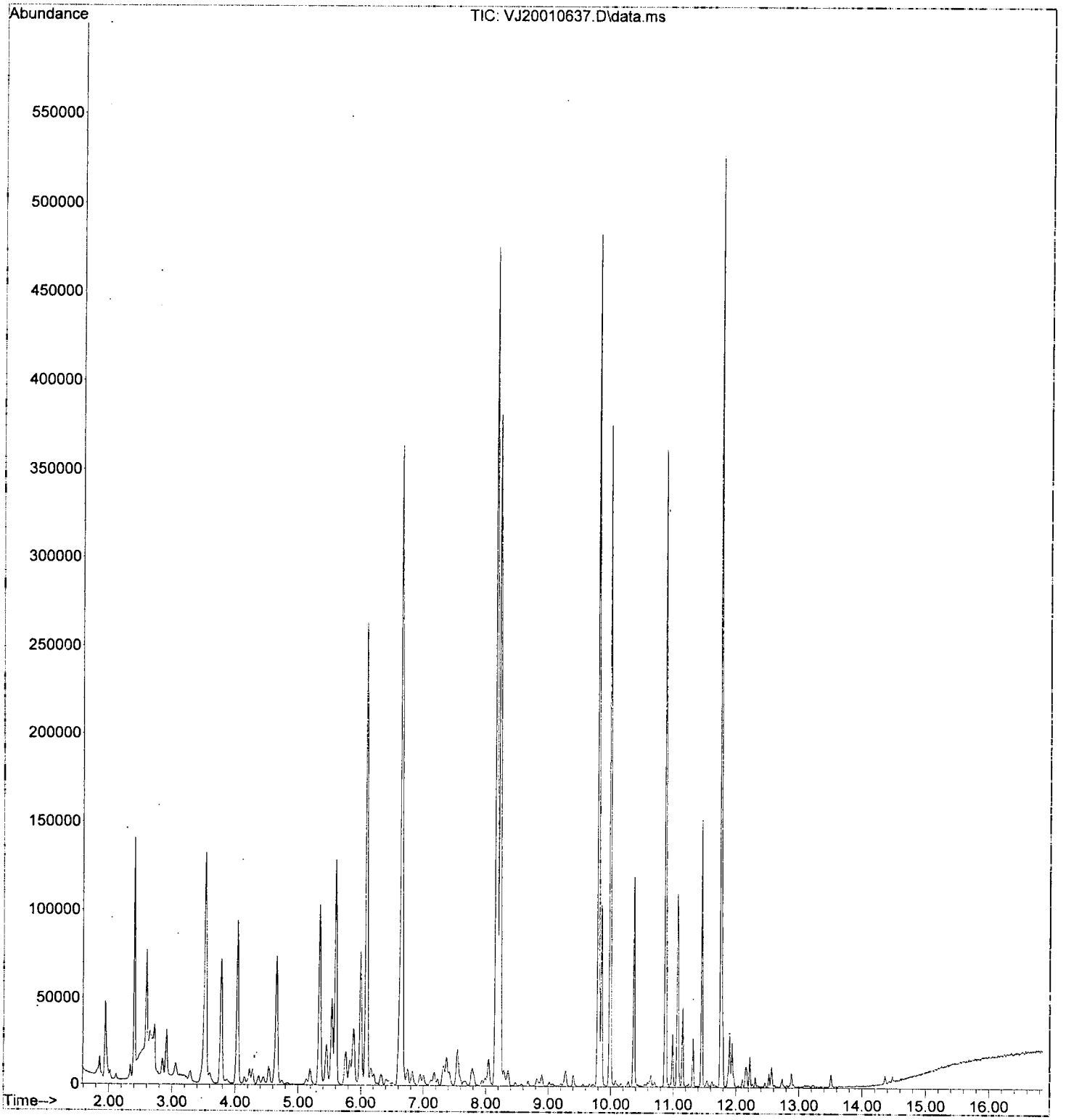
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	192629	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	311330	50.00	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	90026	50.00	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	358267	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	256239	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	176976	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3298839m	500.00	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4612017m	500.00	ug/L	
6) TPHg (C6-C10)	9.239	TIC	3933470m	500.00	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5414996m	500.00	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010637.D
Acq On : 7 Jan 2020 3:30 am
Operator : tb
Sample : 0A06051-CALF
Misc : 1X 5mL 500ppb GX DI+MeOH
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 07 15:41:34 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010638.D
Acq On : 7 Jan 2020 3:57 am
Operator : tb
Sample : 0A06051-CALG
Misc : 1X 5mL 1000ppb GX DI+MeOH
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 07 15:41:36 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

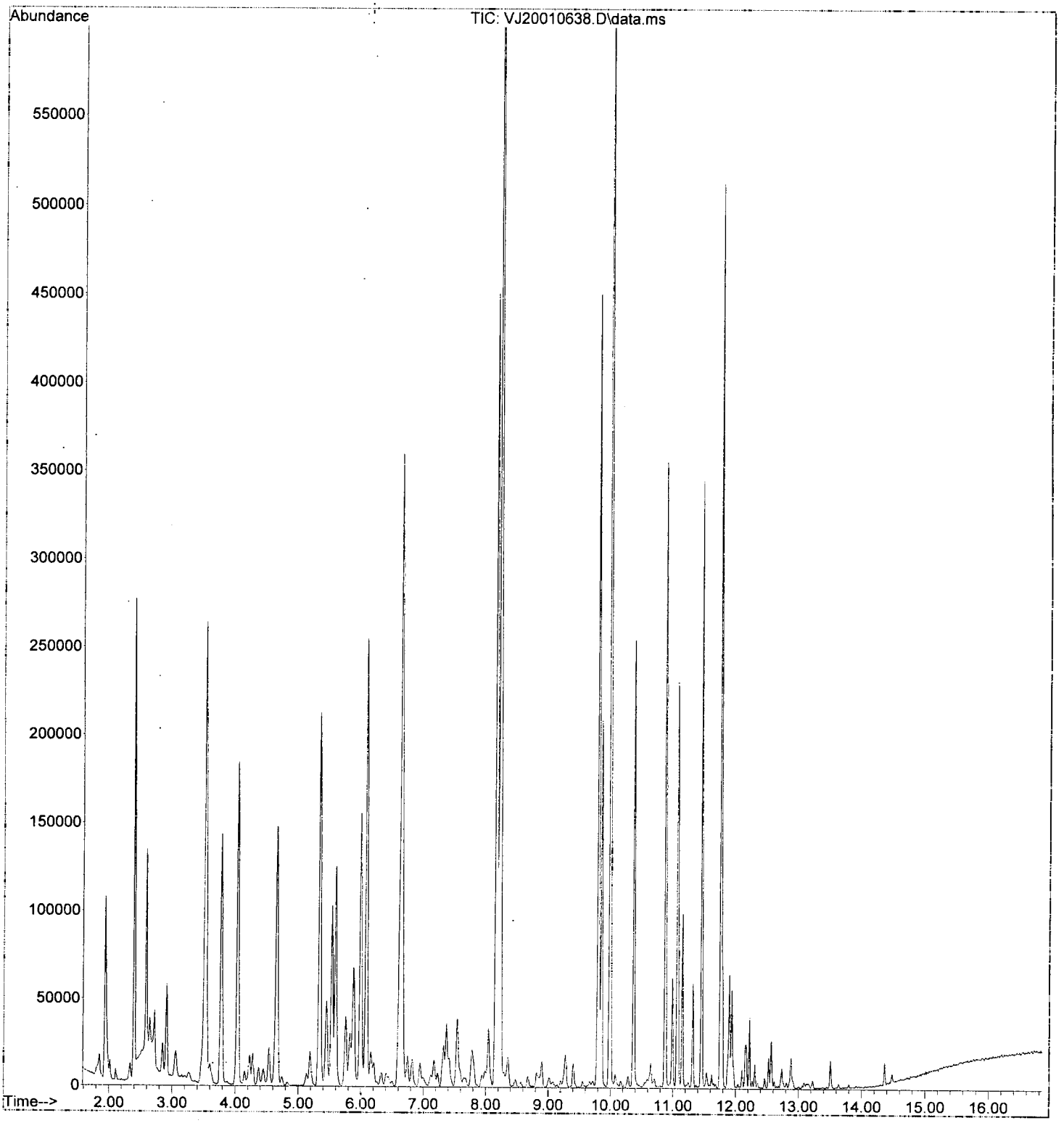
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	191267	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	307334	49.71	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	89389	50.00	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	348198	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	248975	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	178922	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	6810936m	1039.67	ug/L	
5) TPHg (C5-C9)	9.239	TIC	9037989m	986.81	ug/L	
6) TPHg (C6-C10)	9.239	TIC	7738058m	990.62	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	10732551m	998.06	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010638.D
Acq On : 7 Jan 2020 3:57 am
Operator : tb
Sample : 0A06051-CALG
Misc : 1X 5mL 1000ppb GX DI+MeOH
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 07 15:41:36 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010639.D
Acq On : 7 Jan 2020 4:24 am
Operator : tb
Sample : 0A06051-CALH
Misc : 1X 5mL 2500ppb GX DI+MeOH
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 07 15:41:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

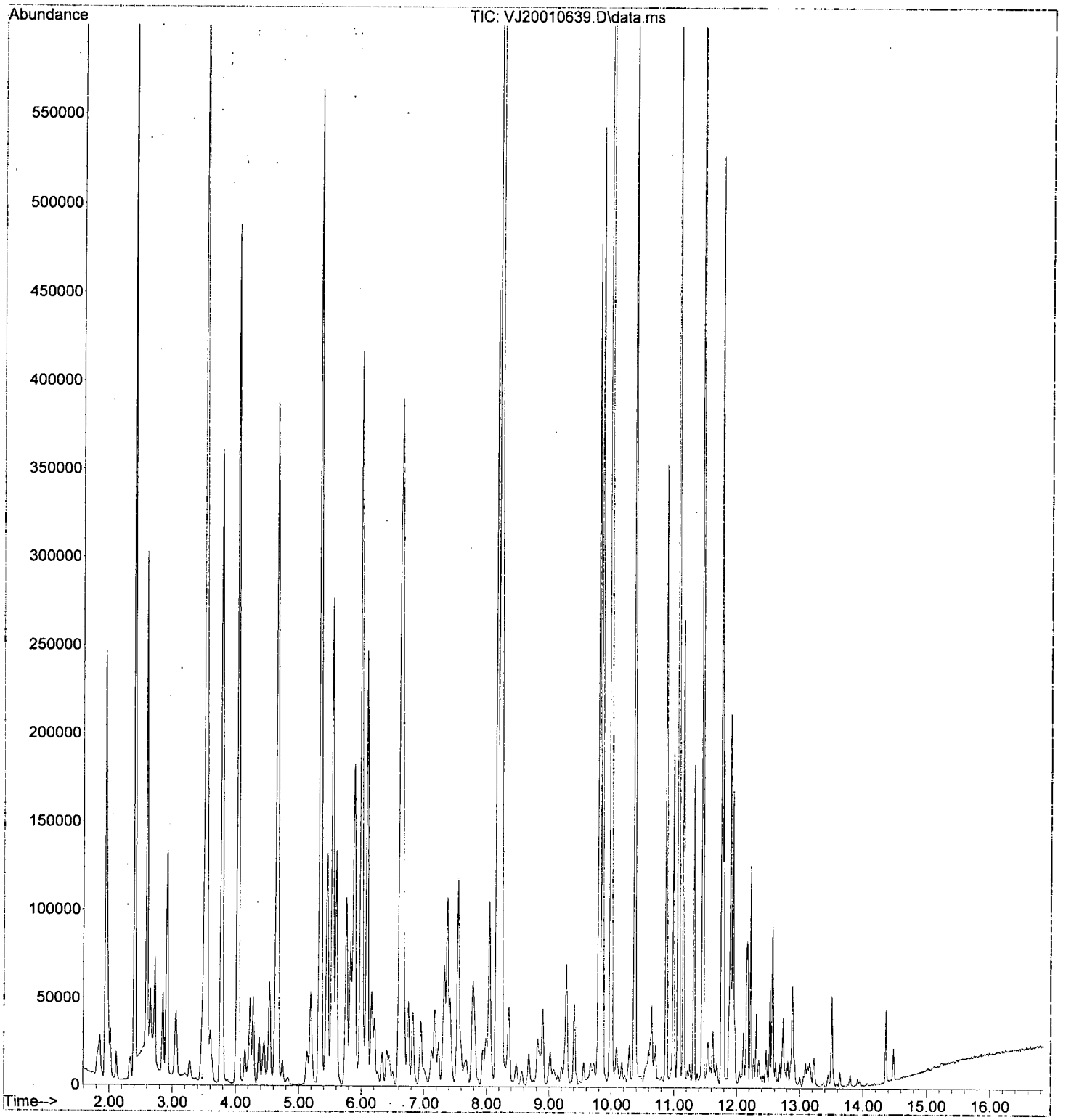
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	186048	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	297873	49.53	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	89534	51.49	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	345300	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	249487	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	178930	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	18803553m	2950.84	ug/L	
5) TPHg (C5-C9)	9.239	TIC	23432028m	2630.18	ug/L	
6) TPHg (C6-C10)	9.239	TIC	20109770m	2646.66	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	28273390m	2703.00	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010639.D
Acq On : 7 Jan 2020 4:24 am
Operator : tb
Sample : 0A06051-CALH
Misc : 1X 5mL 2500ppb GX DI+MeOH
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 07 15:41:38 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010640.D
Acq On : 7 Jan 2020 4:50 am
Operator : tb
Sample : 0A06051-CALI
Misc : 1X 5mL 5000ppb GX DI+MeOH
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 07 15:41:40 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

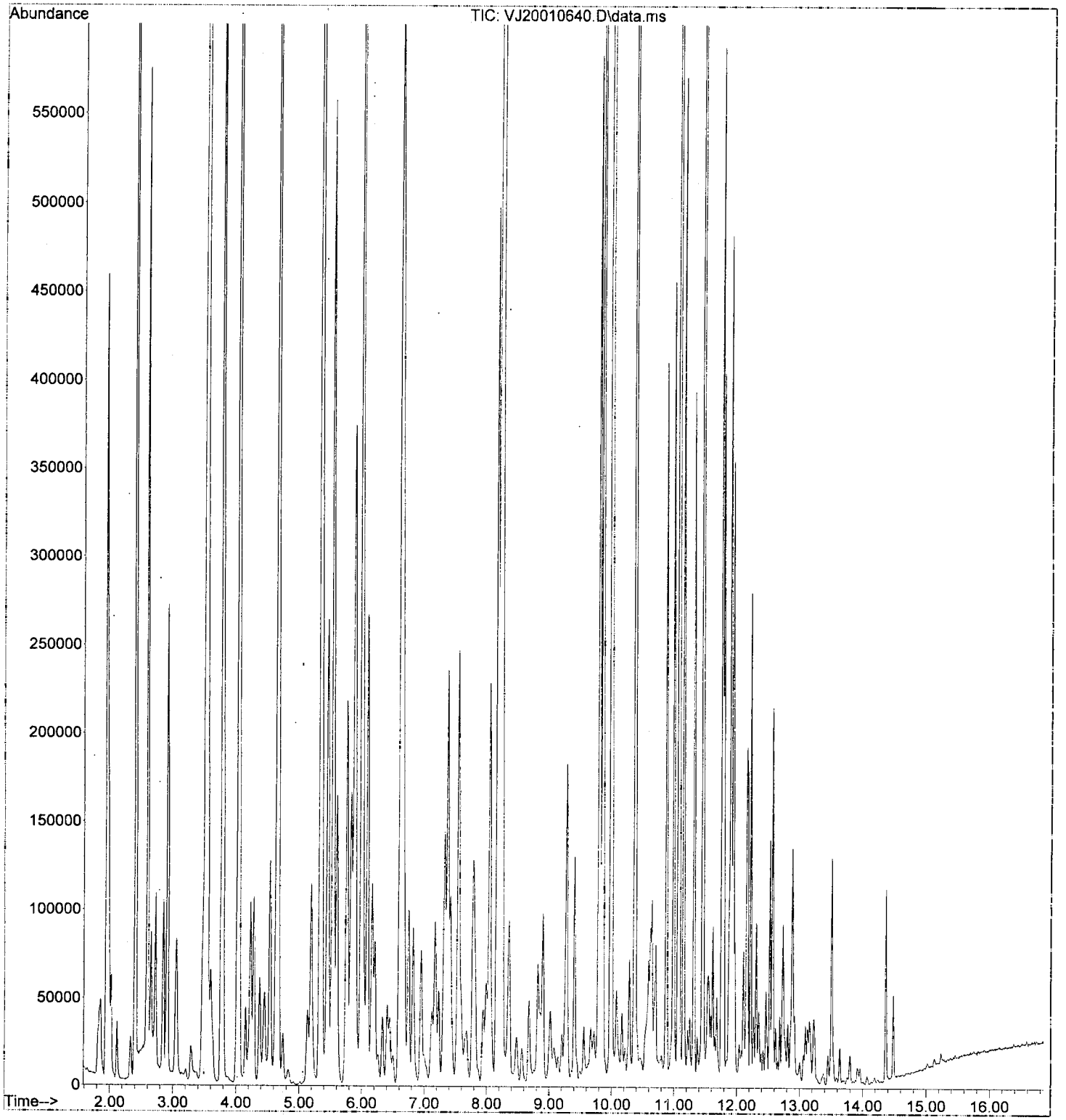
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	209694	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	336080	49.58	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	102563	52.33	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	384587	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	277169	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	203059	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	39793296m	5540.57	ug/L	
5) TPHg (C5-C9)	9.239	TIC	47990967m	4779.41	ug/L	
6) TPHg (C6-C10)	9.239	TIC	41178682m	4808.42	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	58616237m	4971.93	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010640.D
Acq On : 7 Jan 2020 4:50 am
Operator : tb
Sample : 0A06051-CALI
Misc : 1X 5mL 5000ppb GX DI+MeOH
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 07 15:41:40 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010641.D
Acq On : 7 Jan 2020 5:17 am
Operator : tb
Sample : 0A06051-CALJ
Misc : 1X 5mL 10000ppb GX DI+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 07 15:41:42 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration

1/8/20

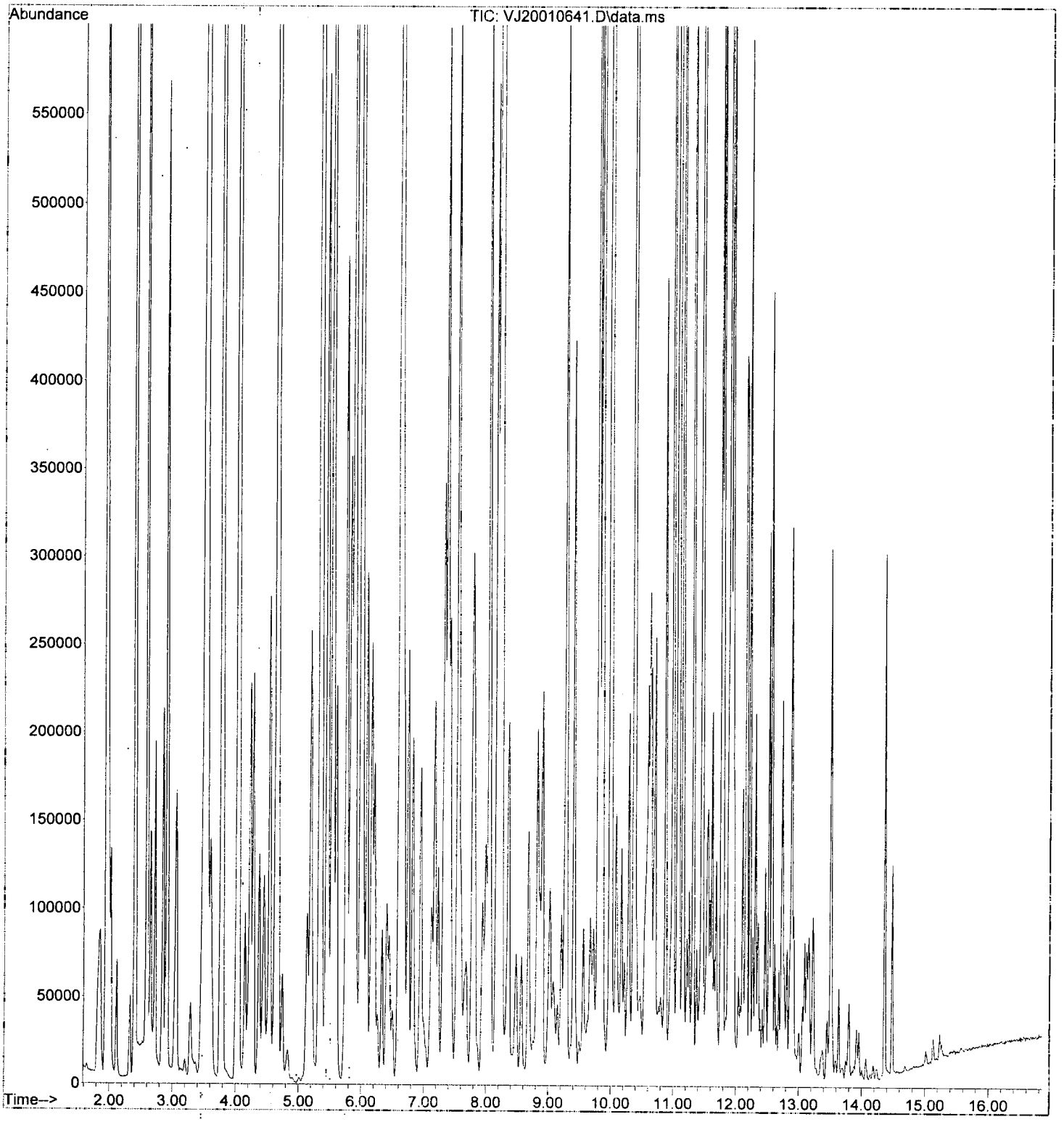
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	222960	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	356334	49.44	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	107899	51.77	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	407557	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	286881	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	210440	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	88988164m	11652.95	ug/L	
5) TPHg (C5-C9)	9.239	TIC	104787947m	9814.88	ug/L	
6) TPHg (C6-C10)	9.239	TIC	90130483m	9898.30	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	128172125m	10224.93	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010641.D
Acq On : 7 Jan 2020 5:17 am
Operator : tb
Sample : 0A06051-CALJ
Misc : 1X 5mL 10000ppb GX DI+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 07 15:41:42 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:40:59 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010642.D
Acq On : 7 Jan 2020 5:44 am
Operator : tb
Sample : 0A06051-IBL8
Misc : 1X 5mL DI+MeOH
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 08 10:53:49 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

NR

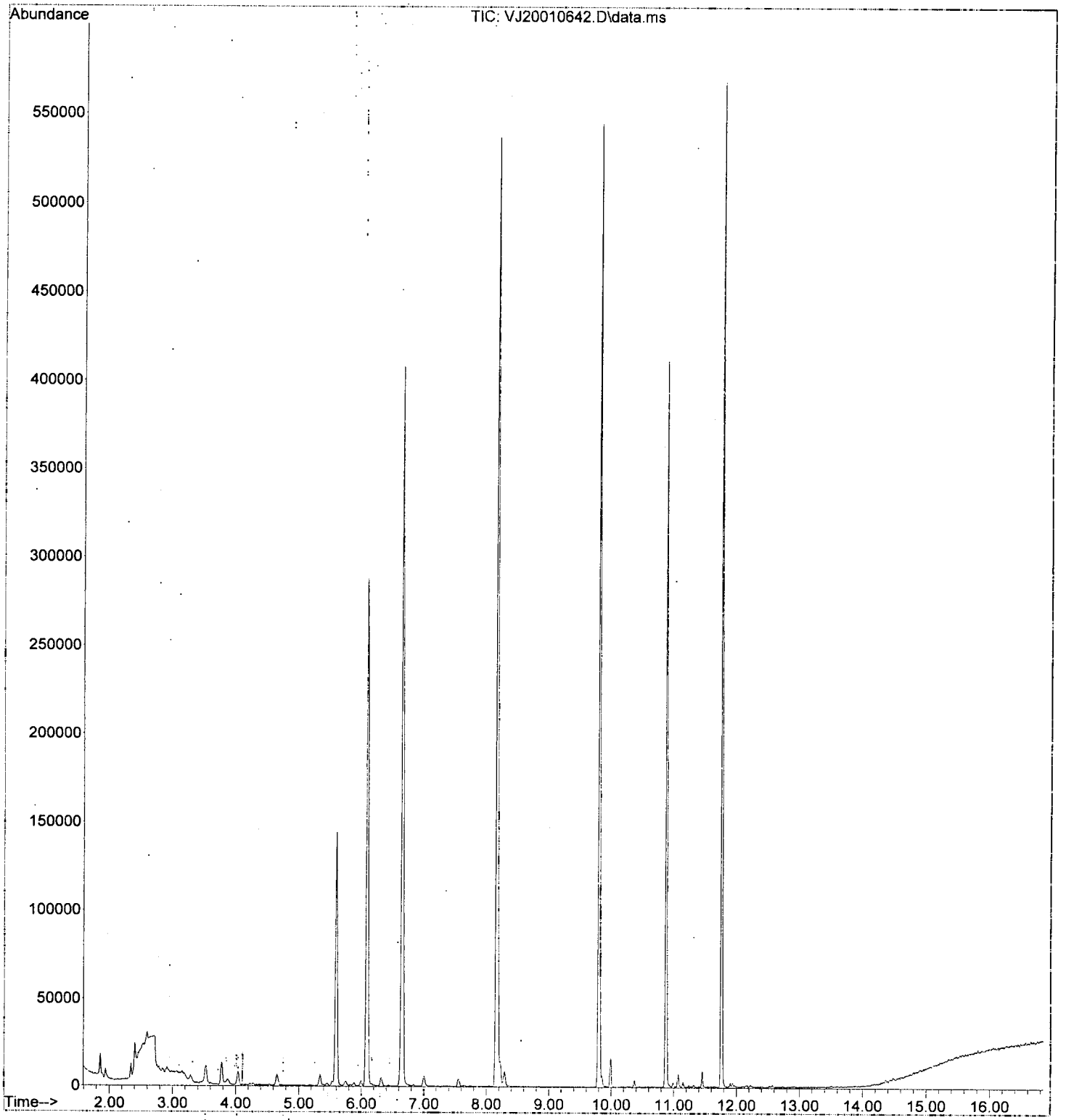
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	223068	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	362661	50.43	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	108125	51.18	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	412423	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	302933	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	205396	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	239672m	46.72	ug/L	
5) TPHg (C5-C9)	9.239	TIC	692335m	19.81	ug/L	
6) TPHg (C6-C10)	9.239	TIC	530090m	37.71	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	771024m	27.69	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010642.D
Acq On : 7 Jan 2020 5:44 am
Operator : tb
Sample : 0A06051-IBL8
Misc : 1X 5mL DI+MeOH
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 08 10:53:49 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010643.D
Acq On : 7 Jan 2020 6:11 am
Operator : tb
Sample : 0A06051-IBL9
Misc : 1X 5mL DI+MeOH
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 08 10:53:51 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

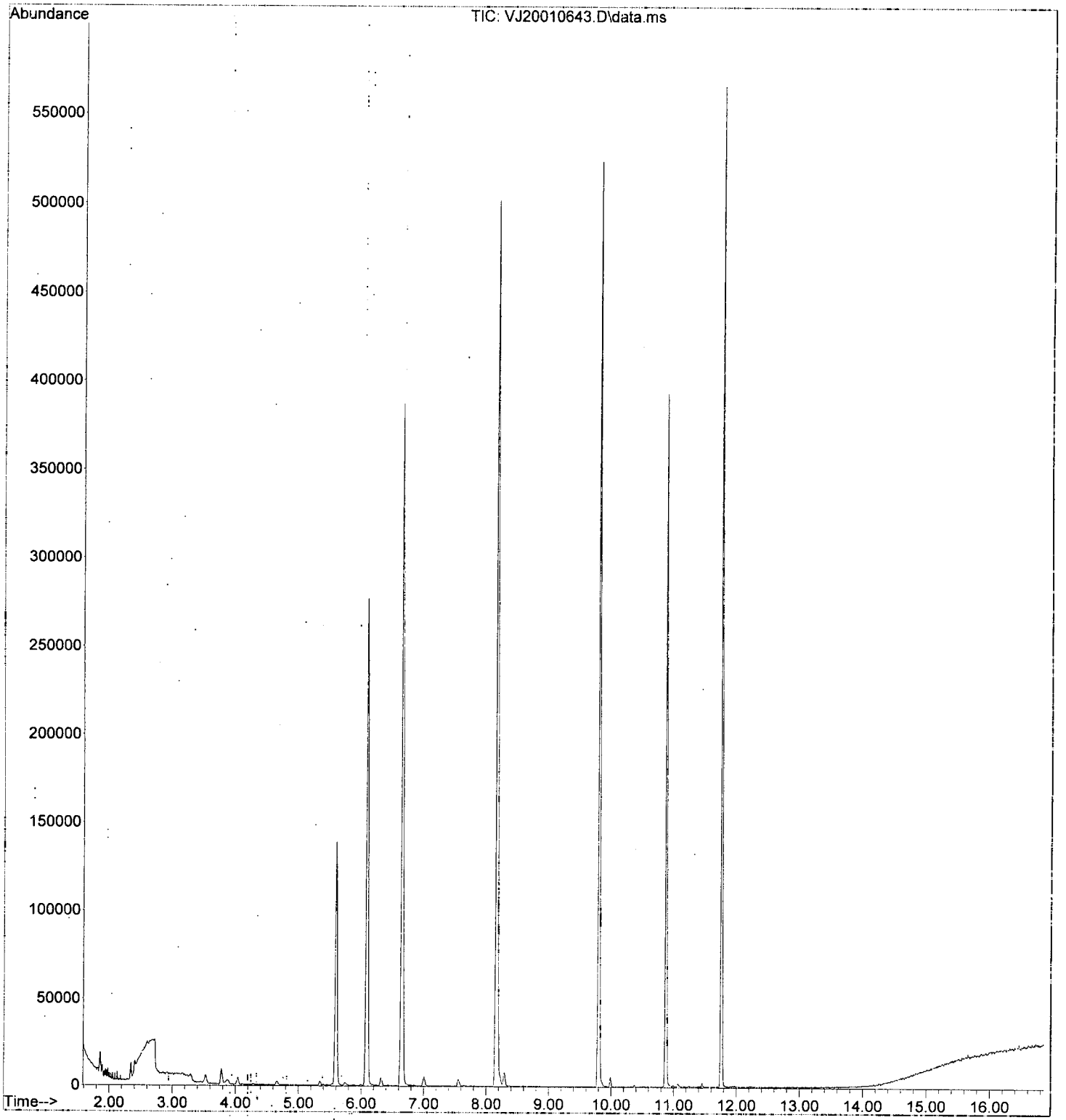
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	212078	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	345200	50.49	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	102246	50.91	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	391979	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	285605	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	197963	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	126016m	33.97	ug/L	
5) TPHg (C5-C9)	9.239	TIC	444129m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	404365m	26.10	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	489111m	7.21	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010643.D
Acq On : 7 Jan 2020 6:11 am
Operator : tb
Sample : 0A06051-IBL9
Misc : 1X 5mL DI+MeOH
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 08 10:53:51 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010644.D
Acq On : 7 Jan 2020 6:38 am
Operator : tb
Sample : 0A06051-ICV2
Misc : 1X 5mL, 500ppb GX DI+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 08 10:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

1/8/20

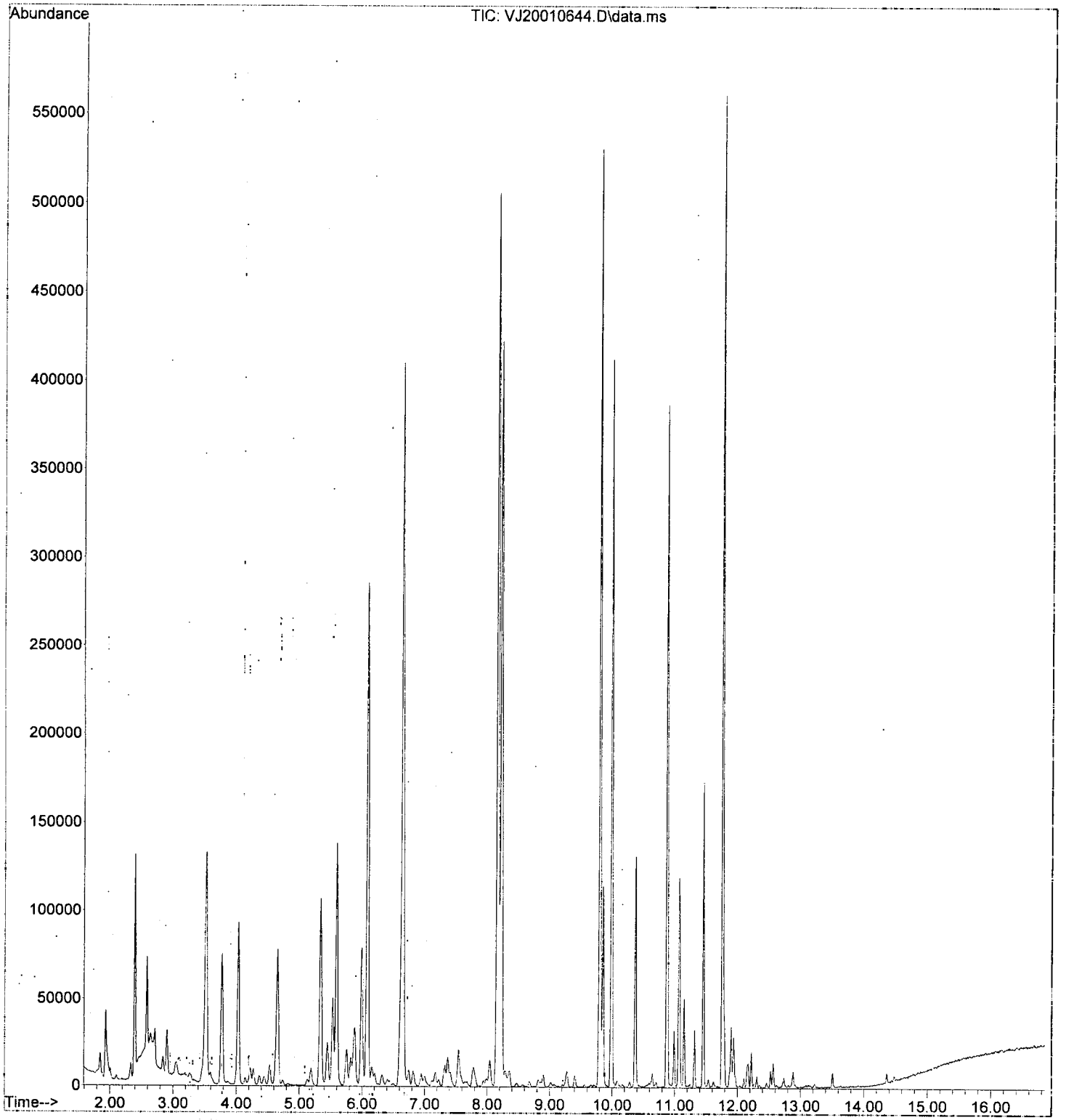
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	223341	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.643	114	354897	49.29	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.877	174	102701	48.55	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	401933	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	290557	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	198745	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3584391m	443.33	ug/L	
5) TPHg (C5-C9)	9.239	TIC	4858419m	421.34	ug/L	
6) TPHg (C6-C10)	9.239	TIC	4209708m	445.10	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5756973m	424.73	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010644.D
Acq On : 7 Jan 2020 6:38 am
Operator : tb
Sample : 0A06051-ICV2
Misc : 1X 5mL 500ppb GX DI+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 08 10:53:53 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010645.D
Acq On : 7 Jan 2020 7:05 am
Operator : tb
Sample : 0A06051-IBLA
Misc : 1X 5mL DI+MeOH
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 08 10:53:55 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration

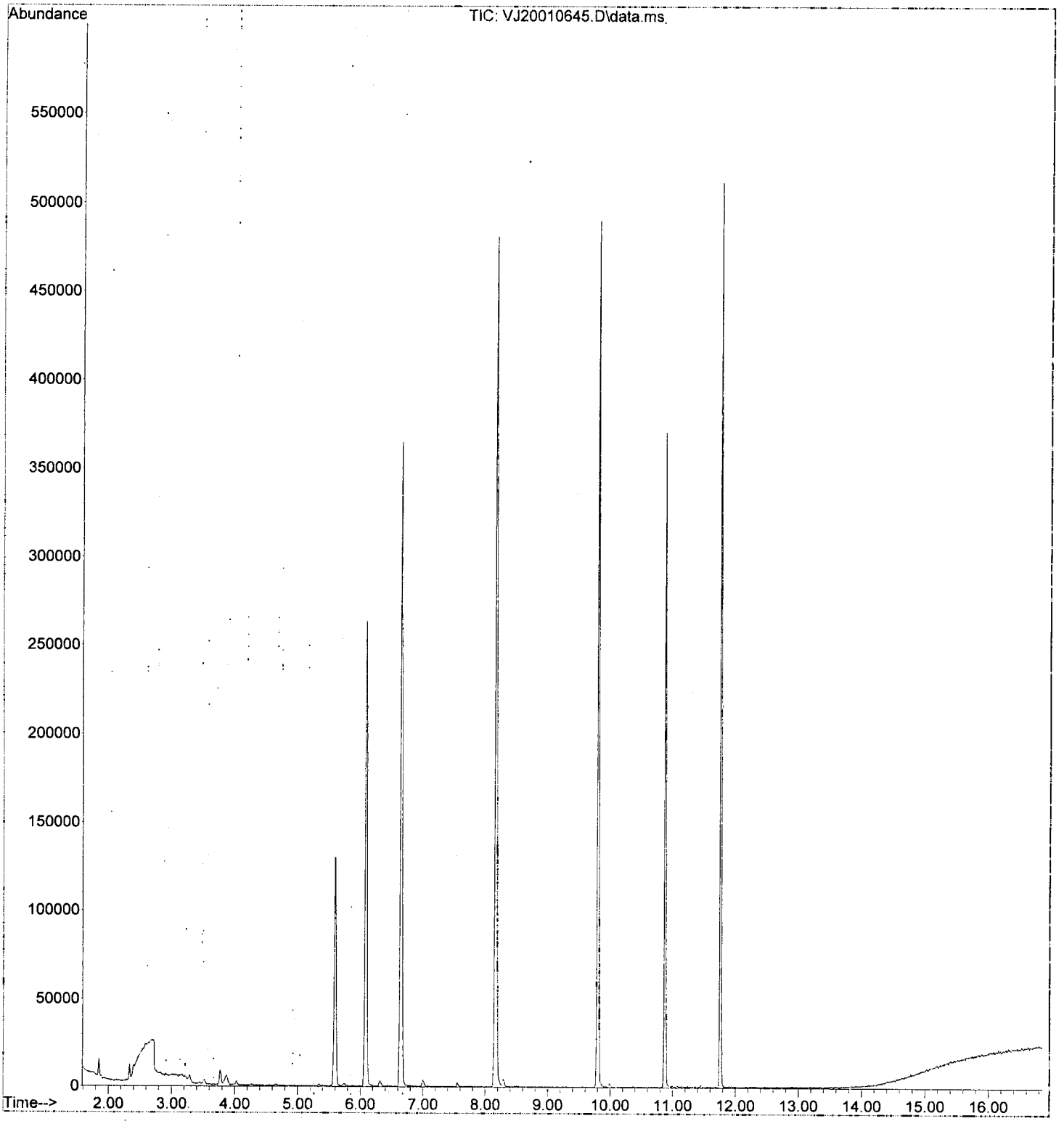
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.083	168	200497	50.00	ug/L	-0.01
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	327019	50.59	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	94643	49.84	ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	373467	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.800	117	271141	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.759	150	184098	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	92945m	30.50	ug/L	
5) TPHg (C5-C9)	9.239	TIC	436196m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	365444m	24.02	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	464596m	7.41	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A06051\
Data File : VJ20010645.D
Acq On : 7 Jan 2020 7:05 am
Operator : tb
Sample : 0A06051-IBLA
Misc : 1X 5mL DI+MeOH
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 08 10:53:55 2020
Quant Method : C:\msdchem\1\methods\VJ200106G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Jan 07 15:45:42 2020
Response via : Initial Calibration



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

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Benchsheet & Analysis Sequence Data

Batch 0010574
Sequence 0A20029 (A0A0539-02RE1)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 0010574 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH 6to9	pH >11
	0010574-BLK1		QC	01/20/20 10:08	16	2				100					
	0010574-BS1		QC	01/20/20 10:08	15	2	A20A088		100	100					
	A0A0538-01RE1	A	8270D LL Full List	01/20/20 10:08	15.4	2				100	PDI-WC-011420-01	QC failures. Re-extract added 1/17/2020 by DTH			
	0010574-DUP1		QC	01/20/20 10:08	15.29	2		A0A0538-01RE1		100					
	A0A0538-01RE2	A	8270D LL Full List	01/20/20 10:08	15.4	2				100	PDI-WC-011420-01	RR1, 10x. Added 1/21/2020 By jk			
	0010574-DUP2		QC	01/20/20 10:08	15.29	2		A0A0538-01RE2		100		Added 1/22/2020 by ams			
	A0A0538-02RE1	A	8270D LL Full List	01/20/20 10:08	15.34	2				100	PDI-WC-011420-03	QC failures. Re-extract added 1/17/2020 by DTH			
	A0A0538-02RE2	A	8270D LL Full List	01/20/20 10:08	15.34	2				100	PDI-WC-011420-03	RR-1, 250x. Added 1/21/2020 By jk			
	A0A0539-01RE1	A	8270D LL Full List	01/20/20 10:08	15.55	2				100	PDI-WC-011420-02	QC failures. Re-extract added 1/17/2020 by DTH			
	A0A0539-01RE2	A	8270D LL Full List	01/20/20 10:08	15.55	2				100	PDI-WC-011420-02	RR-1, 20x. Added 1/21/2020 By jk			
	A0A0539-02RE1	A	8270D LL Full List	01/20/20 10:08	15.52	2				100	PDI-WC-011420-04	QC failures. Re-extract added 1/17/2020 by DTH			
	0010574-MS1		QC	01/20/20 10:08	15.47	2	A20A088	A0A0539-02RE1	100	100					

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19I263	03/18/20	DCM CHEM PROD. 194934
A19L136	06/06/20	Sodium Sulfate Lot # 194950

Analyte Spike(s)

Std ID	Exp. Date	Description
A20A088	07/05/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A20A170	07/11/20	PAH Soil and Water Surr. (50ppm)

Method 3546 digestion time and temperture achieved.
Initial:

Witness:_____

Prepared By: _____ Date _____

Reviewed By: AMS Date 1/22/20

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 0010574 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
1	0010574-BLK1		QC	01/20/20 10:08	~~15~~ 16	2				100					
2	0010574-BS1		QC	01/20/20 10:08	15	2	A20A088		100	100					
3	A0A0538-01RE1	A	8270D LL Full List	01/20/20 10:08	~~15~~ 15.40	2				100	PDI-WC-011420-01	QC failures. Re-extract added 1/17/2020 by DTH Rec. K			
4	0010574-DUP1		QC	01/20/20 10:08	~~15~~ 15.29	2		A0A0538-01RE1		100					
5	A0A0538-02RE1	A	8270D LL Full List	01/20/20 10:08	~~15~~ 15.34	2				100	PDI-WC-011420-03	QC failures. Re-extract added 1/~~17~~2020 by DTH Mud Rock			
6	A0A0539-01RE1	A	8270D LL Full List	01/20/20 10:08	~~15~~ 15.55	2				100	PDI-WC-011420-02	QC failures. Re-extract added 1/17/2020 by DTH d.i.t Rock			
7	A0A0539-02RE1	A	8270D LL Full List	01/20/20 10:08	~~15~~ 15.52	2				100	PDI-WC-011420-04	QC failures. Re-extract added 1/17/2020 by DTH d.i.t			
8	0010574-MS1		QC	01/20/20 10:08	~~15~~ 15.47	2	A20A088	A0A0539-02RE1	100	100					

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19l263	03/18/20	DCM CHEM PROD. 194934
A19L136	06/06/20	Sodium Sulfate Lot # 194950

Analyte Spike(s)

Std ID	Exp. Date	Description
A20A088	07/05/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A20A170	07/11/20	PAH Soil and Water Surr. (50ppm)

Method 3546 digestion time and temperture achieved.
Initial

* = staining on Turbo Vap

Witness: cas 1-20-20

Prepared By: Date 1/20/20

Reviewed By: cas Date 01/20/2020

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **0A20029** Instrument: **SV-GCMS9**

Date: **01/20/20 07:54** Calibration: **A9L0505**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A20029-TUN1	Soil	QC	QC			A19K206	A20A236
2	0A20029-CCV1	Soil	QC	QC			A19K206	A19L374
3	0A20029-CCB1	Soil	QC	QC			A19K206	
4	0010561-BLK1	Soil	QC	QC		0010561	A19K206	
5	0010561-BS1	Soil	QC	QC		0010561	A19K206	
6	A0A0465-01RE2	Soil	8270D LL Full List		01/21/20	0010561	A19K206	
7	0010561-DUP1	Soil	QC	QC		0010561	A19K206	
8	0010561-MS1	Soil	QC	QC		0010561	A19K206	
9	0010574-BLK1	Sediment	QC	QC		0010574	A19K206	
10	0010574-BS1	Sediment	QC	QC		0010574	A19K206	
11	A0A0538-01RE1	Sediment	8270D LL Full List	Anchor QEA, LLC	01/27/20	0010574	A19K206	
12	0010574-DUP1	Sediment	QC	QC		0010574	A19K206	
13	A0A0538-02RE1	Sediment	8270D LL Full List	Anchor QEA, LLC	01/27/20	0010574	A19K206	
14	A0A0539-01RE1	Sediment	8270D LL Full List	Anchor QEA, LLC	01/27/20	0010574	A19K206	
15	A0A0539-02RE1	Sediment	8270D LL Full List	Anchor QEA, LLC	01/27/20	0010574	A19K206	
16	0A20029-IBL1	Soil	QC	QC			A19K206	
17	0010597-BLK1	Soil	QC	QC		0010597	A19K206	
18	0010597-BS1	Soil	QC	QC		0010597	A19K206	
19	0010597-BSD1	Soil	QC	QC		0010597	A19K206	
20	A0A0385-05	Soil	1311/8270D TCLP Full List SVOC		01/21/20	0010597	A19K206	
21	0A20029-IBL2	Soil	QC	QC			A19K206	

Data Entered By: AMS 1/21/20

Data Reviewed By: JPA 1/21/20

Comments:

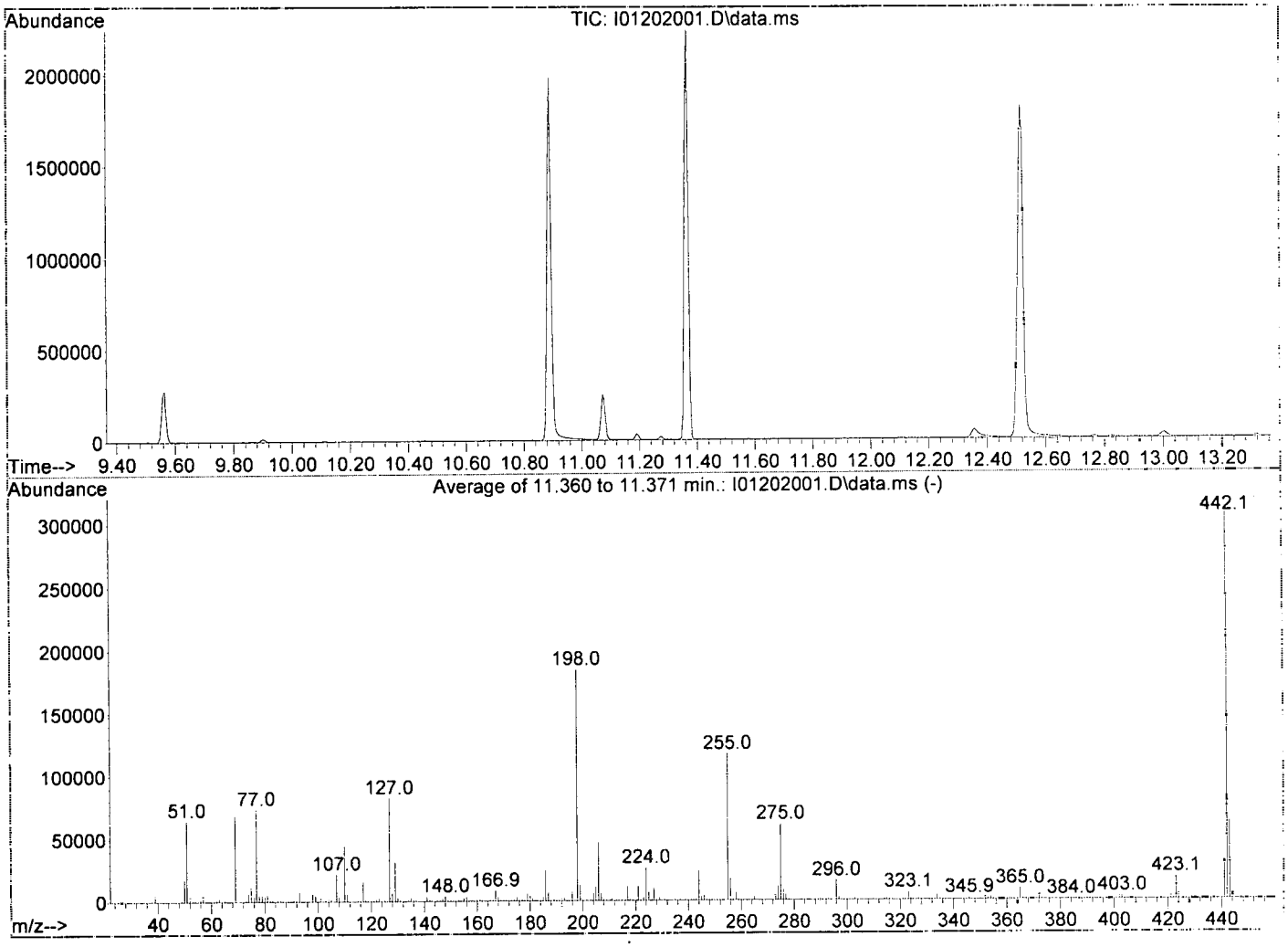
DFTPP

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202001.D
Acq On : 20 Jan 2020 8:01
Operator : JK /AMS /DTH
Sample : 0A20029-TUN1
Misc : 1x, A20A236 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

AMS 1/20/20

Integration File: rteint.p

Method : C:\msdchem\1\methods\DFTPP.M
Title : DFTPP Tune Methodug/mL
Last Update : Mon Jan 06 12:06:36 2020



AutoFind: Scans 1472, 1473, 1474; Background Corrected with Scan 1466

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	68629	PASS
70	69	0.00	2	0.5	352	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	184067	PASS
199	198	5	9	6.9	12731	PASS
365	198	1	100	4.7	8743	PASS
441	443	0.01	150	48.9	30357	PASS
442	198	0.10	200	166.2	305835	PASS
443	442	15	24	20.3	62045	PASS

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202001.D
Acq On : 20 Jan 2020 8:01
Operator : JK /AMS /DTH
Sample : 0A20029-TUN1
Misc : 1x, A20A236 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Jan 20 13:27:46 2020
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Mon Jan 06 12:06:36 2020
Response via : Initial Calibration
InstName : SV-GCMS9

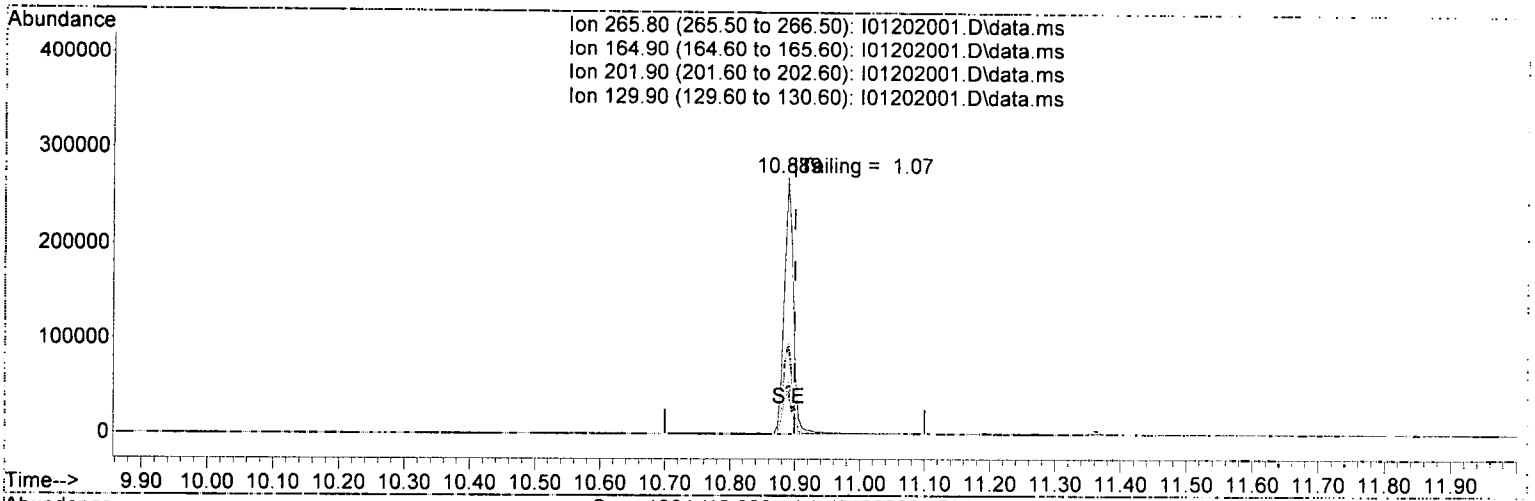
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.782	136	123426	2.00	ug/mL	0.00
2) Acenaphthene-d10	9.563	162	60345	2.00	ug/mL	0.00
4) Phenanthrene-d10	11.071	188	94374	2.00	ug/mL	-0.01
10) Chrysene-d12	14.730	240	80488	2.00	ug/mL	-0.02
11) Perylene-d12	16.858	264	75692	2.00	ug/mL	-0.05
Target Compounds						Qvalue
3) Pentachlorophenol	10.889	266	266754	39.40	ug/mL	85
5) DFTPP	11.365	442	338814	42.70	ug/mL	70
6) Benzidine	12.515	184	964141	33.93	ug/mL	92
7) 4,4-DDE	12.767	TIC	10340	No Calib	#	
8) 4,4-DDD	13.264	TIC	3305	0.85	ug/mL#	1
9) 4,4-DDT	13.804	TIC	3050255	38.35	ug/mL#	1

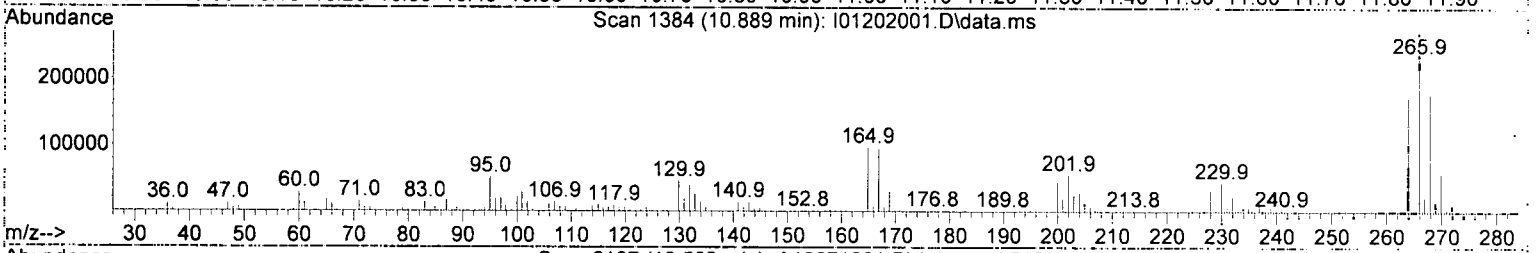
(#) = qualifier out of range (m) = manual integration (+) = signals summed

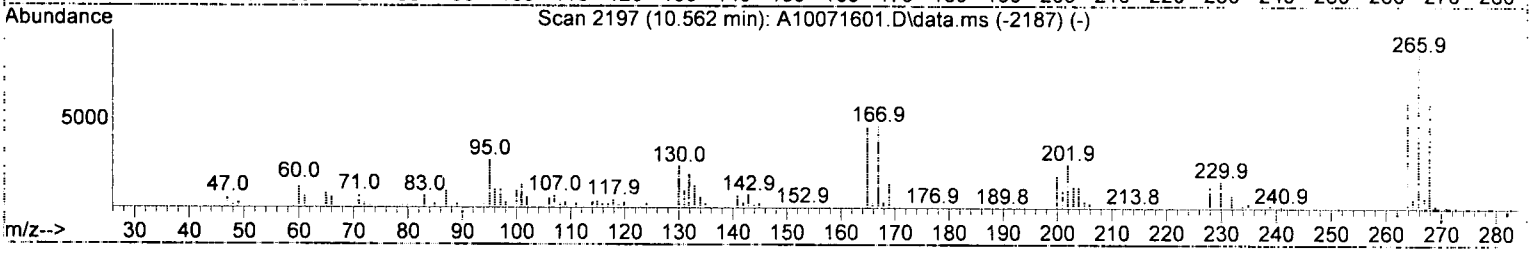
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202001.D
Acq On : 20 Jan 2020 8:01
Operator : JK /AMS /DTH
Sample : 0A20029-TUN1
Misc : 1x, A20A236 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Jan 20 13:27:46 2020
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Mon Jan 06 12:06:36 2020
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I01202001.D\data.ms

(3) Pentachlorophenol

10.889min (-0.010) 39.40 ug/mL

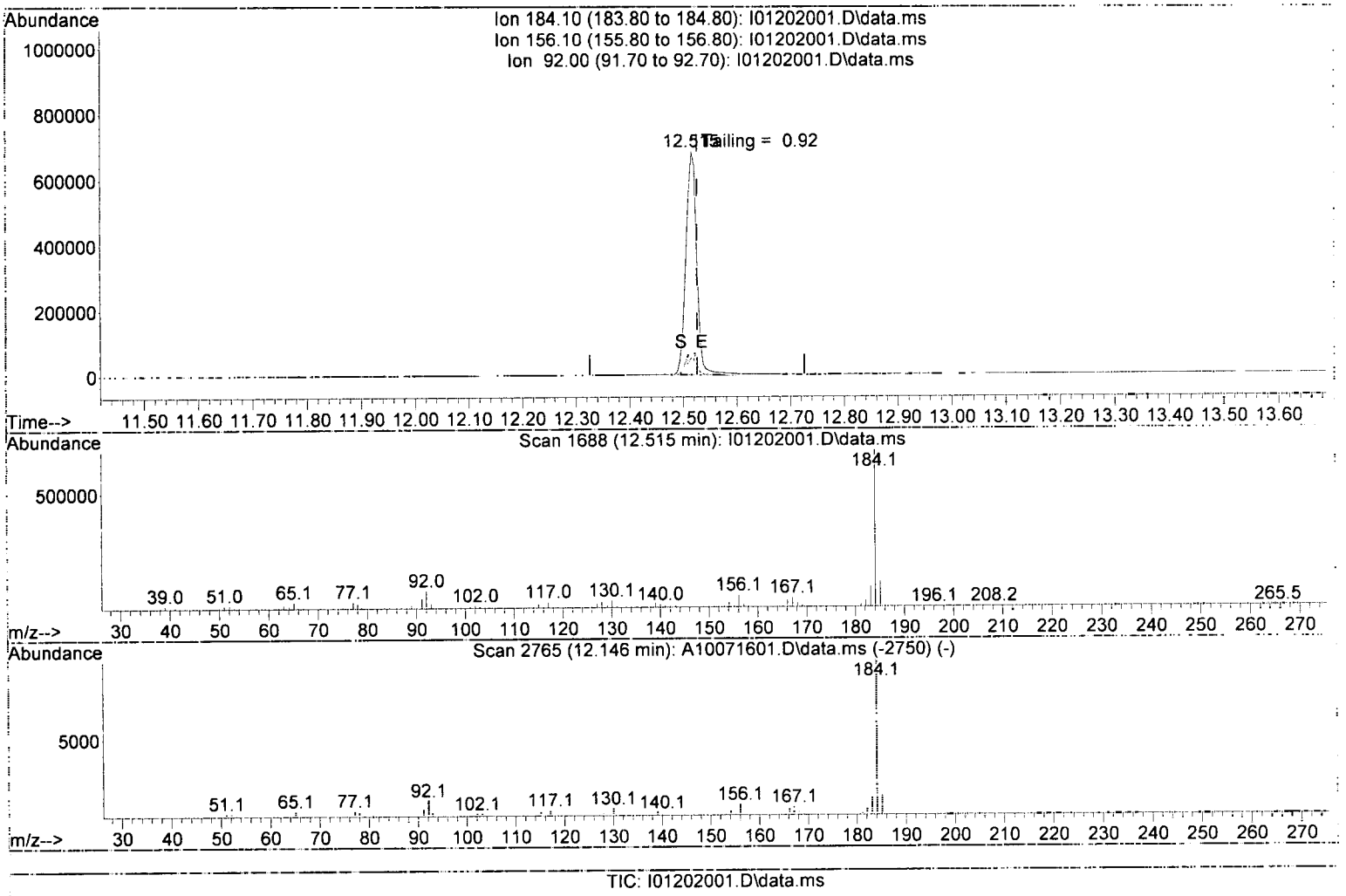
response 266754

Ion	Exp%	Act%
265.80	100.00	100.00
164.90	47.40	35.68
201.90	26.10	20.38
129.90	22.80	16.75

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202001.D
Acq On : 20 Jan 2020 8:01
Operator : JK /AMS /DTH
Sample : 0A20029-TUN1
Misc : 1x, A20A236 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Jan 20 13:27:46 2020
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Mon Jan 06 12:06:36 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01202001.D\data.ms

(6) Benzidine

12.515min (-0.010) 33.93 ug/mL

response 964141

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	9.40	7.69
92.00	15.50	10.97
0.00	0.00	0.00

√

DDT Breakdown Check (Validated 5/1/2013)

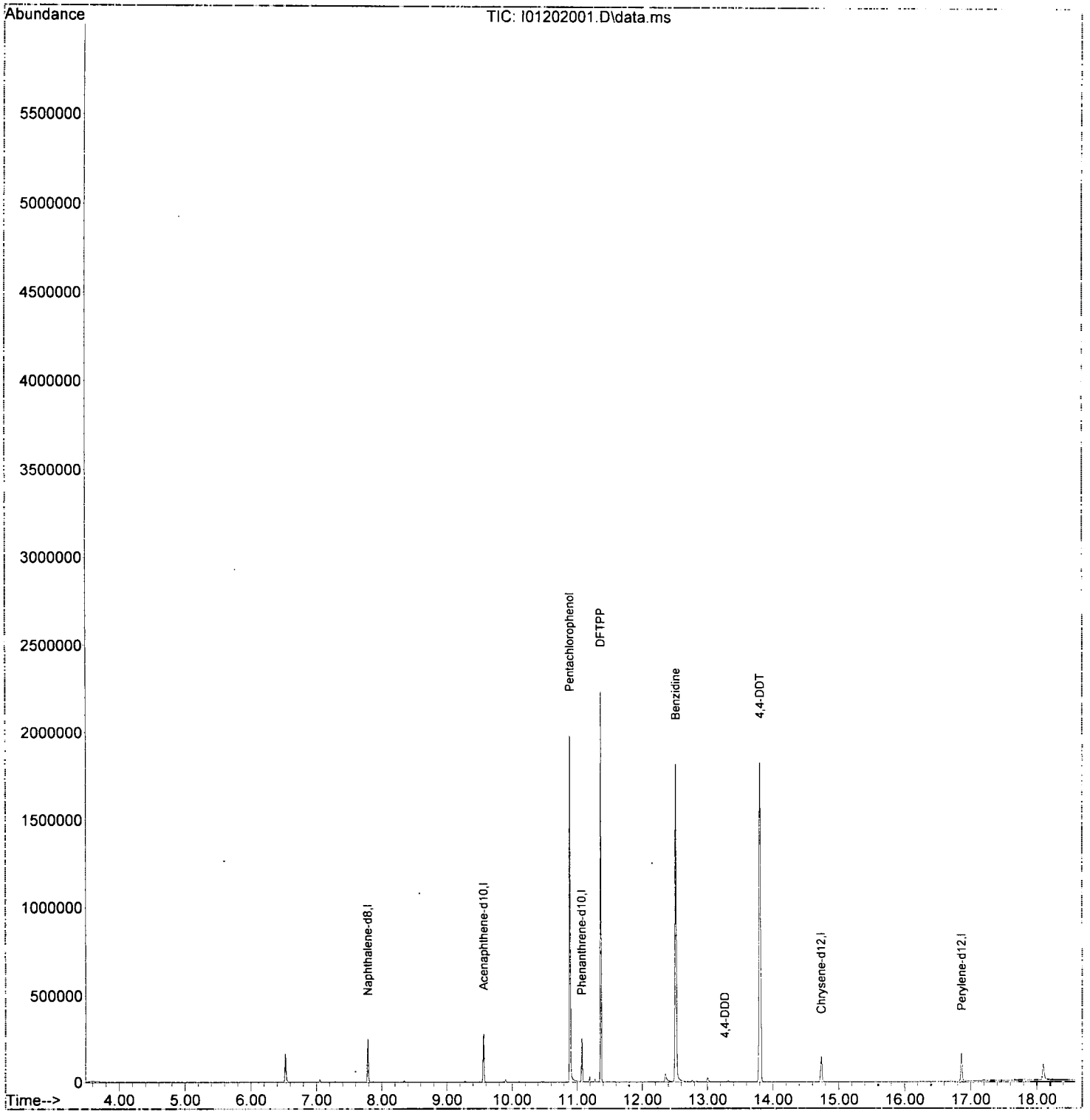
From:
0A20029-TUN1
SV-GCMS9

First Column Area Counts		Percent Breakdown	
DDE	10340		
DDD	3305		
DDT	3050255	0.45	PASS

Breakdown must be less than 20% to accept sample data.

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202001.D
Acq On : 20 Jan 2020 8:01
Operator : JK /AMS /DTH
Sample : 0A20029-TUN1
Misc : 1x, A20A236 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Jan 20 13:27:46 2020
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Mon Jan 06 12:06:36 2020
Response via : Initial Calibration
InstName : SV-GCMS9



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202002.D
Acq On : 20 Jan 2020 8:28
Operator : JK /AMS /DTH
Sample : 0A20029-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 13:30:12 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

AMS 1/20/20

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	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	140	0.00
2	T	N-Nitrosodimethylamine	1000.000	1142.948	-14.3	158	-0.03
3	T	Pyridine	1000.000	1137.699	-13.8	149	-0.03
4	S	2-Fluorophenol (Surr)	1000.000	1097.646	-9.8	155	-0.02
5	S	Phenol-d6 (Surr)	1000.000	1072.974	-7.3	140	0.00
6	T	Phenol	1000.000	1063.013	-6.3	135	0.00
7	T	Aniline	1000.000	798.388	20.2#	99	-0.01
8	T	Bis(2-chloroethyl) ether	1000.000	1177.239	-17.7	161	0.00
9	T	2-Chlorophenol	1000.000	1068.980	-6.9	137	0.00
10	T	1,3-Dichlorobenzene	1000.000	1051.481	-5.1	143	0.00
11	T	1,4-Dichlorobenzene	1000.000	1008.930	-0.9	137	0.00
12	T	Benzyl alcohol	1000.000	888.509	11.1	132	0.00
13	T	1,2-Dichlorobenzene	1000.000	996.700	0.3	135	0.00
14	T	2-Methylphenol	1000.000	1035.407	-3.5	133	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	1007.308	-0.7	142	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1072.868	-7.3	139	0.00
17	T	3+4-Methylphenol	1000.000	1079.264	-7.9	135	0.00
18	T	Hexachloroethane	1000.000	1131.978	-13.2	155	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1046.552	-4.7	135	0.00
20	T	Nitrobenzene	1000.000	1046.877	-4.7	135	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	129	0.00
22	T	Isophorone	1000.000	1109.282	-10.9	134	0.00
23	T	2-Nitrophenol	1000.000	1275.112	-27.5#	151	0.00
24	T	2,4-Dimethylphenol	1000.000	1141.982	-14.2	137	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1088.584	-8.9	132	0.00
26	T	Benzoic acid	2000.000	2287.559	-14.4	194	0.01
27	T	2,4-Dichlorophenol	1000.000	1140.818	-14.1	137	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1066.316	-6.6	132	0.00
29	T	Naphthalene	1000.000	1024.656	-2.5	128	0.00
30	T	4-Chloroaniline	1000.000	920.042	8.0	106	-0.01
31	T	Hexachlorobutadiene	1000.000	1100.700	-10.1	137	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1127.719	-12.8	142	0.00
33	T	2-Methylnaphthalene	1000.000	1057.403	-5.7	130	0.00
34	T	1-Methylnaphthalene	1000.000	1051.289	-5.1	131	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	130	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1217.993	-21.8#	148	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1106.780	-10.7	139	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1116.051	-11.6	138	0.00
39	T	1,1'-Biphenyl	1000.000	1038.748	-3.9	127	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1053.865	-5.4	131	0.00
41	T	2-Chloronaphthalene	1000.000	1057.558	-5.8	130	0.00
42	T	2-Nitroaniline	1000.000	1082.493	-8.2	137	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1054.365	-5.4	129	0.00
44	T	1,4-Dinitrobenzene	1000.000	1193.448	-19.3	157	0.00
45	T	Dimethyl phthalate	1000.000	1102.815	-10.3	133	0.00
46	T	1,3-Dinitrobenzene	1000.000	1138.119	-13.8	144	0.00
47	T	2,6-Dinitrotoluene	1000.000	1164.614	-16.5	139	0.00
48	T	1,2-Dinitrobenzene	1000.000	1080.270	-8.0	133	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202002.D
Acq On : 20 Jan 2020 8:28
Operator : JK /AMS /DTH
Sample : 0A20029-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 13:30:12 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

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)
49	T	Acenaphthylene	1000.000	1075.286	-7.5	126	0.00
50	T	3-Nitroaniline	1000.000	1032.099	-3.2	117	0.00
51	T	Acenaphthene	1000.000	1032.292	-3.2	130	0.00
52	T	2,4-Dinitrophenol	1000.000	1350.133	-35.0#	226	-0.01
53	T	4-Nitrophenol	1000.000	1065.369	-6.5	139	0.00
54	T	2,4-Dinitrotoluene	1000.000	1095.430	-9.5	143	0.00
55	T	Dibenzofuran	1000.000	1049.807	-5.0	129	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1117.157	-11.7	137	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1057.615	-5.8	134	0.00
58	T	Diethyl phthalate	1000.000	1127.295	-12.7	134	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1087.593	-8.8	133	0.00
60	T	Fluorene	1000.000	1113.376	-11.3	135	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1076.777	-7.7	136	0.00
62	T	4-Nitroaniline	1000.000	1035.141	-3.5	130	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1316.540	-31.7#	196	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	134	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1094.128	-9.4	132	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1099.926	-10.0	135	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1099.475	-9.9	144	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1065.929	-6.6	135	0.00
69	T	Hexachlorobenzene	1000.000	1036.214	-3.6	137	0.00
70	T	Pentachlorophenol (PCP)	1000.000	1106.458	-10.6	148	0.00
71	T	Phenanthrene	1000.000	1012.834	-1.3	132	0.00
72	T	Anthracene	1000.000	1091.999	-9.2	132	0.00
73	T	Carbazole	1000.000	990.094	1.0	130	0.00
74	T	Di-n-butyl phthalate	1000.000	1182.922	-18.3	139	0.00
75	T	Fluoranthene	1000.000	1173.531	-17.4	139	0.00
76	T	Benzidine	2000.000	1113.226	44.3#	66	0.00
77	T	Pyrene	1000.000	1161.678	-16.2	138	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	133	-0.01
79	S	Terphenyl-d14 (Surr)	1000.000	1100.799	-10.1	137	0.00
80	T	Butyl benzyl phthalate	1000.000	1083.057	-8.3	148	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1161.299	-16.1	158	0.00
82	T	3,3-Dichlorobenzidine	2000.000	1812.163	9.4	127	-0.01
83	T	Benz(a)anthracene	1000.000	1129.155	-12.9	143	-0.01
84	T	Chrysene	1000.000	1013.682	-1.4	133	-0.01
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1010.626	-1.1	134	-0.01
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	137	-0.01
87	T	Di-n-octyl phthalate	1000.000	1148.982	-14.9	163	-0.02
88	T	Benzo(b)fluoranthene	1000.000	1154.291	-15.4	144	-0.01
89	T	Benzo(k)fluoranthene	1000.000	1108.488	-10.8	138	-0.01
90	T	Benzo(b+k)fluoranthene	2000.000	2251.409	-12.6	142	-0.01
91	T	Benzo(e)pyrene	1000.000	1095.964	-9.6	136	-0.01
92	T	Benzo(a)pyrene	1000.000	1065.331	-6.5	130	-0.01
93	T	Perylene	1000.000	982.027	1.8	131	-0.01
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	140	-0.01

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202002.D
Acq On : 20 Jan 2020 8:28
Operator : JK /AMS /DTH
Sample : 0A20029-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 13:30:12 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

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)
95	T	Indeno(1,2,3-cd)pyrene	1000.000	1024.795	-2.5	142	-0.02
96	T	Dibenz(a,h)anthracene	1000.000	1009.495	-0.9	135	-0.02
97	T	Benzo(g,h,i)perylene	1000.000	1115.948	-11.6	140	-0.02

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202002.D
Acq On : 20 Jan 2020 8:28
Operator : JK /AMS /DTH
Sample : 0A20029-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 13:30:12 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.525	152	113358	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	401344	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.563	162	193731	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.077	188	357674	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.783	240	347695	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.260	264	345670	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.656	292	302210	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.273	112	82779	1097.65	ng/ml	-0.02
5) Phenol-d6 (Surr)	6.177	99	105124	1072.97	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.071	82	80971	1046.55	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.873	172	154628	1053.86	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.365	330	24584	1099.48	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.836	244	175527	1100.80	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.872	74	66667	1142.95	ng/ml	96
3) Pyridine	3.899	79	106800	1137.70	ng/ml	97
6) Phenol	6.188	94	115805	1063.01	ng/ml	98
7) Aniline	6.204	93	90284	798.39	ng/ml	76
8) Bis(2-chloroethyl) ether	6.263	93	106513	1177.24	ng/ml	97
9) 2-Chlorophenol	6.327	128	84685	1068.98	ng/ml	97
10) 1,3-Dichlorobenzene	6.471	146	91868	1051.48	ng/ml	99
11) 1,4-Dichlorobenzene	6.541	146	86266	1008.93	ng/ml	99
12) Benzyl alcohol	6.664	108	44329	888.51	ng/ml	99
13) 1,2-Dichlorobenzene	6.696	146	84141	996.70	ng/ml	96
14) 2-Methylphenol	6.776	107	62777	1035.41	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.787	45	114076	1007.31	ng/ml	97
16) N-Nitrosodi-n-propylamine	6.915	70	61891	1072.87	ng/ml	100
17) 3+4-Methylphenol	6.926	107	81150	1079.26	ng/ml	99
18) Hexachloroethane	7.028	201	28256	1131.98	ng/ml	90
20) Nitrobenzene	7.087	77	82472	1046.88	ng/ml	98
22) Isophorone	7.322	82	158713	1109.28	ng/ml	100
23) 2-Nitrophenol	7.407	139	46648	1275.11	ng/ml	98
24) 2,4-Dimethylphenol	7.445	122	65707	1141.98	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.531	93	91786	1088.58	ng/ml	99
26) Benzoic acid	7.541	105	45771	2287.56	ng/ml	98
27) 2,4-Dichlorophenol	7.648	162	60285	1140.82	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.728	180	70076	1066.32	ng/ml	97
29) Naphthalene	7.809	128	211228	1024.66	ng/ml	99
30) 4-Chloroaniline	7.862	127	62890	920.04	ng/ml	99
31) Hexachlorobutadiene	7.937	225	37201	1100.70	ng/ml	98
32) 4-Chloro-3-methylphenol	8.349	107	64174	1127.72	ng/ml	98
33) 2-Methylnaphthalene	8.504	142	155124	1057.40	ng/ml	99
34) 1-Methylnaphthalene	8.606	142	145711	1051.29	ng/ml	99
36) Hexachlorocyclopentadiene	8.675	237	41775	1217.99	ng/ml	96
37) 2,4,6-Trichlorophenol	8.793	196	40910	1106.78	ng/ml	98
38) 2,4,5-Trichlorophenol	8.830	198	40472	1116.05	ng/ml	99
39) 1,1'-Biphenyl	8.975	154	170546	1038.75	ng/ml	98
41) 2-Chloronaphthalene	8.996	162	128427	1057.56	ng/ml	99
42) 2-Nitroaniline	9.098	138	40945	1082.49	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.135	156	124363	1054.37	ng/ml	98

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202002.D
Acq On : 20 Jan 2020 8:28
Operator : JK /AMS /DTH
Sample : 0A20029-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

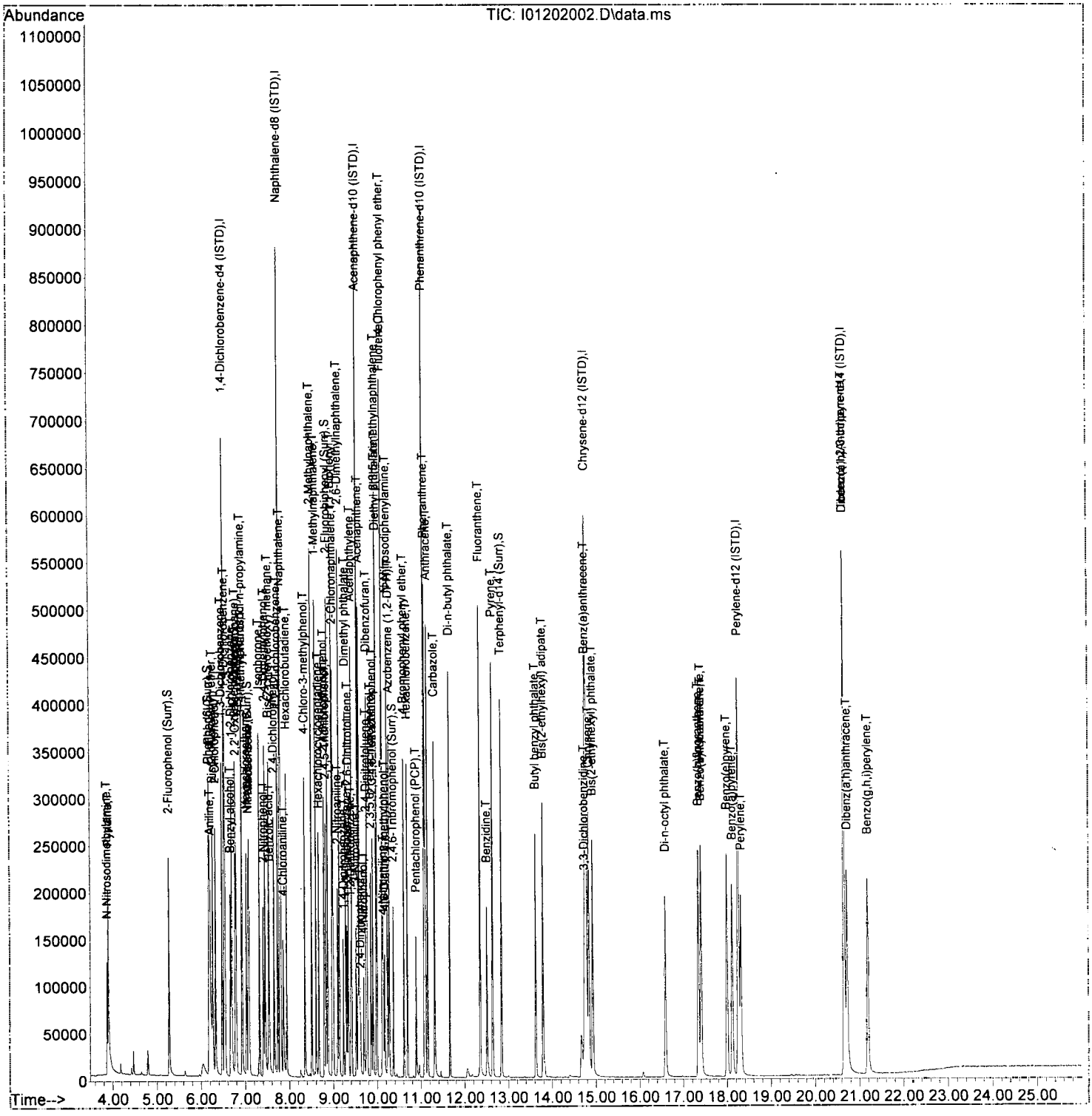
Quant Time: Jan 20 13:30:12 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.231	168	19526	1193.45	ng/ml	83
45) Dimethyl phthalate	9.280	163	146421	1102.82	ng/ml	99
46) 1,3-Dinitrobenzene	9.312	168	23092	1138.12	ng/ml	91
47) 2,6-Dinitrotoluene	9.338	165	34558	1164.61	ng/ml	95
48) 1,2-Dinitrobenzene	9.397	168	15763	1080.27	ng/ml	90
49) Acenaphthylene	9.419	152	200176	1075.29	ng/ml	100
50) 3-Nitroaniline	9.515	138	28867	1032.10	ng/ml	98
51) Acenaphthene	9.595	153	127886	1032.29	ng/ml	99
52) 2,4-Dinitrophenol	9.616	184	9628	1350.13	ng/ml	94
53) 4-Nitrophenol	9.691	139	20981	1065.37	ng/ml	93
54) 2,4-Dinitrotoluene	9.750	165	43186	1095.43	ng/ml	96
55) Dibenzofuran	9.772	168	174476	1049.81	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	9.857	232	30940	1117.16	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	9.900	232	33292	1057.61	ng/ml	97
58) Diethyl phthalate	9.991	149	135320	1127.30	ng/ml	100
59) 2,3,5-Trimethylnaphtha...	9.980	170	114745	1087.59	ng/ml	97
60) Fluorene	10.119	166	140823	1113.38	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.114	204	67955	1076.78	ng/ml	99
62) 4-Nitroaniline	10.135	138	27516	1035.14	ng/ml	95
63) 4,6-Dinitro-2-methylph...	10.167	198	18186	1316.54	ng/ml	95
65) N-Nitrosodiphenylamine	10.232	169	117994	1094.13	ng/ml	98
66) Azobenzene (1,2-DPH)	10.274	77	138897	1099.93	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.611	248	43260	1065.93	ng/ml	99
69) Hexachlorobenzene	10.692	284	52995	1036.21	ng/ml	96
70) Pentachlorophenol (PCP)	10.889	266	22185	1106.46	ng/ml	98
71) Phenanthrene	11.098	178	196322	1012.83	ng/ml	99
72) Anthracene	11.152	178	196247	1092.00	ng/ml	100
73) Carbazole	11.312	167	167773	990.09	ng/ml	99
74) Di-n-butyl phthalate	11.660	149	222629	1182.92	ng/ml	99
75) Fluoranthene	12.355	202	232077	1173.53	ng/ml	99
76) Benzidine	12.505	184	91530	1113.23	ng/ml	100
77) Pyrene	12.638	202	232967	1161.68	ng/ml	99
80) Butyl benzyl phthalate	13.623	149	88663	1083.06	ng/ml	98
81) Bis(2-ethylhexyl) adipate	13.788	129	78931	1161.30	ng/ml	99
82) 3,3-Dichlorobenzidine	14.735	252	59399	1812.16	ng/ml	99
83) Benz(a)anthracene	14.762	228	204152	1129.15	ng/ml	99
84) Chrysene	14.842	228	179061	1013.68	ng/ml	100
85) Bis(2-ethylhexyl) phth...	14.928	149	115123	1010.63	ng/ml	99
87) Di-n-octyl phthalate	16.591	149	174125	1148.98	ng/ml	99
88) Benzo(b)fluoranthene	17.345	252	204089	1154.29	ng/ml	99
89) Benzo(k)fluoranthene	17.409	252	196434	1108.49	ng/ml	99
90) Benzo(b+k)fluoranthene	17.409	252	414499	2251.41	ng/ml	99
91) Benzo(e)pyrene	17.992	252	192552	1095.96	ng/ml	99
92) Benzo(a)pyrene	18.115	252	165453	1065.33	ng/ml	98
93) Perylene	18.319	252	154178	982.03	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.651	276	170457	1024.79	ng/ml	100
96) Dibenz(a,h)anthracene	20.720	278	153679	1009.49	ng/ml	98
97) Benzo(g,h,i)perylene	21.186	276	182661	1115.95	ng/ml	97

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

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202002.D
Acq On : 20 Jan 2020 8:28
Operator : JK /AMS /DTH
Sample : 0A20029-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 13:30:12 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202003.D
Acq On : 20 Jan 2020 9:03
Operator : JK /AMS /DTH
Sample : 0A20029-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

AMS 1/20/20

Quant Time: Jan 20 13:30:42 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.525	152	120707	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	469002	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.563	162	226557	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.077	188	380219	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.783	240	378156	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.255	264	363639	2000.00	ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	20.651	292	299892	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6 (Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00	ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	0.000		0	N.D.		
7) Aniline	0.000		0	N.D.		
8) Bis(2-chloroethyl) ether	0.000		0	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	0.000		0	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	0.000		0	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.		
16) N-Nitrosodi-n-propylamine	0.000		0	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
22) Isophorone	0.000		0	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202003.D
Acq On : 20 Jan 2020 9:03
Operator : JK /AMS /DTH
Sample : 0A20029-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

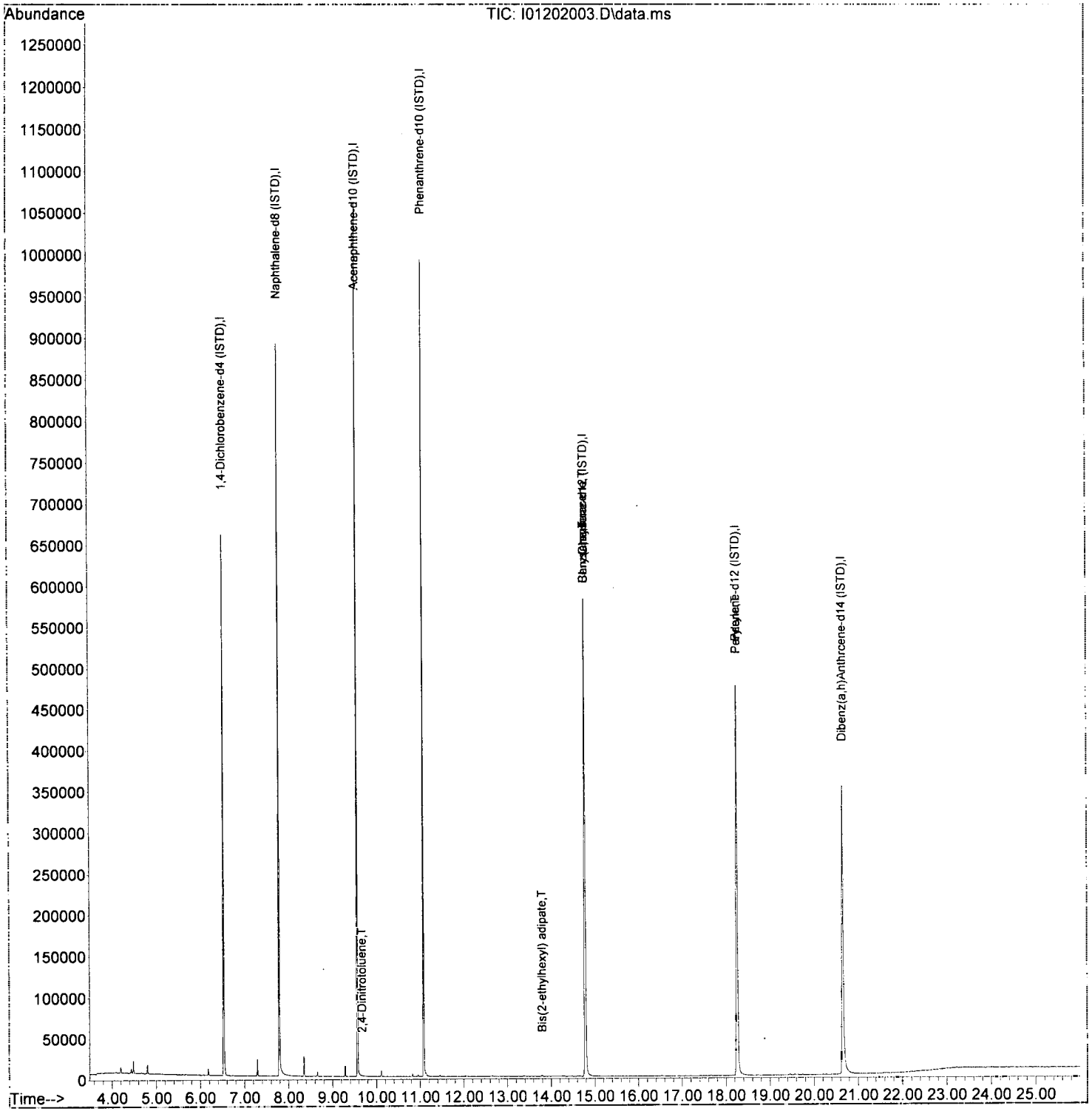
Quant Time: Jan 20 13:30:42 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	0.000		0	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.670	165	53	60.50 ng/ml#	20
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.092	170	51	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	0.000		0	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.077	178	151	N.D.	
72) Anthracene	11.077	178	151	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	0.000		0	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.788	129	452	78.90 ng/ml	72
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.778	228	866	4.40 ng/ml	64
84) Chrysene	14.778	228	858	4.47 ng/ml	60
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.260	252	1123	6.80 ng/ml#	61
95) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
96) Dibenz(a,h)anthracene	20.651	278	52	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202003.D
Acq On : 20 Jan 2020 9:03
Operator : JK /AMS /DTH
Sample : 0A20029-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 13:30:42 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202004.D
Acq On : 20 Jan 2020 11:11
Operator : JK /AMS /DTH
Sample : 0010561-BLK1
Misc : 1x, 8270D LL Full List
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

AMS 1/20/20

Quant Time: Jan 20 13:31:05 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.525	152	110648	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	395071	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.563	162	184220	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.071	188	309496	2000.00	ng/ml	-0.01
78) Chrysene-d12 (ISTD)	14.778	240	280519	2000.00	ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.254	264	257344	2000.00	ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	20.645	292	205736	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.284	112	139785	1898.94	ng/ml	0.00
5) Phenol-d6 (Surr)	6.177	99	167799	1754.63	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.065	82	144042	1907.34	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.873	172	261711	1875.78	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.365	330	38337	1939.46	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.836	244	307491	2390.19	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	3.925	79	52	N.D.		
6) Phenol	6.193	94	209	N.D.		
7) Aniline	6.193	93	59	N.D.		
8) Bis(2-chloroethyl) ether	6.252	93	171	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	0.000		0	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	0.000		0	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.		
16) N-Nitrosodi-n-propylamine	6.910	70	80	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.070	77	616	8.01	ng/ml#	28
22) Isophorone	7.322	82	62	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	7.803	128	666	3.28	ng/ml	94
30) 4-Chloroaniline	7.808	127	74	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	8.509	142	181	N.D.		
34) 1-Methylnaphthalene	8.605	142	81	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	8.974	154	636	4.07	ng/ml	91
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202004.D
Acq On : 20 Jan 2020 11:11
Operator : JK /AMS /DTH
Sample : 0010561-BLK1
Misc : 1x, 8270D LL Full List
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

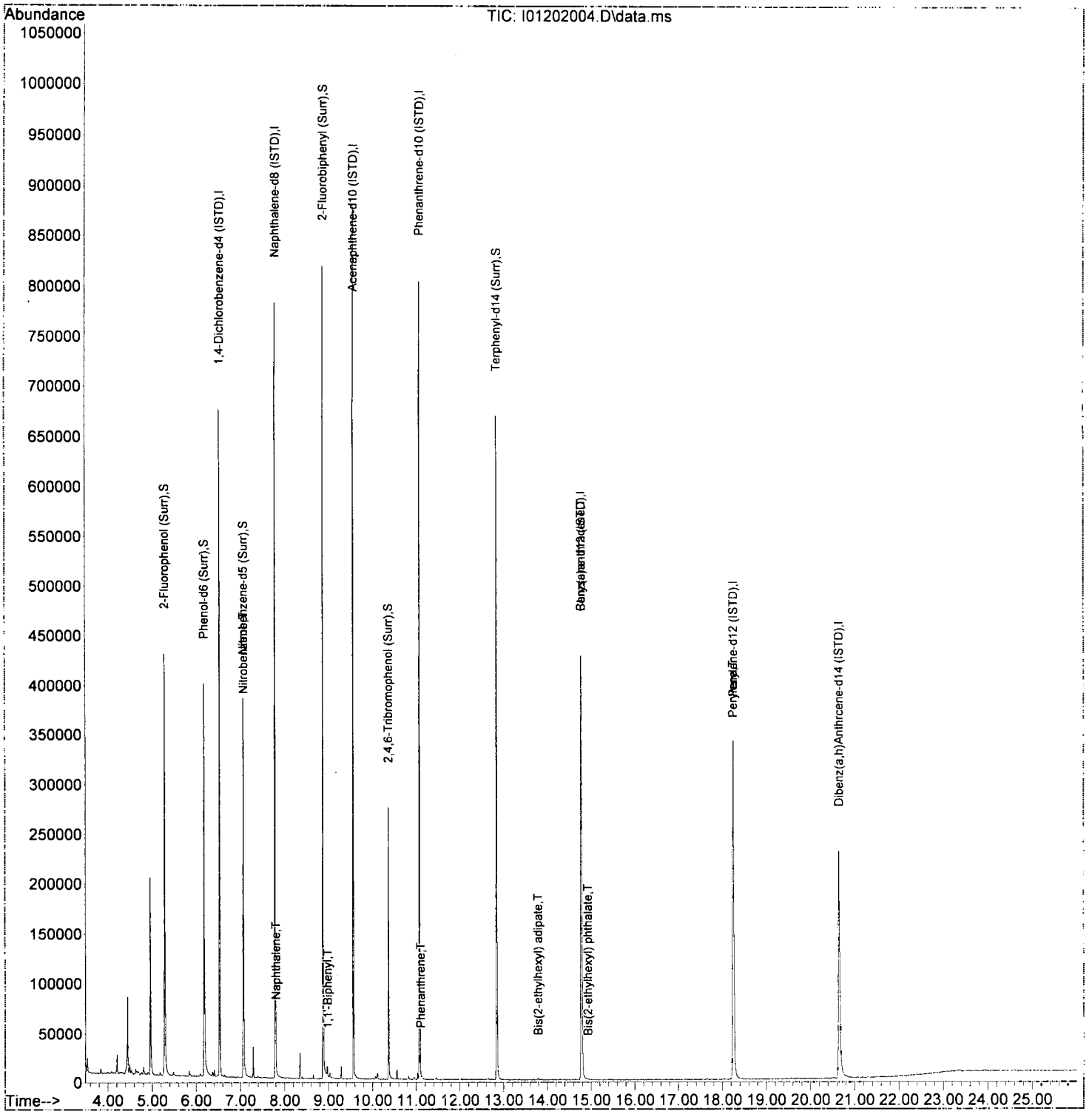
Quant Time: Jan 20 13:31:05 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.595	153	69	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	0.000		0	N.D.	
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	10.119	166	65	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	0.000		0	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.098	178	1109	6.61 ng/ml	95
72) Anthracene	11.151	178	75	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.654	149	215	N.D.	
75) Fluoranthene	12.360	202	332	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.638	202	348	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.783	129	426	80.53 ng/ml	81
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.778	228	632	4.33 ng/ml	71
84) Chrysene	14.831	228	83	N.D.	
85) Bis(2-ethylhexyl) phth...	14.927	149	197	70.92 ng/ml	52
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.249	252	785	6.72 ng/ml#	70
95) Indeno(1,2,3-cd)pyrene	20.640	276	81	N.D.	
96) Dibenz(a,h)anthracene	0.000		0	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202004.D
Acq On : 20 Jan 2020 11:11
Operator : JK /AMS /DTH
Sample : 0010561-BLK1
Misc : 1x, 8270D LL Full List
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 13:31:05 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202005.D
Acq On : 20 Jan 2020 11:46
Operator : JK /AMS /DTH
Sample : 0010561-BS1@2
Misc : 2x, 8270D LL Full List
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 13:31:08 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

AMS 1/20/20

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.530	152	106501	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.793	136	371726	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	178957	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.077	188	332269	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.789	240	291652	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.260	264	286900	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.656	292	253721	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.284	112	80085	1130.29	ng/ml	0.00
5) Phenol-d6 (Surr)	6.183	99	101611	1103.89	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.071	82	73891	1016.53	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.873	172	143893	1061.66	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	24161	1160.69	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.836	244	168482	1259.65	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.888	74	109646	2000.82	ng/ml	97
3) Pyridine	3.915	79	148122	1679.48	ng/ml	96
6) Phenol	6.193	94	192669	1882.44	ng/ml	98
7) Aniline	6.209	93	130407	1227.45	ng/ml	84
8) Bis(2-chloroethyl) ether	6.268	93	163211	1920.04	ng/ml	99
9) 2-Chlorophenol	6.332	128	139964	1880.52	ng/ml	98
10) 1,3-Dichlorobenzene	6.477	146	145828	1776.55	ng/ml	100
11) 1,4-Dichlorobenzene	6.546	146	134890	1679.19	ng/ml	99
12) Benzyl alcohol	6.664	108	77902	1640.16	ng/ml	99
13) 1,2-Dichlorobenzene	6.696	146	131079	1652.68	ng/ml	99
14) 2-Methylphenol	6.776	107	103367	1814.64	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.792	45	168028	1579.24	ng/ml	94
16) N-Nitrosodi-n-propylamine	6.921	70	98341	1814.48	ng/ml	96
17) 3+4-Methylphenol	6.926	107	129743	1836.63	ng/ml	99
18) Hexachloroethane	7.028	201	45648	1946.47	ng/ml	93
20) Nitrobenzene	7.092	77	131930	1782.51	ng/ml	95
22) Isophorone	7.322	82	257408	1942.43	ng/ml	100
23) 2-Nitrophenol	7.407	139	67586	1960.54	ng/ml	99
24) 2,4-Dimethylphenol	7.450	122	106131	1991.52	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.536	93	146854	1880.46	ng/ml	99
26) Benzoic acid	7.541	105	34767	2037.11	ng/ml	97
27) 2,4-Dichlorophenol	7.654	162	99890	2023.07	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.734	180	109554	1799.86	ng/ml	100
29) Naphthalene	7.809	128	329855	1727.60	ng/ml	99
30) 4-Chloroaniline	7.867	127	70863	1119.28	ng/ml	99
31) Hexachlorobutadiene	7.942	225	59017	1885.32	ng/ml	99
32) 4-Chloro-3-methylphenol	8.349	107	109706	2040.26	ng/ml	99
33) 2-Methylnaphthalene	8.504	142	249686	1837.59	ng/ml	100
34) 1-Methylnaphthalene	8.606	142	230047	1792.01	ng/ml	100
36) Hexachlorocyclopentadiene	8.675	237	64208	1988.72	ng/ml	97
37) 2,4,6-Trichlorophenol	8.793	196	69480	2004.62	ng/ml	96
38) 2,4,5-Trichlorophenol	8.830	198	69109	2043.75	ng/ml	99
39) 1,1'-Biphenyl	8.975	154	273107	1800.74	ng/ml	100
41) 2-Chloronaphthalene	9.001	162	203287	1812.21	ng/ml	99
42) 2-Nitroaniline	9.103	138	71720	2052.65	ng/ml	93
43) 2,6-Dimethylnaphthalene	9.135	156	198753	1824.16	ng/ml	98

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202005.D
Acq On : 20 Jan 2020 11:46
Operator : JK /AMS /DTH
Sample : 0010561-BS1@2
Misc : 2x, 8270D LL Full List
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

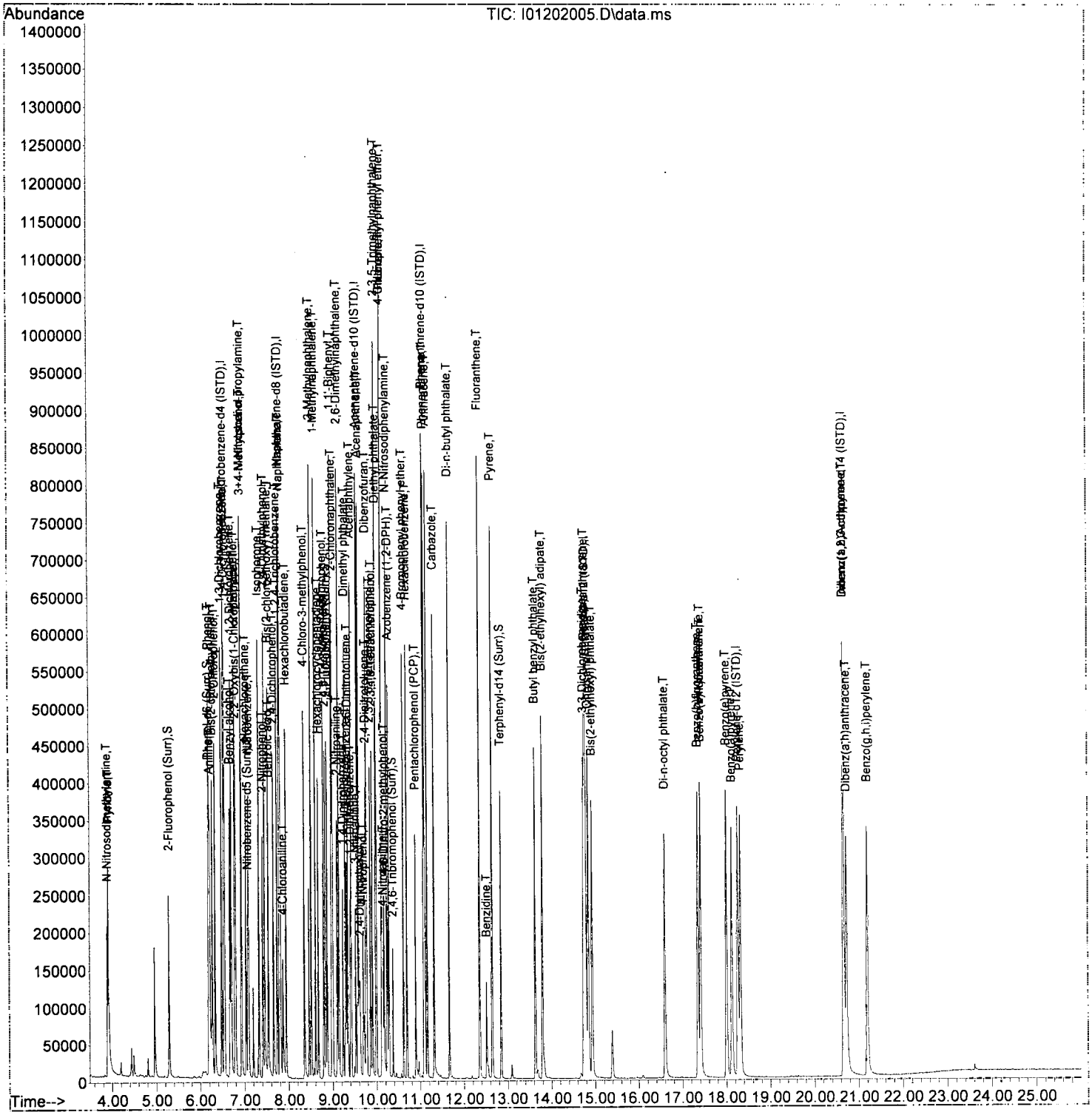
Quant Time: Jan 20 13:31:08 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.231	168	34165	2131.18	ng/ml	88
45) Dimethyl phthalate	9.285	163	242724	1979.08	ng/ml	99
46) 1,3-Dinitrobenzene	9.312	168	39792	2123.11	ng/ml	95
47) 2,6-Dinitrotoluene	9.344	165	58109	2119.96	ng/ml	87
48) 1,2-Dinitrobenzene	9.403	168	27305	2025.75	ng/ml	85
49) Acenaphthylene	9.424	152	323045	1878.56	ng/ml	99
50) 3-Nitroaniline	9.515	138	42109	1629.84	ng/ml	97
51) Acenaphthene	9.600	153	206645	1805.74	ng/ml	99
52) 2,4-Dinitrophenol	9.622	184	19252	2364.71	ng/ml	91
53) 4-Nitrophenol	9.697	139	38649	1971.68	ng/ml	91
54) 2,4-Dinitrotoluene	9.756	165	75176	2022.13	ng/ml	90
55) Dibenzofuran	9.772	168	280649	1828.05	ng/ml	97
56) 2,3,5,6-Tetrachlorophenol	9.857	232	56219	2101.85	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	9.900	232	58481	1965.72	ng/ml	97
58) Diethyl phthalate	9.996	149	216296	1950.63	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	9.986	170	185097	1899.25	ng/ml	96
60) Fluorene	10.119	166	221542	1896.16	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.114	204	111209	1907.63	ng/ml	99
62) 4-Nitroaniline	10.141	138	44821	1825.35	ng/ml	98
63) 4,6-Dinitro-2-methylph...	10.173	198	35416	2464.85	ng/ml	88
65) N-Nitrosodiphenylamine	10.237	169	190479	1901.31	ng/ml	98
66) Azobenzene (1,2-DPH)	10.274	77	219422	1870.46	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.611	248	74235	1969.01	ng/ml	99
69) Hexachlorobenzene	10.692	284	88903	1871.23	ng/ml	97
70) Pentachlorophenol (PCP)	10.889	266	41317	2047.10	ng/ml	97
71) Phenanthrene	11.098	178	325707	1808.81	ng/ml	99
72) Anthracene	11.152	178	322330	1930.71	ng/ml	99
73) Carbazole	11.312	167	280168	1857.40	ng/ml	99
74) Di-n-butyl phthalate	11.660	149	370311	2118.06	ng/ml	100
75) Fluoranthene	12.355	202	384308	2091.89	ng/ml	99
76) Benzidine	12.510	184	69035	934.36	ng/ml	98
77) Pyrene	12.638	202	379405	2036.54	ng/ml	99
80) Butyl benzyl phthalate	13.623	149	154788	2098.28	ng/ml	96
81) Bis(2-ethylhexyl) adipate	13.788	129	131124	2142.57	ng/ml	99
82) 3,3-Dichlorobenzidine	14.735	252	166771	7722.28	ng/ml	98
83) Benz(a)anthracene	14.767	228	318451	2099.79	ng/ml	98
84) Chrysene	14.842	228	290475	1960.39	ng/ml	99
85) Bis(2-ethylhexyl) phth...	14.928	149	187253	1875.96	ng/ml	99
87) Di-n-octyl phthalate	16.591	149	315892	2230.04	ng/ml	99
88) Benzo(b)fluoranthene	17.345	252	327040	2153.17	ng/ml	99
89) Benzo(k)fluoranthene	17.415	252	311831	2106.92	ng/ml	99
90) Benzo(b+k)fluoranthene	17.415	252	662699	4261.61	ng/ml	99
91) Benzo(e)pyrene	17.998	252	310646	2130.32	ng/ml	99
92) Benzo(a)pyrene	18.121	252	268720	2030.47	ng/ml	98
93) Perylene	18.319	252	277977	2133.25	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.656	276	270586	1937.67	ng/ml	99
96) Dibenz(a,h)anthracene	20.720	278	246190	1926.25	ng/ml	99
97) Benzo(g,h,i)perylene	21.191	276	291395	2120.47	ng/ml	99

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

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202005.D
Acq On : 20 Jan 2020 11:46
Operator : JK /AMS /DTH
Sample : 0010561-BS1@2
Misc : 2x, 8270D LL Full List
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 13:31:08 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202009.D
Acq On : 20 Jan 2020 14:22
Operator : JK /AMS /DTH
Sample : 0010574-BLK1
Misc : 1x, 8270D LL Full List
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

BOD

AMS 1/20/20

Quant Time: Jan 20 14:52:19 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.525	152	123119	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	451408	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.563	162	214689	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.077	188	367992	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.789	240	376121	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.260	264	352732	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.656	292	295091	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.284	112	144446	1763.50	ng/ml	0.00
5) Phenol-d6 (Surr)	6.183	99	181171	1702.56	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.070	82	159344	1896.24	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.873	172	286915	1764.57	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.365	330	50660	2147.14	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.842	244	383453	2223.04	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	3.925	79	75	N.D.		
6) Phenol	6.188	94	262	N.D.		
7) Aniline	6.199	93	141	N.D.		
8) Bis(2-chloroethyl) ether	6.252	93	292	2.97	ng/ml#	60
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	0.000		0	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	6.782	107	77	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	6.792	45	100	N.D.		
16) N-Nitrosodi-n-propylamine	6.894	70	83	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.065	77	757	8.85	ng/ml#	37
22) Isophorone	7.322	82	553	3.44	ng/ml	92
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	7.525	93	56	N.D.		
26) Benzoic acid	7.520	105	111	828.17	ng/ml#	59
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	7.809	128	2256	9.73	ng/ml	99
30) 4-Chloroaniline	7.809	127	299	3.89	ng/ml#	14
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	8.359	107	103	27.94	ng/ml#	1
33) 2-Methylnaphthalene	8.509	142	404	N.D.		
34) 1-Methylnaphthalene	8.605	142	220	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	8.975	154	848	4.66	ng/ml	81
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	9.140	156	134	N.D.		

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202009.D
Acq On : 20 Jan 2020 14:22
Operator : JK /AMS /DTH
Sample : 0010574-BLK1
Misc : 1x, 8270D LL Full List
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 14:52:19 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.274	163	162	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.418	152	90	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.595	153	179	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.670	165	64	60.79 ng/ml#	47
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	9.991	149	226	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	10.124	166	113	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	10.290	77	304	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.098	178	599	3.00 ng/ml	99
72) Anthracene	11.098	178	599	3.24 ng/ml	100
73) Carbazole	11.323	167	99	8.89 ng/ml	60
74) Di-n-butyl phthalate	11.660	149	1735	8.96 ng/ml	97
75) Fluoranthene	12.355	202	378	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.638	202	435	N.D.	
80) Butyl benzyl phthalate	13.628	149	187	(67.75) ng/ml#	44
81) Bis(2-ethylhexyl) adipate	13.794	129	884	84.70 ng/ml	81
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.778	228	1107	5.66 ng/ml	77
84) Chrysene	14.842	228	221	N.D.	
85) Bis(2-ethylhexyl) phth...	14.933	149	2836	90.59 ng/ml	93
87) Di-n-octyl phthalate	16.596	149	110	84.09 ng/ml#	1
88) Benzo(b)fluoranthene	17.340	252	285	9.04 ng/ml	57
89) Benzo(k)fluoranthene	17.409	252	86	7.48 ng/ml	57
90) Benzo(b+k)fluoranthene	17.409	252	86	15.60 ng/ml	57
91) Benzo(e)pyrene	17.998	252	229	N.D.	
92) Benzo(a)pyrene	18.126	252	132	9.61 ng/ml	82
93) Perylene	18.260	252	1262	7.88 ng/ml	67
95) Indeno(1,2,3-cd)pyrene	20.651	276	337	N.D.	
96) Dibenz(a,h)anthracene	0.000		0	N.D.	
97) Benzo(g,h,i)perylene	21.191	276	108	N.D.	

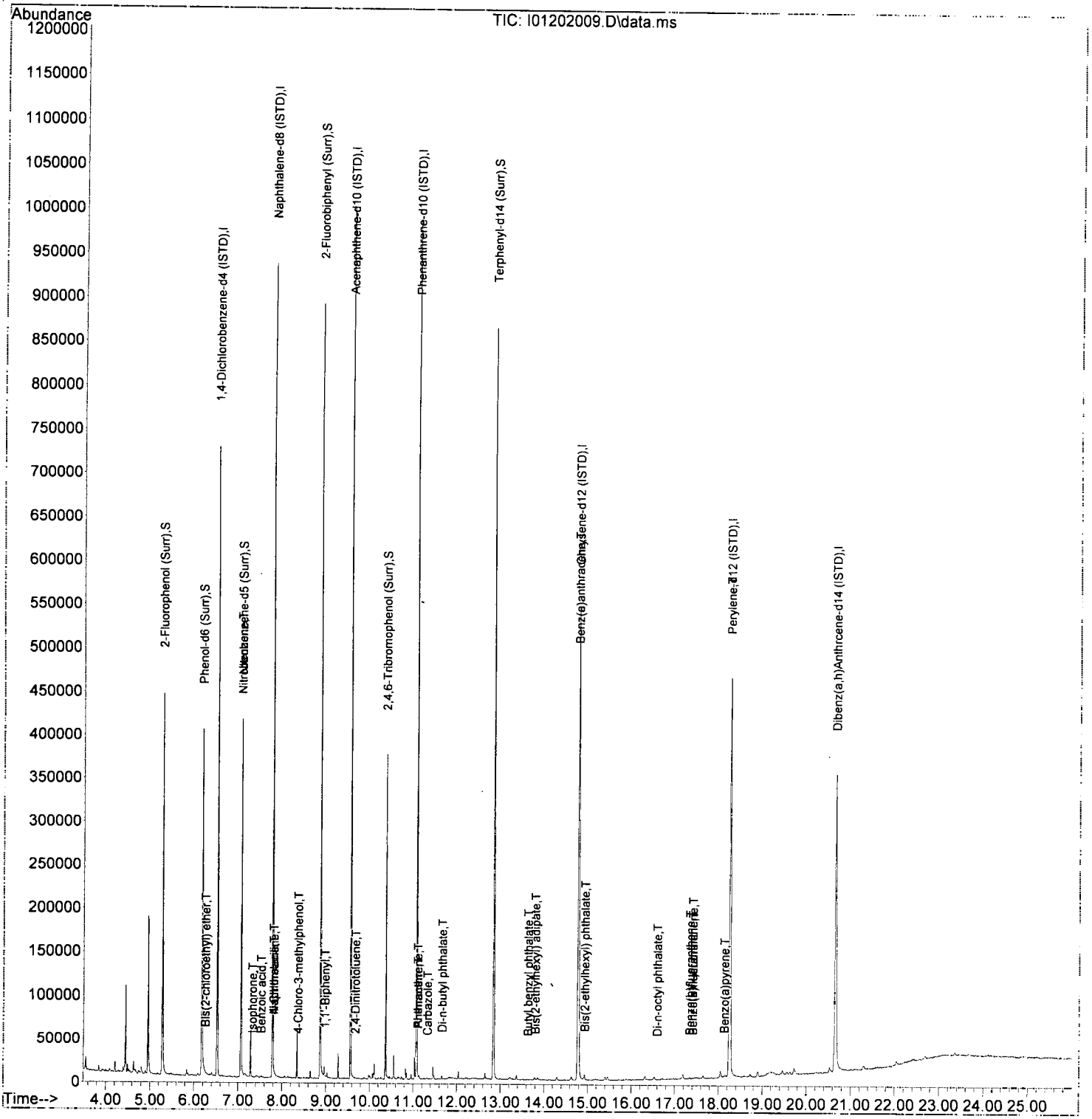
B02 NR

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202009.D
Acq On : 20 Jan 2020 14:22
Operator : JK /AMS /DTH
Sample : 0010574-BLK1
Misc : 1x, 8270D LL Full List
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 14:52:19 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202010.D
Acq On : 20 Jan 2020 14:57
Operator : JK /AMS /DTH
Sample : 0010574-BS1@2
Misc : 2x, 8270D LL Full List
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

AMS 1/20/20

Quant Time: Jan 20 15:40:18 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.530	152	115241	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	409172	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	195594	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.077	188	371571	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.789	240	349950	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.265	264	355244	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.661	292	321224	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.284	112	82958	1082.05	ng/ml	0.00
5) Phenol-d6 (Surr)	6.183	99	105244	1056.65	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.071	82	76928	978.05	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.873	172	144609	976.19	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	27119	1164.83	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.842	244	198941	1239.60	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.899	74	107369	1810.67	ng/ml	98
3) Pyridine	3.926	79	145831	1528.10	ng/ml	98
6) Phenol	6.193	94	195060	1761.26	ng/ml	98
7) Aniline	6.209	93	136053	1183.47	ng/ml	86
8) Bis(2-chloroethyl) ether	6.268	93	154408	1678.72	ng/ml	97
9) 2-Chlorophenol	6.332	128	140929	1749.88	ng/ml	99
10) 1,3-Dichlorobenzene	6.477	146	148544	1672.39	ng/ml	99
11) 1,4-Dichlorobenzene	6.546	146	137078	1577.01	ng/ml	100
12) Benzyl alcohol	6.664	108	83748	1629.59	ng/ml	97
13) 1,2-Dichlorobenzene	6.696	146	134018	1561.58	ng/ml	96
14) 2-Methylphenol	6.776	107	105673	1714.43	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.792	45	166486	1446.07	ng/ml	93
16) N-Nitrosodi-n-propylamine	6.921	70	99383	1694.63	ng/ml	97
17) 3+4-Methylphenol	6.926	107	132686	1735.84	ng/ml	99
18) Hexachloroethane	7.028	201	45802	1804.92	ng/ml	94
20) Nitrobenzene	7.092	77	134437	1678.62	ng/ml	95
22) Isophorone	7.322	82	258289	1770.71	ng/ml	99
23) 2-Nitrophenol	7.408	139	71782	1894.35	ng/ml	99
24) 2,4-Dimethylphenol	7.450	122	108017	1841.41	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.536	93	148083	1722.67	ng/ml	100
26) Benzoic acid	7.525	105	20610	1493.05	ng/ml	98
27) 2,4-Dichlorophenol	7.654	162	103135	1899.49	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.734	180	112193	1674.53	ng/ml	98
29) Naphthalene	7.809	128	335509	1596.40	ng/ml	98
30) 4-Chloroaniline	7.867	127	69088	991.38	ng/ml	99
31) Hexachlorobutadiene	7.942	225	59736	1733.65	ng/ml	97
32) 4-Chloro-3-methylphenol	8.354	107	111577	1890.01	ng/ml	97
33) 2-Methylnaphthalene	8.504	142	252150	1685.90	ng/ml	100
34) 1-Methylnaphthalene	8.606	142	231153	1635.84	ng/ml	99
36) Hexachlorocyclopentadiene	8.675	237	58068	1658.40	ng/ml	98
37) 2,4,6-Trichlorophenol	8.793	196	70881	1873.97	ng/ml	99
38) 2,4,5-Trichlorophenol	8.830	198	71161	1926.63	ng/ml	97
39) 1,1'-Biphenyl	8.975	154	274299	1654.77	ng/ml	99
41) 2-Chloronaphthalene	9.001	162	204701	1669.60	ng/ml	99
42) 2-Nitroaniline	9.103	138	75753	1983.66	ng/ml	93
43) 2,6-Dimethylnaphthalene	9.135	156	198115	1663.65	ng/ml	98

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202010.D
Acq On : 20 Jan 2020 14:57
Operator : JK /AMS /DTH
Sample : 0010574-BS1@2
Misc : 2x, 8270D LL Full List
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 15:40:18 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

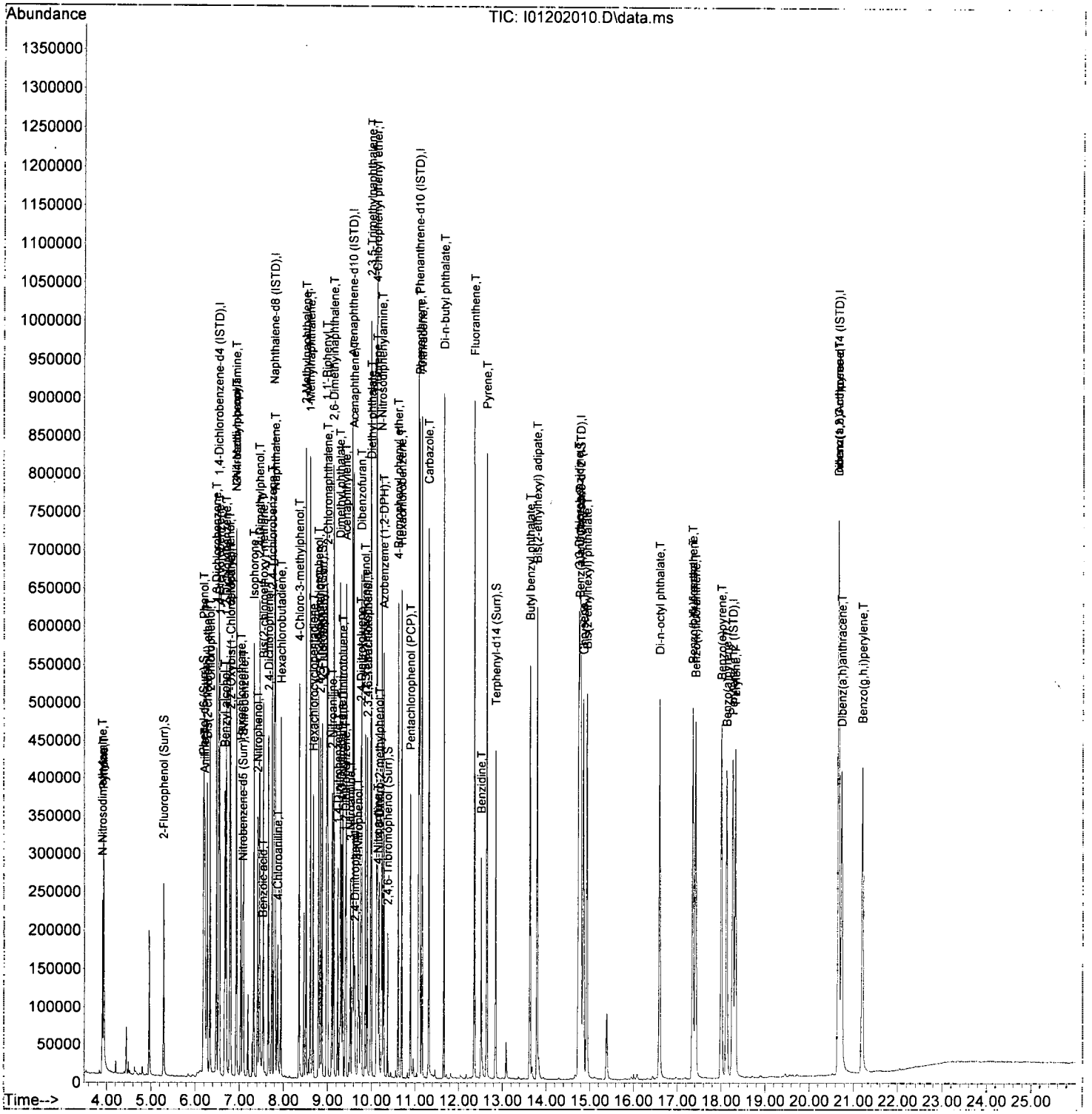
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.231	168	37303	2129.21	ng/ml	88
45)	Dimethyl phthalate	9.285	163	254407	1897.89	ng/ml	99
46)	1,3-Dinitrobenzene	9.312	168	41738	2037.52	ng/ml	93
47)	2,6-Dinitrotoluene	9.344	165	60913	2033.23	ng/ml	88
48)	1,2-Dinitrobenzene	9.403	168	29201	1982.14	ng/ml	83
49)	Acenaphthylene	9.424	152	321315	1709.57	ng/ml	100
50)	3-Nitroaniline	9.520	138	48841	1729.61	ng/ml	95
51)	Acenaphthene	9.600	153	204292	1633.33	ng/ml	99
52)	2,4-Dinitrophenol	9.622	184	21741	2420.42	ng/ml	91
53)	4-Nitrophenol	9.697	139	45117	2090.62	ng/ml	91
54)	2,4-Dinitrotoluene	9.756	165	80326	1977.72	ng/ml	91
55)	Dibenzofuran	9.772	168	278840	1661.78	ng/ml	98
56)	2,3,5,6-Tetrachlorophenol	9.857	232	61143	2092.25	ng/ml	98
57)	2,3,4,6-Tetrachlorophenol	9.905	232	62936	1936.49	ng/ml	95
58)	Diethyl phthalate	9.996	149	235751	1945.24	ng/ml	99
59)	2,3,5-Trimethylnaphtha...	9.986	170	188892	1773.33	ng/ml	98
60)	Fluorene	10.125	166	224682	1759.46	ng/ml	98
61)	4-Chlorophenyl phenyl ...	10.114	204	113065	1774.50	ng/ml	99
62)	4-Nitroaniline	10.141	138	54859	2044.12	ng/ml	97
63)	4,6-Dinitro-2-methylph...	10.173	198	39096	2485.51	ng/ml	92
65)	N-Nitrosodiphenylamine	10.237	169	204990	1829.73	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.280	77	234053	1784.15	ng/ml	92
68)	4-Bromophenyl phenyl e...	10.611	248	79857	1894.09	ng/ml	96
69)	Hexachlorobenzene	10.692	284	94099	1771.11	ng/ml	98
70)	Pentachlorophenol (PCP)	10.889	266	48882	2151.01	ng/ml	97
71)	Phenanthrene	11.103	178	347513	1725.78	ng/ml	99
72)	Anthracene	11.152	178	350051	1874.98	ng/ml	100
73)	Carbazole	11.312	167	321510	1911.48	ng/ml	99
74)	Di-n-butyl phthalate	11.660	149	434332	2221.48	ng/ml	99
75)	Fluoranthene	12.355	202	434935	2117.06	ng/ml	99
76)	Benzidine	12.510	184	145763	1622.05	ng/ml	99
77)	Pyrene	12.638	202	419873	2015.37	ng/ml	99
80)	Butyl benzyl phthalate	13.628	149	200131	2243.43	ng/ml	96
81)	Bis(2-ethylhexyl) adipate	13.788	129	175548	2361.80	ng/ml	99
82)	3,3-Dichlorobenzidine	14.741	252	236318	10123.68	ng/ml	97
83)	Benz(a)anthracene	14.767	228	373670	2053.43	ng/ml	97
84)	Chrysene	14.853	228	336791	1894.32	ng/ml	100
85)	Bis(2-ethylhexyl) phth...	14.933	149	250534	2078.96	ng/ml	99
87)	Di-n-octyl phthalate	16.596	149	459263	2547.25	ng/ml	98
88)	Benzo(b)fluoranthene	17.351	252	405043	2153.66	ng/ml	100
89)	Benzo(k)fluoranthene	17.415	252	376265	2053.71	ng/ml	99
90)	Benzo(b+k)fluoranthene	17.351	252	801616	4166.35	ng/ml	99
91)	Benzo(e)pyrene	18.003	252	376749	2086.58	ng/ml	100
92)	Benzo(a)pyrene	18.121	252	330721	2018.78	ng/ml	98
93)	Perylene	18.324	252	332788	2062.55	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	20.661	276	342301	1936.11	ng/ml	99
96)	Dibenz(a,h)anthracene	20.731	278	306137	1891.94	ng/ml	99
97)	Benzo(g,h,i)perylene	21.202	276	345419	1985.39	ng/ml	98

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202010.D
Acq On : 20 Jan 2020 14:57
Operator : JK /AMS /DTH
Sample : 0010574-BS1@2
Misc : 2x, 8270D LL Full List
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 15:40:18 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202014.D
Acq On : 20 Jan 2020 17:16
Operator : JK /AMS /DTH
Sample : A0A0539-01RE1@40
Misc : 40x, 8270D LL Full List
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

RR-1

AMS 1/21/20

MDS

Quant Time: Jan 20 18:38:55 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.530	152	129386	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.793	136	459920	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	214068	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.077	188	361879	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.789	240	350457	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.265	264	346109	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.661	292	313381	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.295	112	2877	33.42	ng/ml	0.00
5) Phenol-d6 (Surr)	6.193	99	2568	22.96	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.076	82	2966	33.59	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.873	172	7319	45.14	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	990	71.91	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.842	244	8431	52.46	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	3.952	79	105	N.D.		
6) Phenol	6.209	94	166	N.D.		
7) Aniline	6.220	93	58	N.D.		
8) Bis(2-chloroethyl) ether	6.220	93	58	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	0.000		0	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	0.000		0	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.		
16) N-Nitrosodi-n-propylamine	6.910	70	178	2.70	ng/ml	59
17) 3+4-Methylphenol	6.937	107	648	7.55	ng/ml#	63
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.092	77	283	3.15	ng/ml	69
22) Isophorone	7.316	82	313	N.D.		
23) 2-Nitrophenol	7.343	139	104	31.67	ng/ml#	17
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	7.520	93	90	N.D.		
26) Benzoic acid	7.514	105	418	837.22	ng/ml#	26
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	7.809	128	97159	411.29	ng/ml	100
30) 4-Chloroaniline	7.862	127	144	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	8.359	107	116	28.11	ng/ml#	1
33) 2-Methylnaphthalene	8.509	142	42898	255.17	ng/ml	100
34) 1-Methylnaphthalene	8.605	142	23816	149.95	ng/ml	97
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	8.980	154	14887	82.06	ng/ml	98
41) 2-Chloronaphthalene	8.980	162	223	N.D.		
42) 2-Nitroaniline	9.098	138	67	N.D.		
43) 2,6-Dimethylnaphthalene	9.140	156	28291	217.07	ng/ml	99

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202014.D
Acq On : 20 Jan 2020 17:16
Operator : JK /AMS /DTH
Sample : A0A0539-01RE1@40
Misc : 40x, 8270D LL Full List
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

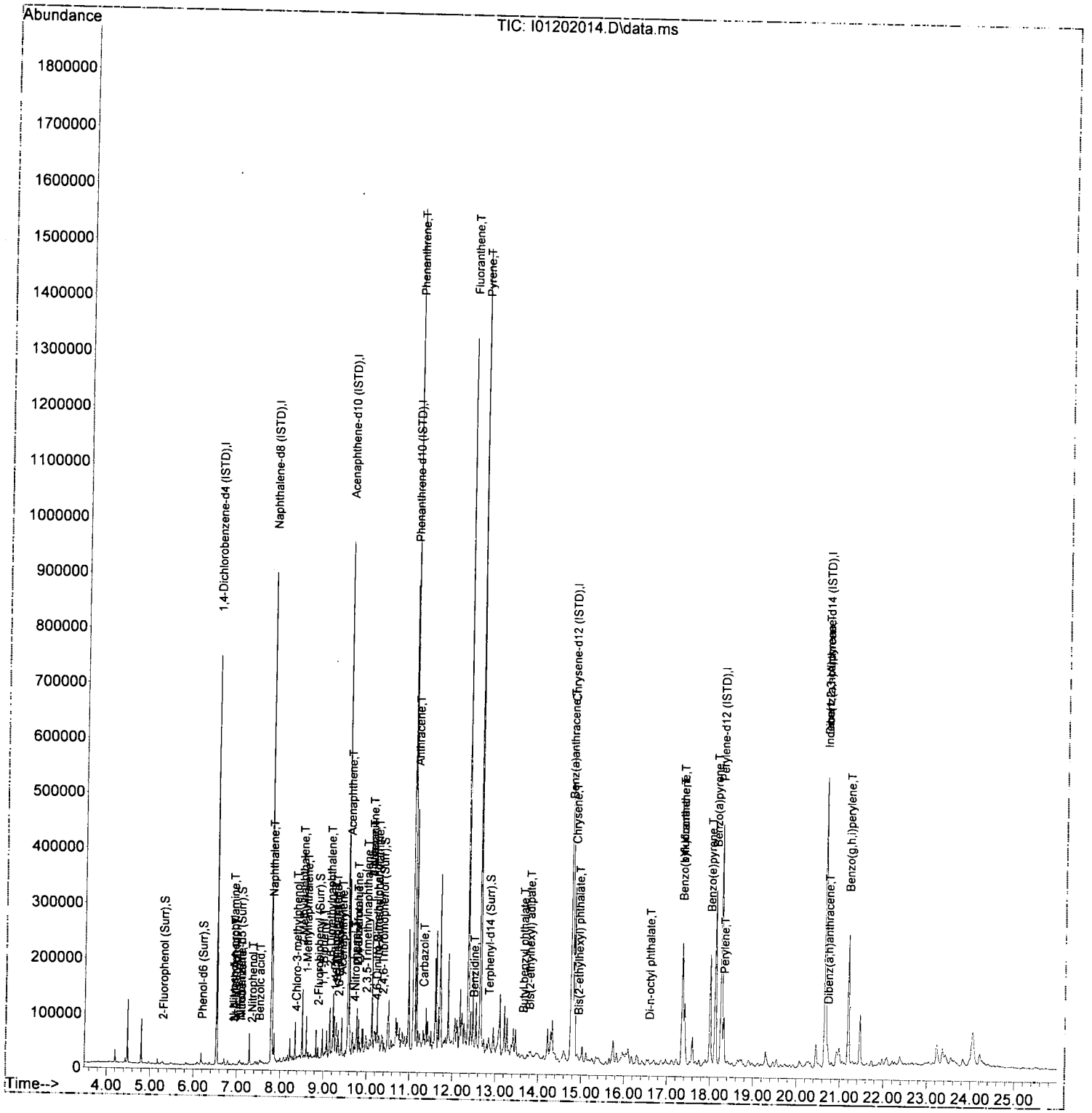
Quant Time: Jan 20 18:38:55 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44)	1,4-Dinitrobenzene	9.253	168	358	83.72	ng/ml#	66	
45)	Dimethyl phthalate	9.274	163	104	N.D.			
46)	1,3-Dinitrobenzene	9.285	168	66	2.94	ng/ml#	1	
47)	2,6-Dinitrotoluene	9.344	165	109	3.32	ng/ml#	1	
48)	1,2-Dinitrobenzene	0.000		0	N.D.			
49)	Acenaphthylene	9.418	152	22888	111.27	ng/ml	96	
50)	3-Nitroaniline	9.541	138	74	N.D.			
51)	Acenaphthene	9.600	153	79454	580.42	ng/ml	99	
52)	2,4-Dinitrophenol	0.000		0	N.D.			
53)	4-Nitrophenol	9.718	139	214	90.24	ng/ml#	1	
54)	2,4-Dinitrotoluene	9.771	165	701	74.55	ng/ml#	45	
55)	Dibenzofuran	9.771	168	9797	53.35	ng/ml	87	
56)	2,3,5,6-Tetrachlorophenol	0.000		0	N.D.			
57)	2,3,4,6-Tetrachlorophenol	0.000		0	N.D.			
58)	Diethyl phthalate	9.991	149	74	N.D.			
59)	2,3,5-Trimethylnaphtha...	9.985	170	13612	116.76	ng/ml	95	
60)	Fluorene	10.119	166	64053	458.31	ng/ml	98	
61)	4-Chlorophenyl phenyl ...	0.000		0	N.D.			
62)	4-Nitroaniline	10.119	138	875	29.79	ng/ml#	52	
63)	4,6-Dinitro-2-methylph...	10.221	198	86	150.43	ng/ml#	1	
65)	N-Nitrosodiphenylamine	10.242	169	4912	45.02	ng/ml	77	MDL=MRL
66)	Azobenzene (1,2-DPH)	10.269	77	241	N.D.			
68)	4-Bromophenyl phenyl e...	10.563	248	51	N.D.			
69)	Hexachlorobenzene	0.000		0	N.D.			
70)	Pentachlorophenol (PCP)	0.000		0	N.D.			
71)	Phenanthrene	11.103	178	608712	3103.88	ng/ml	98	
72)	Anthracene	11.151	178	178972	984.30	ng/ml	100	
73)	Carbazole	11.317	167	10804	67.96	ng/ml	91	
74)	Di-n-butyl phthalate	11.660	149	380	N.D.			
75)	Fluoranthene	12.360	202	645148	3224.38	ng/ml	98	
76)	Benzidine	12.489	184	80	167.38	ng/ml#	1	
77)	Pyrene	12.644	202	801008	3947.77	ng/ml	98	
80)	Butyl benzyl phthalate	13.644	149	90	66.75	ng/ml#	38	
81)	Bis(2-ethylhexyl) adipate	13.788	129	768	83.90	ng/ml	86	
82)	3,3-Dichlorobenzidine	14.740	252	135	Below Cal	#	1	
83)	Benz(a)anthracene	14.767	228	200997	1102.94	ng/ml	75	
84)	Chrysene	14.847	228	228081	1281.01	ng/ml	99	
85)	Bis(2-ethylhexyl) phth...	14.933	149	458	72.66	ng/ml	99	
87)	Di-n-octyl phthalate	16.591	149	90	83.97	ng/ml#	1	
88)	Benzo(b)fluoranthene	17.351	252	247643	1387.02	ng/ml	98	
89)	Benzo(k)fluoranthene	~~17.351~~	~~252~~	~~315043~~	~~1767.55~~	~~ng/ml~~	~~97~~	MI-MOS
90)	Benzo(b+k)fluoranthene	17.351	252	350444	1908.09	ng/ml	97	
91)	Benzo(e)pyrene	17.998	252	158164	899.09	ng/ml	99	
92)	Benzo(a)pyrene	18.121	252	249072	1578.38	ng/ml	100	
93)	Perylene	18.319	252	63962	406.89	ng/ml	100	
95)	Indeno(1,2,3-cd)pyrene	20.656	276	165698	960.67	ng/ml	98	
96)	Dibenz(a,h)anthracene	20.720	278	17404	110.25	ng/ml	90	
97)	Benzo(g,h,i)perylene	21.196	276	203266	1197.56	ng/ml	99	

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

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202014.D
Acq On : 20 Jan 2020 17:16
Operator : JK /AMS /DTH
Sample : A0A0539-01RE1@40
Misc : 40x, 8270D LL Full List
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 18:38:55 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202015.D
Acq On : 20 Jan 2020 17:51
Operator : JK /AMS /DTH
Sample : A0A0539-02RE1@40
Misc : 40x, 8270D LL Full List
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

AMS R02 1/21/20 MOS

Quant Time: Jan 20 18:39:00 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.530	152	127426	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.793	136	436881	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	196625	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.082	188	340143	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.794	240	329412	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.271	264	331710	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.667	292	298330	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.295	112	3120	36.80 ng/ml	0.00
5) Phenol-d6 (Surr)	6.193	99	3334	30.27 ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.076	82	4093	47.06 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.878	172	7795	52.34 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	1116	80.51 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.842	244	8933	59.13 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	3.920	79	79	N.D.	
6) Phenol	6.231	94	60	N.D.	
7) Aniline	6.220	93	127	N.D.	
8) Bis(2-chloroethyl) ether	6.268	93	72	N.D.	
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	6.691	108	65	42.09 ng/ml#	1
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.792	107	65	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	6.964	70	87	N.D.	
17) 3+4-Methylphenol	6.942	107	597	7.06 ng/ml#	76
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.081	77	440	4.97 ng/ml#	18
22) Isophorone	7.317	82	391	2.51 ng/ml#	1
23) 2-Nitrophenol	7.413	139	138	32.65 ng/ml#	1
24) 2,4-Dimethylphenol	7.450	122	61	N.D.	
25) Bis(2-chloroethoxy) me...	7.557	93	335	3.65 ng/ml#	1
26) Benzoic acid	7.515	105	1278	864.70 ng/ml#	39
27) 2,4-Dichlorophenol	7.643	162	60	12.69 ng/ml#	25
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.814	128	503956	2245.81 ng/ml	98
30) 4-Chloroaniline	7.900	127	125	N.D.	
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.338	107	75	27.55 ng/ml#	1
33) 2-Methylnaphthalene	8.509	142	312194	1954.97 ng/ml	100
34) 1-Methylnaphthalene	8.611	142	176628	1170.69 ng/ml	99
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	8.841	196	52	27.48 ng/ml#	11
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	8.980	154	161165	967.16 ng/ml	100
41) 2-Chloronaphthalene	8.980	162	1161	9.42 ng/ml#	1
42) 2-Nitroaniline	9.076	138	404	10.52 ng/ml#	4
43) 2,6-Dimethylnaphthalene	9.140	156	105099	877.93 ng/ml	99

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202015.D
Acq On : 20 Jan 2020 17:51
Operator : JK /AMS /DTH
Sample : A0A0539-02RE1@40
Misc : 40x, 8270D LL Full List
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 18:39:00 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

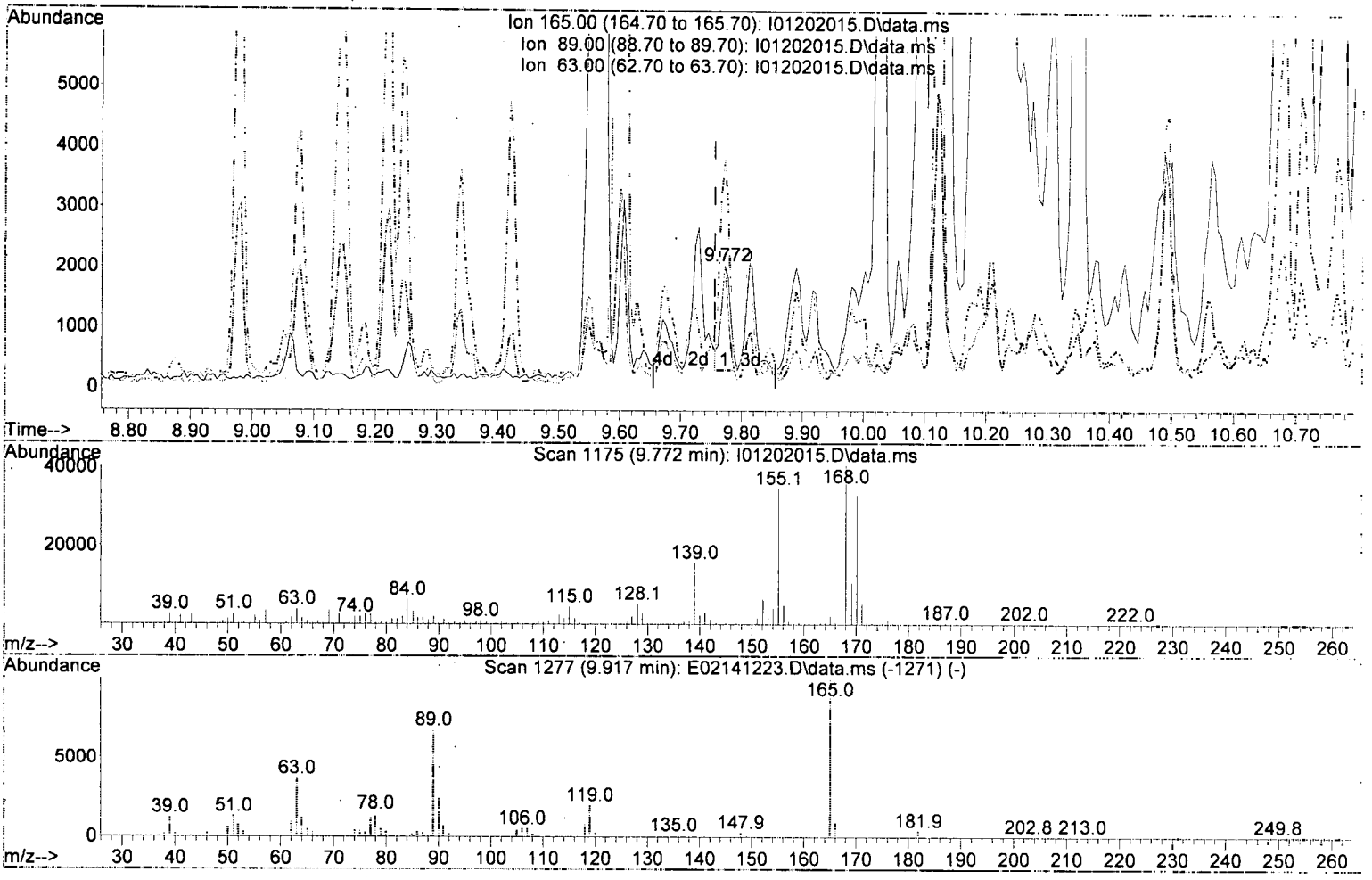
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.253	168	1549	155.98	ng/ml#	51
45) Dimethyl phthalate	9.285	163	367	2.72	ng/ml#	1
46) 1,3-Dinitrobenzene	9.317	168	109	5.29	ng/ml#	1
47) 2,6-Dinitrotoluene	9.344	165	65	N.D.		
48) 1,2-Dinitrobenzene	9.413	168	119	8.04	ng/ml#	1
49) Acenaphthylene	9.419	152	40096	212.21	ng/ml	92
50) 3-Nitroaniline	9.515	138	86	3.03	ng/ml#	48
51) Acenaphthene	9.600	153	354404	2818.63	ng/ml	100
52) 2,4-Dinitrophenol	9.617	184	70	191.45	ng/ml#	1
53) 4-Nitrophenol	9.718	139	924	125.25	ng/ml#	47
54) 2,4-Dinitrotoluene	9.772	165	1851	102.92	ng/ml#	1
55) Dibenzofuran	9.772	168	38577	228.70	ng/ml	97
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.		
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
58) Diethyl phthalate	9.980	149	236	N.D.		
59) 2,3,5-Trimethylnaphtha...	9.986	170	40495	378.18	ng/ml	97
60) Fluorene	10.125	166	209297	1630.39	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.173	204	100	N.D.		
62) 4-Nitroaniline	10.125	138	2216	82.14	ng/ml#	39
63) 4,6-Dinitro-2-methylph...	10.157	198	213	159.52	ng/ml#	1
65) N-Nitrosodiphenylamine	10.242	169	12687	123.71	ng/ml#	67
66) Azobenzene (1,2-DPH)	10.280	77	1257	10.47	ng/ml#	1
68) 4-Bromophenyl phenyl e...	10.627	248	50	N.D.		
69) Hexachlorobenzene	0.000		0	N.D.		
70) Pentachlorophenol (PCP)	0.000		0	N.D.		
71) Phenanthrene	11.109	178	1097585	5954.33	ng/ml	94
72) Anthracene	11.157	178	291540	1705.86	ng/ml	100
73) Carbazole	11.317	167	40809	250.06	ng/ml	95
74) Di-n-butyl phthalate	11.660	149	433	N.D.		
75) Fluoranthene	12.366	202	849407	4516.52	ng/ml	98
76) Benzidine	12.505	184	96	167.61	ng/ml#	1
77) Pyrene	12.649	202	1052154	5516.92	ng/ml	96
80) Butyl benzyl phthalate	13.623	149	185	68.02	ng/ml#	1
81) Bis(2-ethylhexyl) adipate	13.788	129	935	87.15	ng/ml#	39
82) 3,3-Dichlorobenzidine	14.741	252	83	Below Cal	#	10
83) Benz(a)anthracene	14.773	228	306108	1787.04	ng/ml	80
84) Chrysene	14.853	228	340407	2034.03	ng/ml	99
85) Bis(2-ethylhexyl) phth...	14.933	149	1906	85.55	ng/ml	85
87) Di-n-octyl phthalate	16.613	149	98	84.05	ng/ml#	1
88) Benzo(b)fluoranthene	17.361	252	358292	2047.34	ng/ml	99
89) Benzo(k)fluoranthene	17.415	252	102311	605.83	ng/ml	97
90) Benzo(b+k)fluoranthene	17.361	252	513269	2887.71	ng/ml	100
91) Benzo(e)pyrene	18.009	252	230696	1368.33	ng/ml	100
92) Benzo(a)pyrene	18.132	252	361320	2343.16	ng/ml	100
93) Perylene	18.324	252	92005	610.68	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.667	276	230657	1404.75	ng/ml	100
96) Dibenz(a,h)anthracene	20.720	278	28909	192.37	ng/ml	91
97) Benzo(g,h,i)perylene	21.207	276	275964	1707.90	ng/ml	97

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202015.D
Acq On : 20 Jan 2020 17:51
Operator : JK /AMS /DTH
Sample : A0A0539-02RE1@40
Misc : 40x, 8270D LL Full List
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 18:39:00 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01202015.D\data.ms

(54) 2,4-Dinitrotoluene (T)

9.772min (+ 0.016) 102.92 ng/ml

response 1851

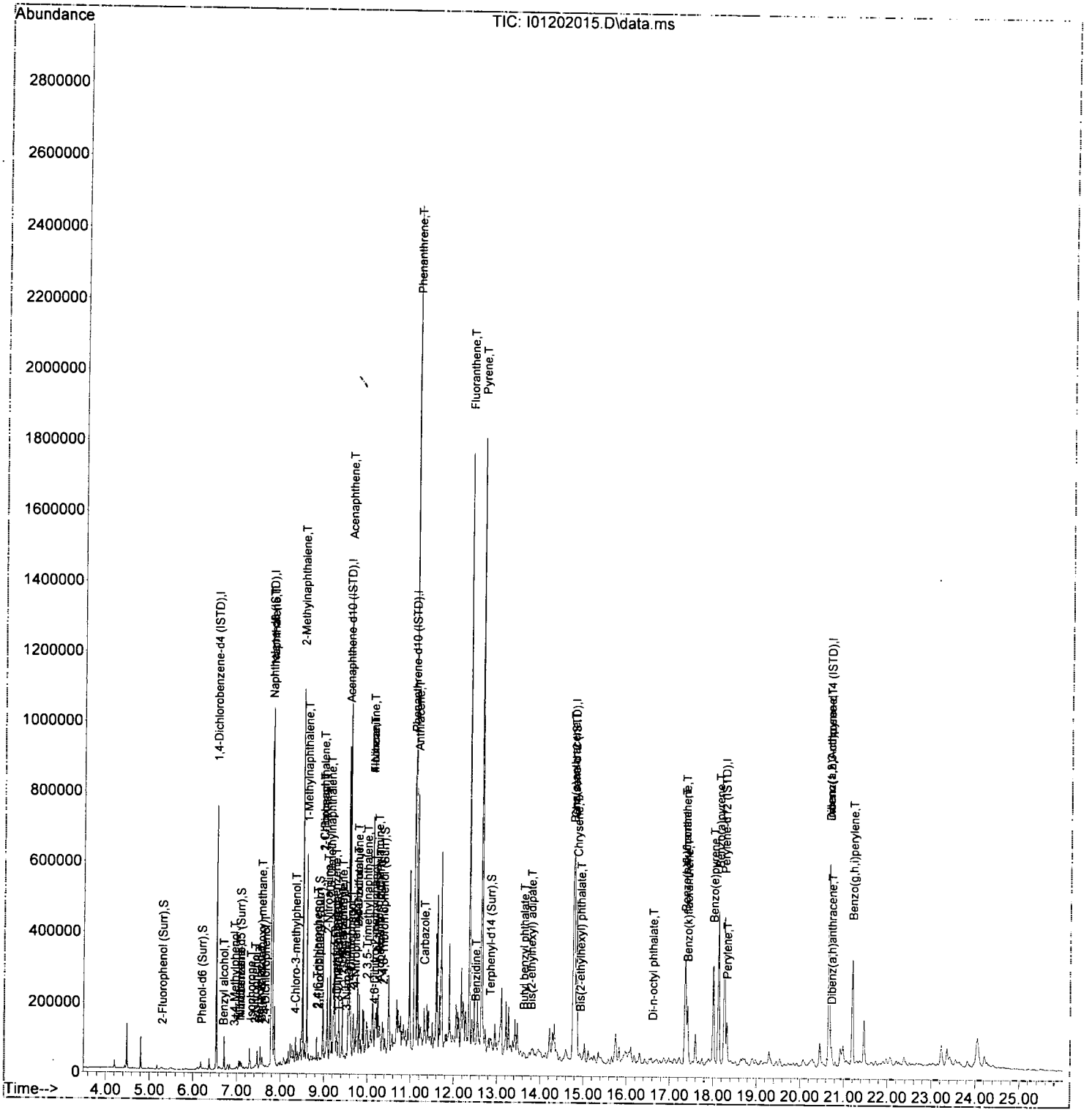
Ion	Exp%	Act%
165.00	100.00	100.00
89.00	72.30	99.41
63.00	45.90	186.04#
0.00	0.00	0.00

✓

MDL=MRL

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202015.D
Acq On : 20 Jan 2020 17:51
Operator : JK /AMS /DTH
Sample : A0A0539-02RE1@40
Misc : 40x, 8270D LL Full List
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 20 18:39:00 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202017.D
Acq On : 20 Jan 2020 19:01
Operator : JK /AMS /DTH
Sample : 0010597-BLK1
Misc : 1x, 8270D TCLP FULL LIST SVOC
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

AMS 1/21/20

Quant Time: Jan 21 07:12:44 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.530	152	118877	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	417754	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	201053	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.076	188	335278	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.788	240	315101	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.265	264	294150	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.661	292	243148	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.284	112	58603	741.00	ng/ml	0.00
5) Phenol-d6 (Surr)	6.188	99	45222	440.14	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.070	82	126753	1562.23	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.878	172	224291	1472.98	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.370	330	41115	1920.75	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.841	244	314030	2173.12	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.899	74	90	N.D.		
3) Pyridine	3.963	79	120	N.D.		
6) Phenol	6.198	94	678	5.93	ng/ml#	1
7) Aniline	6.193	93	179	N.D.		
8) Bis(2-chloroethyl) ether	6.252	93	943	9.94	ng/ml#	32
9) 2-Chlorophenol	6.338	128	74	N.D.		
10) 1,3-Dichlorobenzene	6.541	146	139	N.D.		
11) 1,4-Dichlorobenzene	6.541	146	139	N.D.		
12) Benzyl alcohol	6.669	108	183	44.30	ng/ml#	77
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	6.776	107	68	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	6.792	45	244	N.D.		
16) N-Nitrosodi-n-propylamine	6.921	70	58	N.D.		
17) 3+4-Methylphenol	6.937	107	177	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.070	77	807	9.77	ng/ml#	37
22) Isophorone	7.327	82	554	3.72	ng/ml	68
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	7.520	122	1833	30.61	ng/ml#	4
25) Bis(2-chloroethoxy) me...	7.530	93	120	N.D.		
26) Benzoic acid	7.520	105	5528	1004.15	ng/ml	93
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	7.814	128	1789	8.34	ng/ml	95
30) 4-Chloroaniline	7.814	127	221	3.11	ng/ml	63
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	8.359	107	197	29.64	ng/ml#	1
33) 2-Methylnaphthalene	8.509	142	586	3.84	ng/ml	86
34) 1-Methylnaphthalene	8.611	142	294	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	8.974	154	740	4.34	ng/ml	88
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	9.140	156	195	N.D.		

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202017.D
Acq On : 20 Jan 2020 19:01
Operator : JK /AMS /DTH
Sample : 0010597-BLK1
Misc : 1x, 8270D TCLP FULL LIST SVOC
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

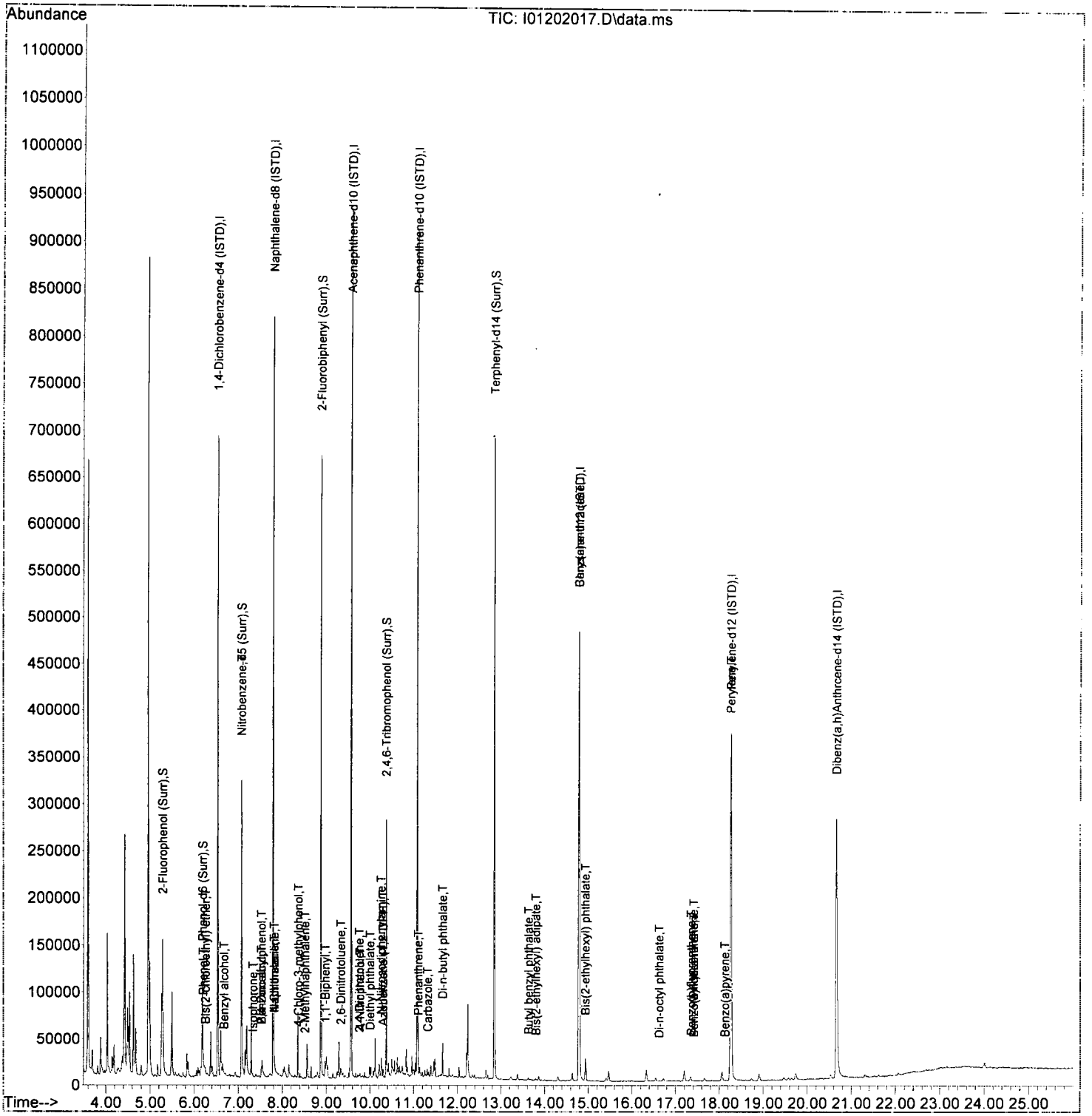
Quant Time: Jan 21 07:12:44 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.279	163	172	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.327	165	206	6.69 ng/ml#	1
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.418	152	193	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.600	153	139	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.766	139	110	85.95 ng/ml#	55
54) 2,4-Dinitrotoluene	9.750	165	217	64.40 ng/ml#	60
55) Dibenzofuran	9.771	168	199	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	9.996	149	1019	8.18 ng/ml	95
59) 2,3,5-Trimethylnaphtha...	9.975	170	251	N.D.	
60) Fluorene	10.119	166	238	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.247	169	278	2.75 ng/ml#	25
66) Azobenzene (1,2-DPH)	10.290	77	915	7.73 ng/ml#	1
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.098	178	908	5.00 ng/ml	85
72) Anthracene	11.146	178	226	N.D.	
73) Carbazole	11.317	167	147	9.23 ng/ml	74
74) Di-n-butyl phthalate	11.659	149	16329	92.56 ng/ml	99
75) Fluoranthene	12.360	202	307	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.638	202	439	N.D.	
80) Butyl benzyl phthalate	13.628	149	753	75.63 ng/ml	88
81) Bis(2-ethylhexyl) adipate	13.794	129	625	82.86 ng/ml	77
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.788	228	870	5.31 ng/ml	81
84) Chrysene	14.847	228	258	N.D.	
85) Bis(2-ethylhexyl) phth...	14.933	149	10865	167.99 ng/ml	97
87) Di-n-octyl phthalate	16.623	149	55	83.80 ng/ml#	1
88) Benzo(b)fluoranthene	17.356	252	149	8.43 ng/ml	57
89) Benzo(k)fluoranthene	17.415	252	71	7.47 ng/ml	54
90) Benzo(b+k)fluoranthene	17.415	252	71	15.60 ng/ml	54
91) Benzo(e)pyrene	17.998	252	153	N.D.	
92) Benzo(a)pyrene	18.121	252	70	9.30 ng/ml	59
93) Perylene	18.260	252	1076	8.05 ng/ml	72
95) Indeno(1,2,3-cd)pyrene	20.656	276	256	N.D.	
96) Dibenz(a,h)anthracene	0.000		0	N.D.	
97) Benzo(g,h,i)perylene	21.196	276	186	N.D.	

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

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202017.D
Acq On : 20 Jan 2020 19:01
Operator : JK /AMS /DTH
Sample : 0010597-BLK1
Misc : 1x, 8270D TCLP FULL LIST SVOC
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 07:12:44 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202018.D
Acq On : 20 Jan 2020 19:36
Operator : JK /AMS /DTH
Sample : 0010597-BS1@2
Misc : 2x, 8270D TCLP FULL LIST SVOC
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

AMS 1/21/20

Quant Time: Jan 21 07:12:47 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.530	152	119476	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.793	136	408627	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	194226	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.082	188	367982	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.799	240	345999	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.276	264	348628	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.672	292	319525	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.284	112	50051	629.69 ng/ml	0.00
5) Phenol-d6 (Surr)	6.183	99	41076	397.78 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.071	82	82253	1008.68 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.878	172	150768	1024.94 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	27000	1170.80 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.842	244	203410	1281.92 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.899	74	78049	1269.56 ng/ml	95
3) Pyridine	3.926	79	102235	1033.30 ng/ml	99
6) Phenol	6.199	94	89683	781.07 ng/ml	92
7) Aniline	6.209	93	137522	1153.84 ng/ml	89
8) Bis(2-chloroethyl) ether	6.268	93	183084	1919.92 ng/ml	97
9) 2-Chlorophenol	6.332	128	143943	1723.95 ng/ml	99
10) 1,3-Dichlorobenzene	6.477	146	130624	1418.51 ng/ml	99
11) 1,4-Dichlorobenzene	6.546	146	121260	1345.58 ng/ml	99
12) Benzyl alcohol	6.664	108	76930	1445.52 ng/ml	99
13) 1,2-Dichlorobenzene	6.696	146	120751	1357.12 ng/ml	97
14) 2-Methylphenol	6.776	107	95776	1498.78 ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.792	45	184375	1544.69 ng/ml	94
16) N-Nitrosodi-n-propylamine	6.921	70	109800	1805.89 ng/ml	98
17) 3+4-Methylphenol	6.926	107	109426	1380.80 ng/ml	98
18) Hexachloroethane	7.033	201	39153	1488.21 ng/ml	98
20) Nitrobenzene	7.092	77	142973	1721.93 ng/ml	97
22) Isophorone	7.327	82	286748	1968.43 ng/ml	99
23) 2-Nitrophenol	7.407	139	74237	1959.07 ng/ml	99
24) 2,4-Dimethylphenol	7.450	122	106665	1820.79 ng/ml	99
25) Bis(2-chloroethoxy) me...	7.536	93	161507	1881.34 ng/ml	99
26) Benzoic acid	7.547	105	49090	2360.96 ng/ml	99
27) 2,4-Dichlorophenol	7.654	162	108377	1997.14 ng/ml	97
28) 1,2,4-Trichlorobenzene	7.734	180	103956	1553.66 ng/ml	98
29) Naphthalene	7.814	128	324915	1548.05 ng/ml	99
30) 4-Chloroaniline	7.873	127	102752	1476.41 ng/ml	97
31) Hexachlorobutadiene	7.942	225	53223	1546.69 ng/ml	99
32) 4-Chloro-3-methylphenol	8.354	107	115783	1961.43 ng/ml	97
33) 2-Methylnaphthalene	8.509	142	252607	1691.21 ng/ml	99
34) 1-Methylnaphthalene	8.611	142	236188	1673.70 ng/ml	99
36) Hexachlorocyclopentadiene	8.675	237	50706	1465.26 ng/ml	98
37) 2,4,6-Trichlorophenol	8.798	196	77033	2046.85 ng/ml	99
38) 2,4,5-Trichlorophenol	8.836	198	76340	2079.75 ng/ml	99
39) 1,1'-Biphenyl	8.980	154	284207	1726.61 ng/ml	99
41) 2-Chloronaphthalene	9.001	162	207314	1702.82 ng/ml	99
42) 2-Nitroaniline	9.103	138	82112	2165.32 ng/ml	95
43) 2,6-Dimethylnaphthalene	9.140	156	204740	1731.39 ng/ml	99

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202018.D
Acq On : 20 Jan 2020 19:36
Operator : JK /AMS /DTH
Sample : 0010597-BS1@2
Misc : 2x, 8270D TCLP FULL LIST SVOC
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

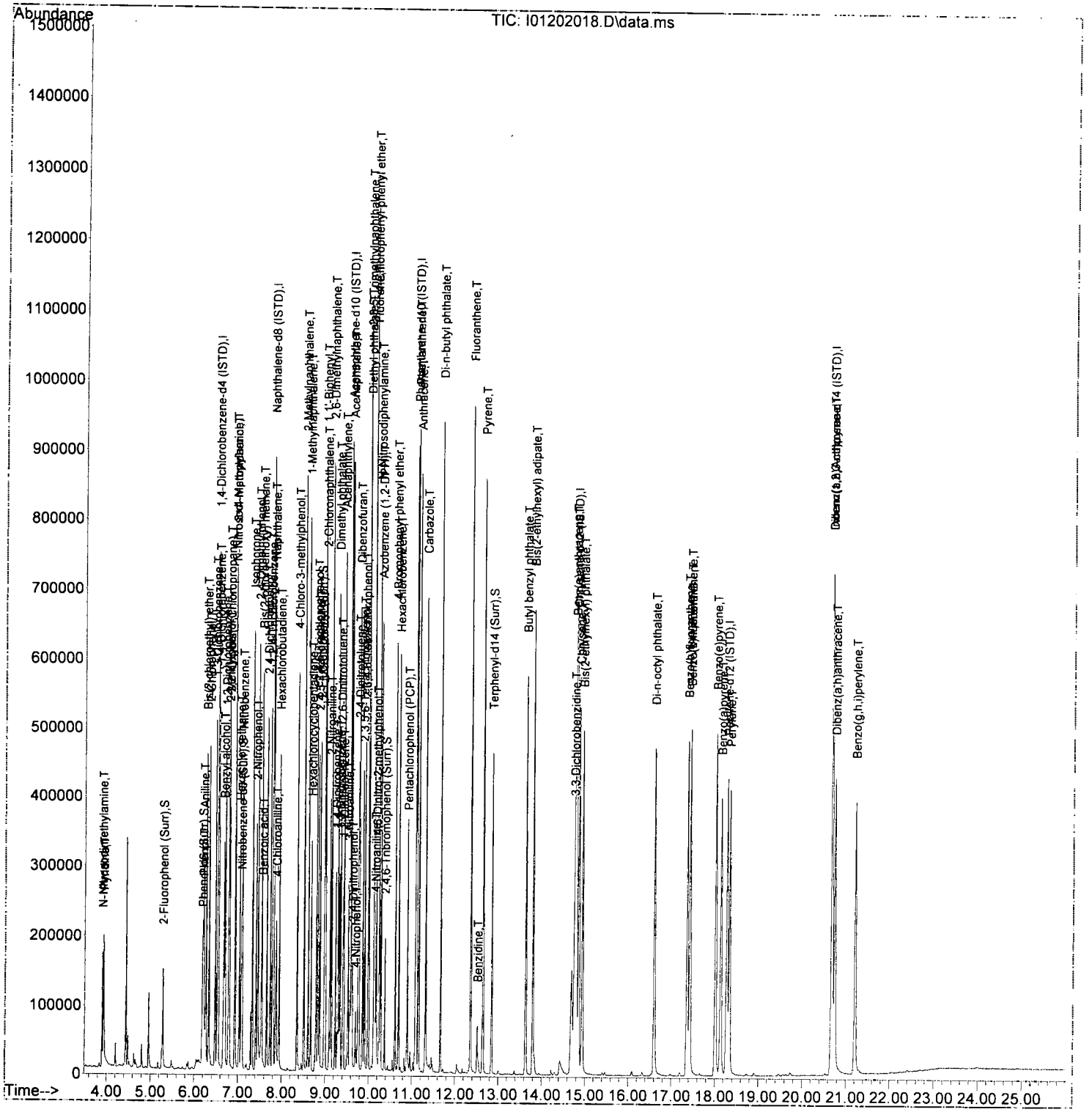
Quant Time: Jan 21 07:12:47 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.231	168	37837	2170.41	ng/ml	94
45)	Dimethyl phthalate	9.285	163	263303	1978.09	ng/ml	99
46)	1,3-Dinitrobenzene	9.317	168	42547	2091.64	ng/ml	94
47)	2,6-Dinitrotoluene	9.344	165	62445	2099.05	ng/ml	93
48)	1,2-Dinitrobenzene	9.403	168	28968	1980.18	ng/ml	94
49)	Acenaphthylene	9.424	152	335892	1799.71	ng/ml	99
50)	3-Nitroaniline	9.520	138	48881	1743.22	ng/ml	95
51)	Acenaphthene	9.600	153	216992	1747.09	ng/ml	100
52)	2,4-Dinitrophenol	9.622	184	22692	2507.62	ng/ml	95
53)	4-Nitrophenol	9.697	139	17522	906.50	ng/ml	90
54)	2,4-Dinitrotoluene	9.756	165	82247	2038.11	ng/ml	94
55)	Dibenzofuran	9.777	168	301196	1807.65	ng/ml	94
56)	2,3,5,6-Tetrachlorophenol	9.862	232	62840	2160.11	ng/ml	95
57)	2,3,4,6-Tetrachlorophenol	9.905	232	64943	2009.85	ng/ml	95
58)	Diethyl phthalate	9.996	149	241907	2010.09	ng/ml	98
59)	2,3,5-Trimethylnaphtha...	9.986	170	198465	1876.33	ng/ml	97
60)	Fluorene	10.125	166	237760	1874.99	ng/ml	99
61)	4-Chlorophenyl phenyl ...	10.119	204	119786	1893.22	ng/ml	98
62)	4-Nitroaniline	10.141	138	51189	1920.80	ng/ml	98
63)	4,6-Dinitro-2-methylph...	10.173	198	39002	2495.14	ng/ml	92
65)	N-Nitrosodiphenylamine	10.237	169	209588	1889.02	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.280	77	244295	1880.38	ng/ml	94
68)	4-Bromophenyl phenyl e...	10.617	248	84458	2022.76	ng/ml	98
69)	Hexachlorobenzene	10.697	284	96941	1842.39	ng/ml	95
70)	Pentachlorophenol (PCP)	10.895	266	48856	2168.40	ng/ml	98
71)	Phenanthrene	11.103	178	352718	1768.71	ng/ml	99
72)	Anthracene	11.157	178	355327	1921.80	ng/ml	99
73)	Carbazole	11.317	167	321131	1929.71	ng/ml	99
74)	Di-n-butyl phthalate	11.660	149	456136	2355.75	ng/ml	99
75)	Fluoranthene	12.360	202	447451	2199.22	ng/ml	99
76)	Benzidine	12.515	184	42299	590.51	ng/ml	100
77)	Pyrene	12.644	202	442948	2146.87	ng/ml	99
80)	Butyl benzyl phthalate	13.628	149	207080	2336.48	ng/ml	97
81)	Bis(2-ethylhexyl) adipate	13.794	129	181776	2460.58	ng/ml	98
82)	3,3-Dichlorobenzidine	14.746	252	126546	4310.69	ng/ml	99
83)	Benz(a)anthracene	14.773	228	389338	2163.97	ng/ml	97
84)	Chrysene	14.858	228	351288	1998.42	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	14.938	149	254203	2130.41	ng/ml	100
87)	Di-n-octyl phthalate	16.602	149	468751	2630.79	ng/ml	98
88)	Benzo(b)fluoranthene	17.361	252	419871	2266.55	ng/ml	99
89)	Benzo(k)fluoranthene	17.425	252	389142	2163.15	ng/ml	98
90)	Benzo(b+k)fluoranthene	17.425	252	827485	4375.18	ng/ml	98
91)	Benzo(e)pyrene	18.014	252	384888	2172.11	ng/ml	100
92)	Benzo(a)pyrene	18.131	252	336579	2089.81	ng/ml	99
93)	Perylene	18.335	252	333847	2108.37	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	20.672	276	341367	1941.10	ng/ml	99
96)	Dibenz(a,h)anthracene	20.742	278	312844	1943.66	ng/ml	98
97)	Benzo(g,h,i)perylene	21.212	276	340956	1970.15	ng/ml	97

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

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202018.D
Acq On : 20 Jan 2020 19:36
Operator : JK /AMS /DTH
Sample : 0010597-BS1@2
Misc : 2x, 8270D TCLP FULL LIST SVOC
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 07:12:47 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202019.D
Acq On : 20 Jan 2020 20:10
Operator : JK /AMS /DTH
Sample : 0010597-BSD1@2
Misc : 2x, 8270D TCLP FULL LIST SVOC
ALS Vial : 18 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Q-19

AMS 1/21/20

Quant Time: Jan 21 07:12:50 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.530	152	118174	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.793	136	409234	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	199010	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.077	188	374921	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.799	240	354043	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.276	264	356462	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.677	292	323060	2000.00	ng/ml	0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.289	112	49427	628.69	ng/ml	0.00
5) Phenol-d6 (Surr)	6.183	99	41732	408.59	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.070	82	83707	1037.82	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.878	172	151801	1007.15	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	26569	1132.27	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.842	244	204731	1260.93	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.904	74	78607	1292.73	ng/ml	97
3) Pyridine	3.936	79	92287	943.03	ng/ml	98
6) Phenol	6.193	94	91396	804.76	ng/ml	97
7) Aniline	6.215	93	130580	1107.67	ng/ml	94
8) Bis(2-chloroethyl) ether	6.268	93	182734	1937.37	ng/ml	97
9) 2-Chlorophenol	6.332	128	144054	1744.29	ng/ml	99
10) 1,3-Dichlorobenzene	6.477	146	132152	1450.91	ng/ml	100
11) 1,4-Dichlorobenzene	6.546	146	123837	1389.32	ng/ml	100
12) Benzyl alcohol	6.664	108	79969	1518.34	ng/ml	99
13) 1,2-Dichlorobenzene	6.696	146	124006	1409.06	ng/ml	97
14) 2-Methylphenol	6.776	107	97383	1540.72	ng/ml	96
15) 2,2'-Oxybis(1-Chloropr...	6.792	45	184674	1564.24	ng/ml	94
16) N-Nitrosodi-n-propylamine	6.921	70	113681	1890.33	ng/ml	97
17) 3+4-Methylphenol	6.926	107	111897	1427.54	ng/ml	98
18) Hexachloroethane	7.033	201	40148	1542.84	ng/ml	98
20) Nitrobenzene	7.092	77	146573	1784.73	ng/ml	95
22) Isophorone	7.327	82	292079	2002.05	ng/ml	98
23) 2-Nitrophenol	7.407	139	77593	2041.14	ng/ml	98
24) 2,4-Dimethylphenol	7.450	122	110427	1882.21	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.536	93	167359	1946.61	ng/ml	99
26) Benzoic acid	7.546	105	53563	2489.53	ng/ml	99
27) 2,4-Dichlorophenol	7.653	162	112381	2066.75	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.734	180	106695	1592.23	ng/ml	99
29) Naphthalene	7.814	128	338714	1611.40	ng/ml	99
30) 4-Chloroaniline	7.873	127	105157	1508.72	ng/ml	98
31) Hexachlorobutadiene	7.942	225	55495	1610.32	ng/ml	99
32) 4-Chloro-3-methylphenol	8.354	107	119192	2014.38	ng/ml	97
33) 2-Methylnaphthalene	8.509	142	262375	1754.00	ng/ml	100
34) 1-Methylnaphthalene	8.606	142	242716	1717.41	ng/ml	99
36) Hexachlorocyclopentadiene	8.675	237	48770	1378.45	ng/ml	96
37) 2,4,6-Trichlorophenol	8.798	196	79681	2065.88	ng/ml	98
38) 2,4,5-Trichlorophenol	8.835	198	79251	2106.89	ng/ml	99
39) 1,1'-Biphenyl	8.980	154	295769	1753.66	ng/ml	99
41) 2-Chloronaphthalene	9.001	162	215578	1728.13	ng/ml	99
42) 2-Nitroaniline	9.103	138	85917	2211.20	ng/ml	95
43) 2,6-Dimethylnaphthalene	9.140	156	210393	1736.42	ng/ml	98

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202019.D
Acq On : 20 Jan 2020 20:10
Operator : JK /AMS /DTH
Sample : 0010597-BSD1@2
Misc : 2x, 8270D TCLP FULL LIST SVOC
ALS Vial : 18 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

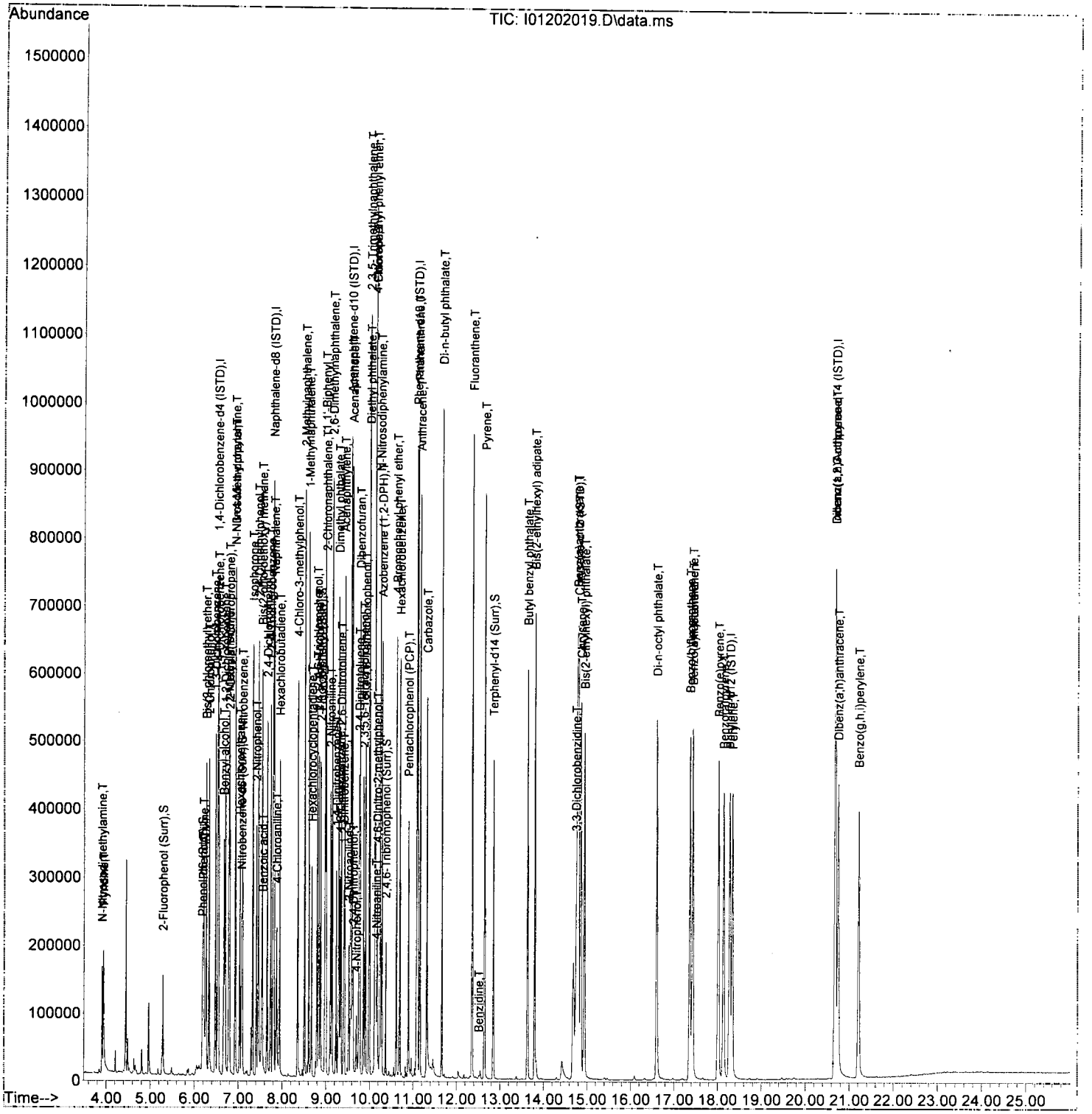
Quant Time: Jan 21 07:12:50 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.231	168	40406	2252.88	ng/ml	92
45) Dimethyl phthalate	9.285	163	272848	2000.53	ng/ml	100
46) 1,3-Dinitrobenzene	9.317	168	45094	2163.56	ng/ml	91
47) 2,6-Dinitrotoluene	9.344	165	65532	2149.86	ng/ml	91
48) 1,2-Dinitrobenzene	9.402	168	30283	2020.30	ng/ml	90
49) Acenaphthylene	9.424	152	344815	1803.11	ng/ml	99
50) 3-Nitroaniline	9.520	138	37420	1302.41	ng/ml	94
51) Acenaphthene	9.600	153	221527	1740.73	ng/ml	99
52) 2,4-Dinitrophenol	9.622	184	23984	2563.37	ng/ml	94
53) 4-Nitrophenol	9.697	139	17835	901.23	ng/ml	91
54) 2,4-Dinitrotoluene	9.755	165	86055	2080.45	ng/ml	94
55) Dibenzofuran	9.777	168	309605	1813.45	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	9.862	232	65016	2179.64	ng/ml	94
57) 2,3,4,6-Tetrachlorophenol	9.905	232	66467	2007.64	ng/ml	96
58) Diethyl phthalate	9.996	149	245993	1994.91	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	9.985	170	203754	1880.02	ng/ml	97
60) Fluorene	10.125	166	246462	1896.89	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.119	204	121663	1876.67	ng/ml	97
62) 4-Nitroaniline	10.146	138	46803	1714.00	ng/ml	96
63) 4,6-Dinitro-2-methylph...	10.173	198	40540	2525.30	ng/ml	91
65) N-Nitrosodiphenylamine	10.237	169	214687	1899.16	ng/ml	100
66) Azobenzene (1,2-DPH)	10.280	77	249215	1882.75	ng/ml	93
68) 4-Bromophenyl phenyl e...	10.617	248	86347	2029.72	ng/ml	98
69) Hexachlorobenzene	10.697	284	101354	1890.61	ng/ml	94
70) Pentachlorophenol (PCP)	10.889	266	50163	2183.14	ng/ml	96
71) Phenanthrene	11.103	178	365283	1797.82	ng/ml	99
72) Anthracene	11.157	178	362520	1924.42	ng/ml	99
73) Carbazole	11.317	167	298874	1745.78	ng/ml	99
74) Di-n-butyl phthalate	11.660	149	457540	2319.27	ng/ml	99
75) Fluoranthene	12.360	202	456313	2201.27	ng/ml	100
76) Benzidine	12.510	184	2984	195.85	ng/ml	93
77) Pyrene	12.644	202	453994	2159.68	ng/ml	99
80) Butyl benzyl phthalate	13.628	149	210037	2318.19	ng/ml	97
81) Bis(2-ethylhexyl) adipate	13.794	129	183279	2428.64	ng/ml	99
82) 3,3-Dichlorobenzidine	14.746	252	116809	3813.62	ng/ml	98
83) Benz(a)anthracene	14.778	228	403662	2192.60	ng/ml	98
84) Chrysene	14.858	228	362033	2012.76	ng/ml	100
85) Bis(2-ethylhexyl) phth...	14.938	149	258164	2115.34	ng/ml	99
87) Di-n-octyl phthalate	16.602	149	475829	2615.21	ng/ml	98
88) Benzo(b)fluoranthene	17.361	252	432559	2282.54	ng/ml	99
89) Benzo(k)fluoranthene	17.425	252	402219	2186.47	ng/ml	98
90) Benzo(b+k)fluoranthene	17.425	252	856553	4427.52	ng/ml	98
91) Benzo(e)pyrene	18.014	252	396062	2186.05	ng/ml	100
92) Benzo(a)pyrene	18.131	252	345545	2097.90	ng/ml	98
93) Perylene	18.340	252	341077	2106.70	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.677	276	350434	1970.85	ng/ml	97
96) Dibenz(a,h)anthracene	20.742	278	322250	1980.20	ng/ml	99
97) Benzo(g,h,i)perylene	21.212	276	346366	1979.52	ng/ml	99

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

Data Path : C:\msdchem\1\data\2020-01\0A20029\
Data File : I01202019.D
Acq On : 20 Jan 2020 20:10
Operator : JK /AMS /DTH
Sample : 0010597-BSD1@2
Misc : 2x, 8270D TCLP FULL LIST SVOC
ALS Vial : 18 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 07:12:50 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



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

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Benchsheet & Analysis Sequence Data

Sequence 0A21026 (A0A0539-01RE2)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**0A21026**	Instrument:	**SV-GCMS9**
Date:	**01/21/20 07:53**	Calibration:	**A9L0505**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
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2	0A21026-CCV1	Sediment	QC	QC			A19K206	A19L374
3	0A21026-CCB1	Sediment	QC	QC			A19K206	
4	A0A0538-01RE2	Sediment	8270D LL Full List	Anchor QEA, LLC	01/27/20	0010574	A19K206	
5	0010574-DUP2	Sediment	QC	QC		0010574	A19K206	
6	A0A0538-02RE2	Sediment	8270D LL Full List	Anchor QEA, LLC	01/27/20	0010574	A19K206	
7	A0A0539-01RE2	Sediment	8270D LL Full List	Anchor QEA, LLC	01/27/20	0010574	A19K206	
8	0A21026-IBL1	Sediment	QC	QC			A19K206	

Data Entered By: AMS 1/22/20 Comments:

Data Reviewed By: [illegible] 1/23/20

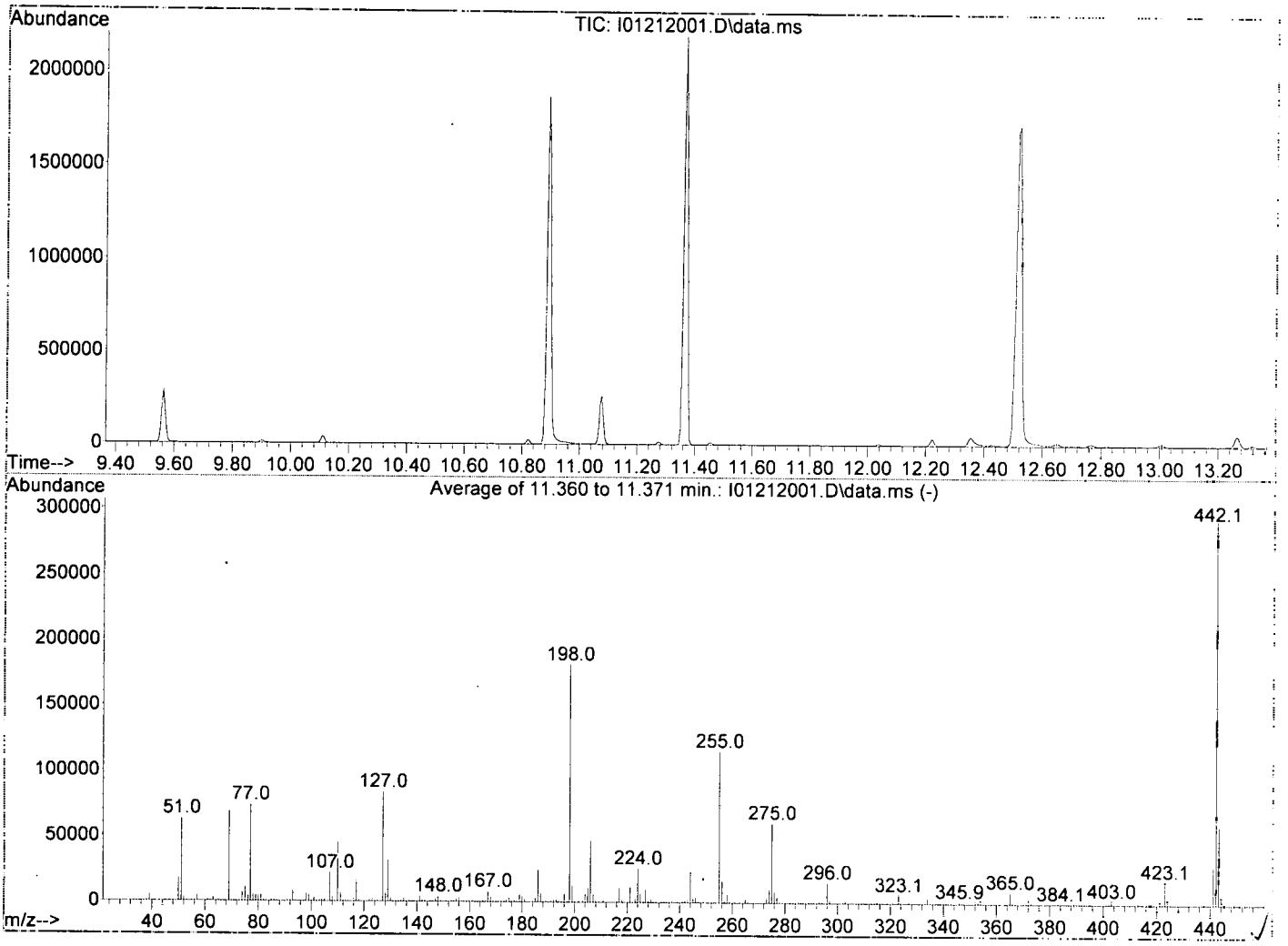
DFTPP

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212001.D
Acq On : 21 Jan 2020 13:18
Operator : JK /AMS /DTH
Sample : 0A21026-TUN1
Misc : 1x, A20A236 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

AMS 1/21/20

Integration File: rteint.p

Method : C:\msdchem\1\methods\DFTPP.M
Title : DFTPP Tune Methodug/mL
Last Update : Mon Jan 06 12:06:36 2020



AutoFind: Scans 1472, 1473, 1474; Background Corrected with Scan 1466

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	69029	PASS
70	69	0.00	2	0.6	387	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	181675	PASS
199	198	5	9	7.0	12731	PASS
365	198	1	100	4.8	8735	PASS
441	443	0.01	150	48.2	28632	PASS
442	198	0.10	200	160.9	292395	PASS
443	442	15	24	20.3	59416	PASS

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212001.D
Acq On : 21 Jan 2020 13:18
Operator : JK /AMS /DTH
Sample : 0A21026-TUN1
Misc : 1x, A20A236 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Jan 21 14:49:06 2020
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Mon Jan 06 12:06:36 2020
Response via : Initial Calibration
InstName : SV-GCMS9

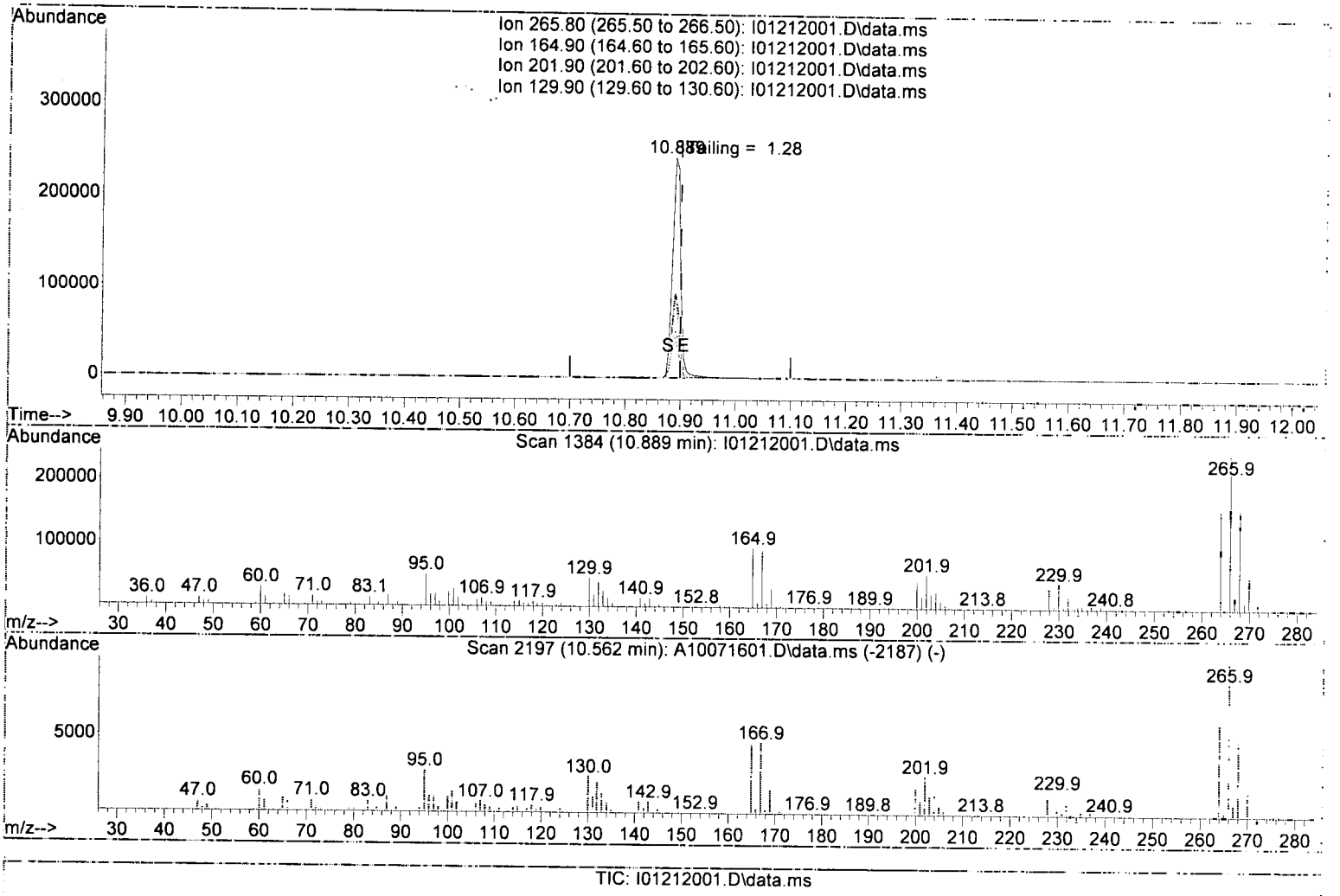
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.787	136	118758	2.00	ug/mL	0.00
2) Acenaphthene-d10	9.563	162	58631	2.00	ug/mL	0.00
4) Phenanthrene-d10	11.077	188	91870	2.00	ug/mL	0.00
10) Chrysene-d12	14.735	240	78702	2.00	ug/mL	-0.01
11) Perylene-d12	16.875	264	69670	2.00	ug/mL	-0.04
Target Compounds						Qvalue
3) Pentachlorophenol	10.889	266	256624	39.01	ug/mL	89
5) DFTPP	11.365	442	327838	42.45	ug/mL	70
6) Benzidine	12.521	184	946063	34.20	ug/mL	91
7) 4,4-DDE	12.767	TIC	14760	No Calib	#	
8) 4,4-DDD	13.264	TIC	77168	20.27	ug/mL#	1
9) 4,4-DDT	13.804	TIC	2893314	37.37	ug/mL#	1

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212001.D
Acq On : 21 Jan 2020 13:18
Operator : JK /AMS /DTH
Sample : 0A21026-TUN1
Misc : 1x, A20A236 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Jan 21 14:49:06 2020
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Mon Jan 06 12:06:36 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212001.D\data.ms

(3) Pentachlorophenol

10.889min (-0.010) 39.01 ug/mL

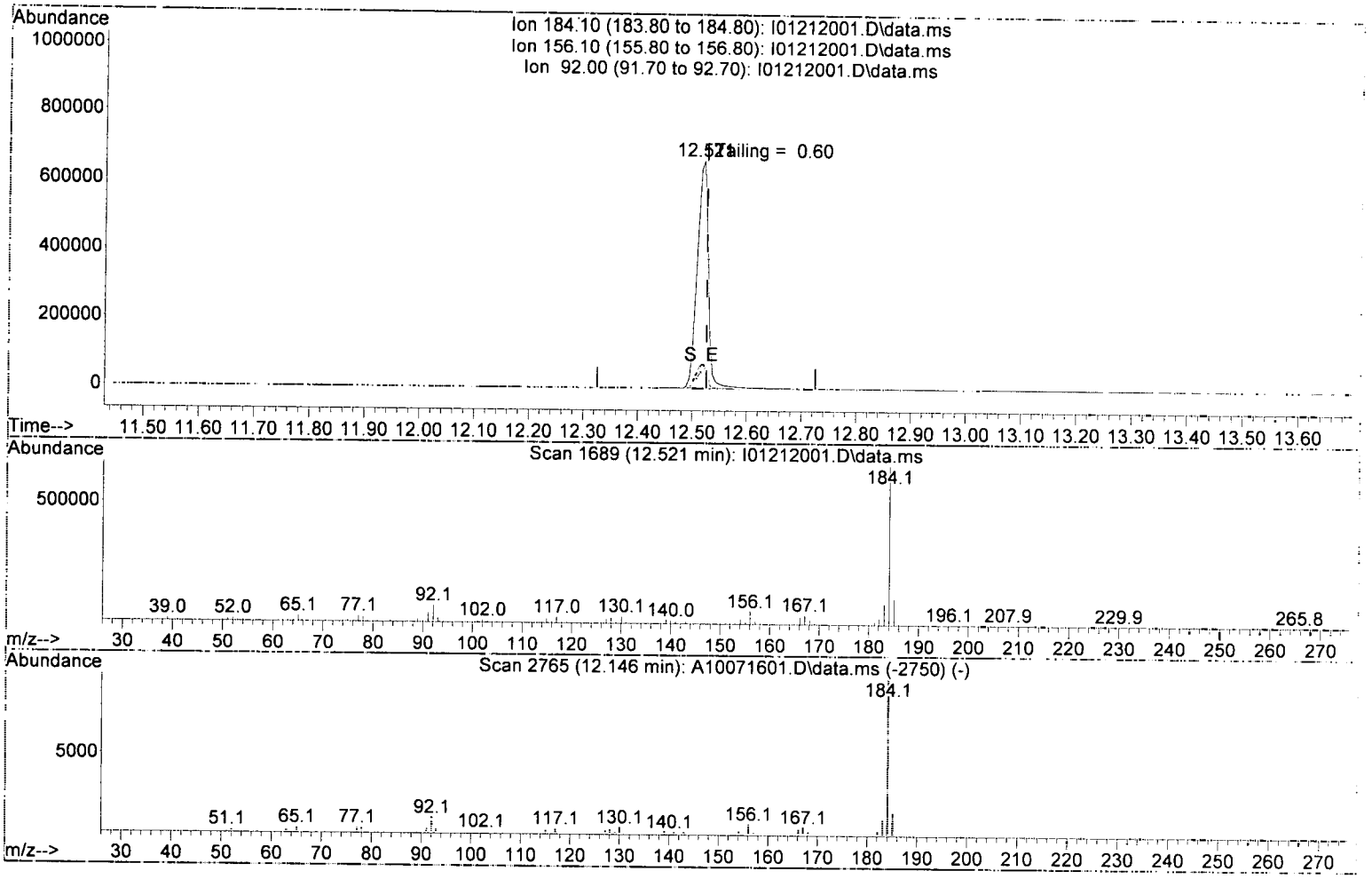
response 256624

Ion	Exp%	Act%
265.80	100.00	100.00
164.90	47.40	38.27
201.90	26.10	21.67
129.90	22.80	18.40

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212001.D
Acq On : 21 Jan 2020 13:18
Operator : JK /AMS /DTH
Sample : 0A21026-TUN1
Misc : 1x, A20A236 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Jan 21 14:49:06 2020
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Mon Jan 06 12:06:36 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212001.D\data.ms

(6) Benzidine

12.521min (-0.005) 34.20 ug/mL

response 946063

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	9.40	7.58
92.00	15.50	10.46
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

From:
0A21026-TUN1
SV-GCMS9

First Column Area Counts		Percent Breakdown	
DDE	14760		
DDD	77168		
DDT	2893314	3.08	PASS

Breakdown must be less than 20% to accept sample data.

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212001.D
Acq On : 21 Jan 2020 13:18
Operator : JK /AMS /DTH
Sample : 0A21026-TUN1
Misc : 1x, A20A236 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Jan 21 14:49:06 2020
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Mon Jan 06 12:06:36 2020
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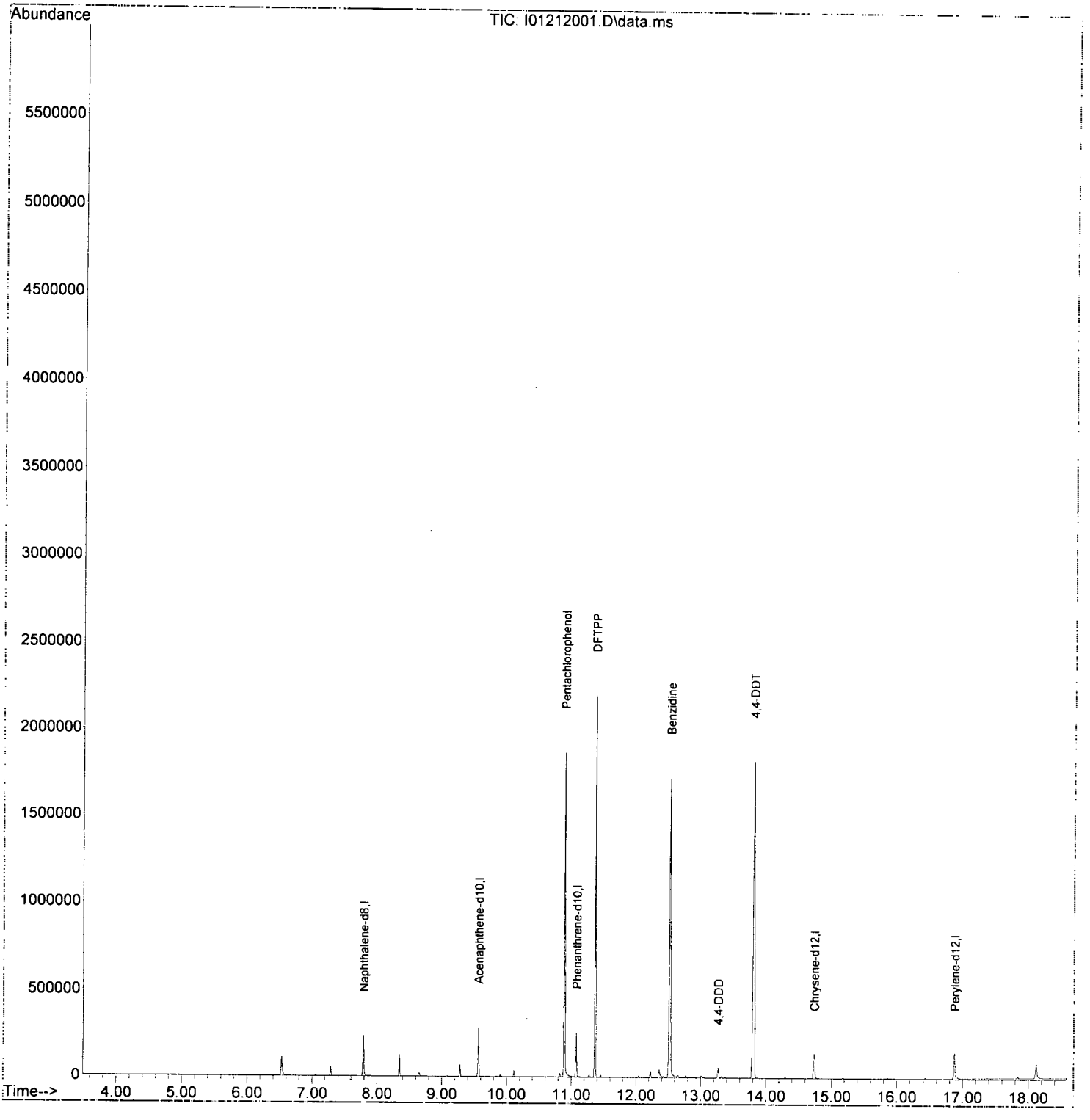
InstName : SV-GCMS9



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212002.D
Acq On : 21 Jan 2020 13:45
Operator : JK /AMS /DTH
Sample : 0A21026-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 14:51:28 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

AMS 1/20/21

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	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	130	0.00
2	T	N-Nitrosodimethylamine	1000.000	1167.688	-16.8	150	-0.02
3	T	Pyridine	1000.000	1095.220	-9.5	134	-0.02
4	S	2-Fluorophenol (Surr)	1000.000	1041.859	-4.2	137	-0.01
5	S	Phenol-d6 (Surr)	1000.000	1097.469	-9.7	133	0.00
6	T	Phenol	1000.000	1108.454	-10.8	131	0.00
7	T	Aniline	1000.000	727.106	27.3#	84	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1355.748	-35.6#	172	0.00
9	T	2-Chlorophenol	1000.000	1085.408	-8.5	130	0.00
10	T	1,3-Dichlorobenzene	1000.000	1059.626	-6.0	134	0.00
11	T	1,4-Dichlorobenzene	1000.000	1019.958	-2.0	129	0.00
12	T	Benzyl alcohol	1000.000	980.380	2.0	135	0.00
13	T	1,2-Dichlorobenzene	1000.000	1013.988	-1.4	128	0.00
14	T	2-Methylphenol	1000.000	1096.039	-9.6	131	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	1032.308	-3.2	135	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1113.855	-11.4	134	0.00
17	T	3+4-Methylphenol	1000.000	1137.138	-13.7	133	0.00
18	T	Hexachloroethane	1000.000	1112.311	-11.2	142	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1126.011	-12.6	135	0.00
20	T	Nitrobenzene	1000.000	1144.704	-14.5	137	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	128	0.00
22	T	Isophorone	1000.000	1095.430	-9.5	132	0.00
23	T	2-Nitrophenol	1000.000	1270.681	-27.1#	149	0.00
24	T	2,4-Dimethylphenol	1000.000	1101.121	-10.1	131	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1104.286	-10.4	132	0.00
26	T	Benzoic acid	2000.000	1918.770	4.1	142	0.00
27	T	2,4-Dichlorophenol	1000.000	1123.527	-12.4	134	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1055.170	-5.5	130	0.00
29	T	Naphthalene	1000.000	1041.623	-4.2	129	0.00
30	T	4-Chloroaniline	1000.000	930.606	6.9	106	0.00
31	T	Hexachlorobutadiene	1000.000	1101.167	-10.1	136	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1108.700	-10.9	138	0.00
33	T	2-Methylnaphthalene	1000.000	1067.561	-6.8	130	0.00
34	T	1-Methylnaphthalene	1000.000	1046.997	-4.7	129	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	131	0.00
36	T	Hexachlorocyclopentadiene	1000.000	963.674	3.6	117	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1078.158	-7.8	136	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1087.709	-8.8	135	0.00
39	T	1,1'-Biphenyl	1000.000	1045.984	-4.6	128	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1042.520	-4.3	130	0.00
41	T	2-Chloronaphthalene	1000.000	1053.010	-5.3	130	0.00
42	T	2-Nitroaniline	1000.000	1117.791	-11.8	142	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1063.813	-6.4	130	0.00
44	T	1,4-Dinitrobenzene	1000.000	1207.982	-20.8#	159	0.00
45	T	Dimethyl phthalate	1000.000	1123.926	-12.4	136	0.00
46	T	1,3-Dinitrobenzene	1000.000	1118.818	-11.9	142	0.00
47	T	2,6-Dinitrotoluene	1000.000	1139.237	-13.9	136	0.00
48	T	1,2-Dinitrobenzene	1000.000	1100.320	-10.0	136	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212002.D
Acq On : 21 Jan 2020 13:45
Operator : JK /AMS /DTH
Sample : 0A21026-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 14:51:28 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

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)
49	T	Acenaphthylene	1000.000	1063.991	-6.4	126	0.00
50	T	3-Nitroaniline	1000.000	1039.365	-3.9	119	0.00
51	T	Acenaphthene	1000.000	1022.075	-2.2	129	0.00
52	T	2,4-Dinitrophenol	1000.000	1126.201	-12.6	177	0.00
53	T	4-Nitrophenol	1000.000	1020.654	-2.1	133	0.00
54	T	2,4-Dinitrotoluene	1000.000	1088.454	-8.8	143	0.00
55	T	Dibenzofuran	1000.000	1068.530	-6.9	131	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1107.838	-10.8	137	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1001.061	-0.1	127	0.00
58	T	Diethyl phthalate	1000.000	1167.158	-16.7	139	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1095.266	-9.5	135	0.00
60	T	Fluorene	1000.000	1112.600	-11.3	135	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1085.629	-8.6	138	0.00
62	T	4-Nitroaniline	1000.000	1016.619	-1.7	128	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1256.002	-25.6#	186	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	138	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1080.823	-8.1	134	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1098.232	-9.8	139	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1072.536	-7.3	144	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1079.492	-7.9	141	0.00
69	T	Hexachlorobenzene	1000.000	1044.490	-4.4	142	0.00
70	T	Pentachlorophenol (PCP)	1000.000	994.074	0.6	135	0.00
71	T	Phenanthrene	1000.000	1011.607	-1.2	135	0.00
72	T	Anthracene	1000.000	1070.495	-7.0	133	0.00
73	T	Carbazole	1000.000	969.768	3.0	131	0.00
74	T	Di-n-butyl phthalate	1000.000	1176.109	-17.6	142	0.00
75	T	Fluoranthene	1000.000	1156.365	-15.6	140	0.00
76	T	Benzidine	2000.000	727.369	63.6#	40	0.00
77	T	Pyrene	1000.000	1145.385	-14.5	140	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	137	-0.01
79	S	Terphenyl-d14 (Surr)	1000.000	1136.076	-13.6	145	0.00
80	T	Butyl benzyl phthalate	1000.000	1072.964	-7.3	150	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1163.638	-16.4	163	0.00
82	T	3,3-Dichlorobenzidine	2000.000	1853.297	7.3	133	-0.01
83	T	Benz(a)anthracene	1000.000	1126.874	-12.7	146	-0.01
84	T	Chrysene	1000.000	1015.043	-1.5	136	-0.01
85	T	Bis(2-ethylhexyl) phthalate	1000.000	990.850	0.9	134	-0.01
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	133	-0.01
87	T	Di-n-octyl phthalate	1000.000	1194.789	-19.5	166	-0.02
88	T	Benzo(b)fluoranthene	1000.000	1150.696	-15.1	140	-0.02
89	T	Benzo(k)fluoranthene	1000.000	1164.779	-16.5	141	-0.01
90	T	Benzo(b+k)fluoranthene	2000.000	2301.859	-15.1	141	-0.01
91	T	Benzo(e)pyrene	1000.000	1099.468	-9.9	133	-0.01
92	T	Benzo(a)pyrene	1000.000	1076.674	-7.7	128	-0.01
93	T	Perylene	1000.000	986.873	1.3	128	-0.01
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	130	-0.02

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212002.D
Acq On : 21 Jan 2020 13:45
Operator : JK /AMS /DTH
Sample : 0A21026-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 14:51:28 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

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)
95 T	Indeno(1,2,3-cd)pyrene	1000.000	997.633	0.2	128	-0.02
96 T	Dibenz(a,h)anthracene	1000.000	1036.192	-3.6	129	-0.02
97 T	Benzo(g,h,i)perylene	1000.000	1042.387	-4.2	121	-0.02

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212002.D
Acq On : 21 Jan 2020 13:45
Operator : JK /AMS /DTH
Sample : 0A21026-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 14:51:28 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.530	152	105429	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	398025	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	194436	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.077	188	367843	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.783	240	356044	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.260	264	336088	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.651	292	280756	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.279	112	73076	1041.86	ng/ml	-0.01
5) Phenol-d6 (Surr)	6.177	99	100003	1097.47	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.070	82	81025	1126.01	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.873	172	153520	1042.52	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.365	330	24639	1072.54	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.836	244	185502	1136.08	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.883	74	63346	1167.69	ng/ml	96
3) Pyridine	3.909	79	95621	1095.22	ng/ml	98
6) Phenol	6.193	94	112309	1108.45	ng/ml	97
7) Aniline	6.209	93	76472	727.11	ng/ml	82
8) Bis(2-chloroethyl) ether	6.263	93	114084	1355.75	ng/ml	96
9) 2-Chlorophenol	6.332	128	79972	1085.41	ng/ml	97
10) 1,3-Dichlorobenzene	6.477	146	86104	1059.63	ng/ml	99
11) 1,4-Dichlorobenzene	6.546	146	81109	1019.96	ng/ml	99
12) Benzyl alcohol	6.664	108	45649	980.38	ng/ml	99
13) 1,2-Dichlorobenzene	6.696	146	79613	1013.99	ng/ml	97
14) 2-Methylphenol	6.776	107	61805	1096.04	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.792	45	108730	1032.31	ng/ml	94
16) N-Nitrosodi-n-propylamine	6.921	70	59761	1113.85	ng/ml	95
17) 3+4-Methylphenol	6.926	107	79521	1137.14	ng/ml	98
18) Hexachloroethane	7.028	201	25823	1112.31	ng/ml	94
20) Nitrobenzene	7.092	77	83871	1144.70	ng/ml	97
22) Isophorone	7.322	82	155435	1095.43	ng/ml	99
23) 2-Nitrophenol	7.407	139	46095	1270.68	ng/ml	99
24) 2,4-Dimethylphenol	7.450	122	62832	1101.12	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.536	93	92340	1104.29	ng/ml	99
26) Benzoic acid	7.536	105	33425	1918.77	ng/ml	98
27) 2,4-Dichlorophenol	7.648	162	58866	1123.53	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.734	180	68770	1055.17	ng/ml	98
29) Naphthalene	7.809	128	212950	1041.62	ng/ml	100
30) 4-Chloroaniline	7.867	127	63086	930.61	ng/ml	97
31) Hexachlorobutadiene	7.942	225	36909	1101.17	ng/ml	99
32) 4-Chloro-3-methylphenol	8.349	107	62532	1108.70	ng/ml	99
33) 2-Methylnaphthalene	8.504	142	155319	1067.56	ng/ml	99
34) 1-Methylnaphthalene	8.605	142	143916	1047.00	ng/ml	99
36) Hexachlorocyclopentadiene	8.675	237	32936	963.67	ng/ml	97
37) 2,4,6-Trichlorophenol	8.793	196	39966	1078.16	ng/ml	99
38) 2,4,5-Trichlorophenol	8.835	198	39565	1087.71	ng/ml	97
39) 1,1'-Biphenyl	8.975	154	172359	1045.98	ng/ml	100
41) 2-Chloronaphthalene	9.001	162	128340	1053.01	ng/ml	99
42) 2-Nitroaniline	9.103	138	42434	1117.79	ng/ml	91
43) 2,6-Dimethylnaphthalene	9.135	156	125934	1063.81	ng/ml	98

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212002.D
Acq On : 21 Jan 2020 13:45
Operator : JK /AMS /DTH
Sample : 0A21026-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

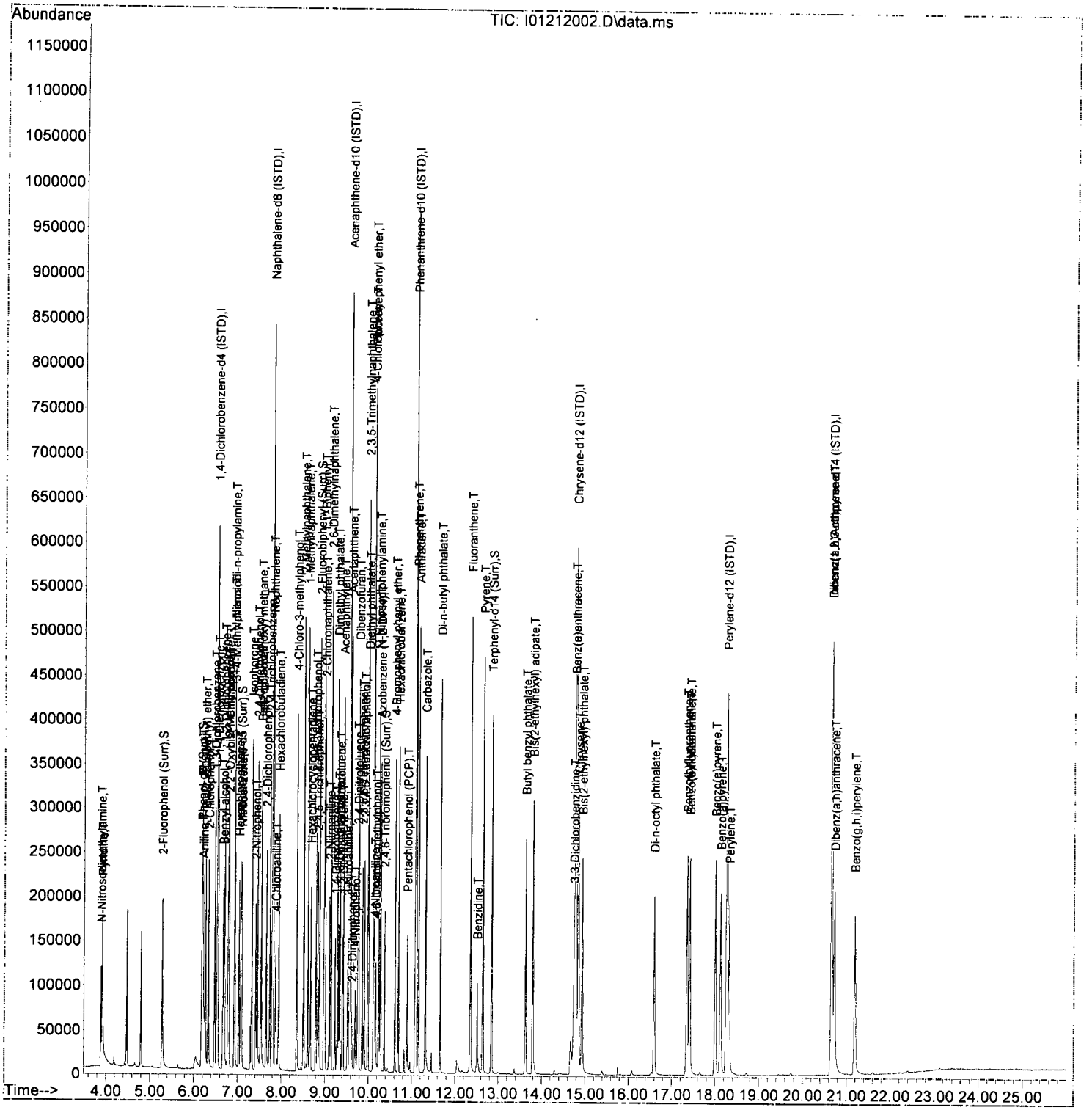
Quant Time: Jan 21 14:51:28 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.231	168	19860	1207.98	ng/ml	90
45) Dimethyl phthalate	9.279	163	149767	1123.93	ng/ml	100
46) 1,3-Dinitrobenzene	9.311	168	22783	1118.82	ng/ml	95
47) 2,6-Dinitrotoluene	9.344	165	33928	1139.24	ng/ml	90
48) 1,2-Dinitrobenzene	9.397	168	16114	1100.32	ng/ml	92
49) Acenaphthylene	9.418	152	198794	1063.99	ng/ml	99
50) 3-Nitroaniline	9.515	138	29176	1039.36	ng/ml	97
51) Acenaphthene	9.600	153	127081	1022.07	ng/ml	99
52) 2,4-Dinitrophenol	9.622	184	7538	1126.20	ng/ml	93
53) 4-Nitrophenol	9.691	139	20063	1020.65	ng/ml	93
54) 2,4-Dinitrotoluene	9.750	165	43053	1088.45	ng/ml	98
55) Dibenzofuran	9.771	168	178234	1068.53	ng/ml	97
56) 2,3,5,6-Tetrachlorophenol	9.857	232	30776	1107.84	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	9.900	232	31550	1001.06	ng/ml	98
58) Diethyl phthalate	9.996	149	140615	1167.16	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	9.985	170	115975	1095.27	ng/ml	100
60) Fluorene	10.119	166	141237	1112.60	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.114	204	68763	1085.63	ng/ml	100
62) 4-Nitroaniline	10.135	138	27122	1016.62	ng/ml	98
63) 4,6-Dinitro-2-methylph...	10.167	198	17250	1256.00	ng/ml	98
65) N-Nitrosodiphenylamine	10.237	169	119873	1080.82	ng/ml	99
66) Azobenzene (1,2-DPH)	10.274	77	142626	1098.23	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.611	248	45056	1079.49	ng/ml	98
69) Hexachlorobenzene	10.691	284	54937	1044.49	ng/ml	95
70) Pentachlorophenol (PCP)	10.889	266	20206	994.07	ng/ml	97
71) Phenanthrene	11.098	178	201659	1011.61	ng/ml	100
72) Anthracene	11.151	178	197852	1070.49	ng/ml	100
73) Carbazole	11.312	167	169151	969.77	ng/ml	99
74) Di-n-butyl phthalate	11.660	149	227640	1176.11	ng/ml	100
75) Fluoranthene	12.355	202	235184	1156.37	ng/ml	99
76) Benzidine	12.510	184	55889	727.37	ng/ml	98
77) Pyrene	12.638	202	236230	1145.38	ng/ml	98
80) Butyl benzyl phthalate	13.622	149	89854	1072.96	ng/ml	98
81) Bis(2-ethylhexyl) adipate	13.788	129	81008	1163.64	ng/ml	98
82) 3,3-Dichlorobenzidine	14.735	252	62075	1853.30	ng/ml	96
83) Benz(a)anthracene	14.762	228	208632	1126.87	ng/ml	98
84) Chrysene	14.842	228	183607	1015.04	ng/ml	99
85) Bis(2-ethylhexyl) phth...	14.928	149	115384	990.85	ng/ml	99
87) Di-n-octyl phthalate	16.591	149	177212	1194.79	ng/ml	98
88) Benzo(b)fluoranthene	17.340	252	197787	1150.70	ng/ml	99
89) Benzo(k)fluoranthene	17.409	252	200786	1164.78	ng/ml	99
90) Benzo(b+k)fluoranthene	17.409	252	412250	2301.86	ng/ml	99
91) Benzo(e)pyrene	17.992	252	187813	1099.47	ng/ml	99
92) Benzo(a)pyrene	18.115	252	162637	1076.67	ng/ml	98
93) Perylene	18.319	252	150644	986.87	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.651	276	154159	997.63	ng/ml	97
96) Dibenz(a,h)anthracene	20.720	278	146545	1036.19	ng/ml	100
97) Benzo(g,h,i)perylene	21.185	276	158508	1042.39	ng/ml	99

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

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212002.D
Acq On : 21 Jan 2020 13:45
Operator : JK /AMS /DTH
Sample : 0A21026-CCV1
Misc : 1x, A19L374@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 14:51:28 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212003.D
Acq On : 21 Jan 2020 14:20
Operator : JK /AMS /DTH
Sample : 0A21026-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

AMS 1/20/21

Quant Time: Jan 21 14:51:44 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.530	152	122775	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	475676	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	224433	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.077	188	383644	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.783	240	378228	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.260	264	337092	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.651	292	259963	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6 (Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	7.012	82	58	0.69	ng/ml	-0.06
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	0.000		0	N.D.		
7) Aniline	0.000		0	N.D.		
8) Bis(2-chloroethyl) ether	0.000		0	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	0.000		0	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	0.000		0	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.		
16) N-Nitrosodi-n-propylamine	0.000		0	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
22) Isophorone	0.000		0	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

J

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212003.D
Acq On : 21 Jan 2020 14:20
Operator : JK /AMS /DTH
Sample : 0A21026-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

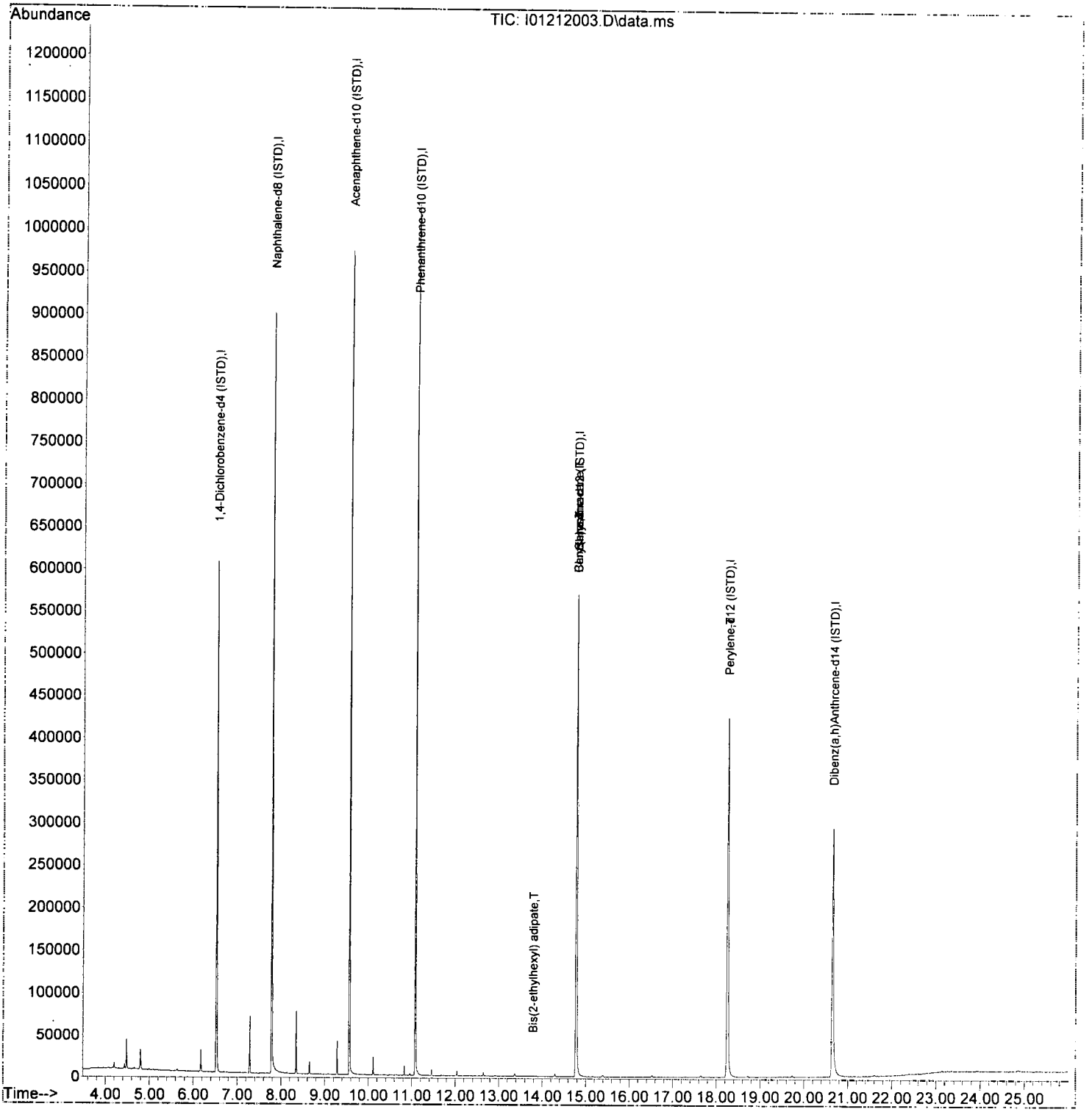
Quant Time: Jan 21 14:51:44 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	0.000		0	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	0.000		0	N.D.	
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	0.000		0	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.077	178	150	N.D.	
72) Anthracene	11.077	178	150	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	0.000		0	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.783	129	182	75.31 ng/ml	53
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.778	228	820	4.17 ng/ml	57
84) Chrysene	14.778	228	820	4.27 ng/ml	54
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.260	252	1093	7.14 ng/ml#	62
95) Indeno(1,2,3-cd)pyrene	20.651	276	85	N.D.	
96) Dibenz(a,h)anthracene	0.000		0	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212003.D
Acq On : 21 Jan 2020 14:20
Operator : JK /AMS /DTH
Sample : 0A21026-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 14:51:44 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

AMS 1/28/20

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.530	152	134123	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	483418	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	216664	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.076	188	370511	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.794	240	351202	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.270	264	356315	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.661	292	320900	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.284	112	6077	68.11 ng/ml	0.00
5) Phenol-d6 (Surr)	6.188	99	7278	62.78 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.076	82	6869	75.04 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.873	172	14979	91.28 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.365	330	2007	114.15 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.842	244	16338	101.44 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	3.947	79	55	N.D.	
6) Phenol	6.209	94	276	N.D.	
7) Aniline	6.215	93	180	N.D.	
8) Bis(2-chloroethyl) ether	6.236	93	80	N.D.	
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	6.691	108	57	41.91 ng/ml#	1
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.782	107	65	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	6.910	70	96	N.D.	
17) 3+4-Methylphenol	6.931	107	1637	18.40 ng/ml#	72
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.081	77	95	N.D.	
22) Isophorone	7.322	82	452	2.62 ng/ml#	1
23) 2-Nitrophenol	7.418	139	147	32.52 ng/ml#	1
24) 2,4-Dimethylphenol	7.514	122	144	N.D.	
25) Bis(2-chloroethoxy) me...	7.541	93	210	N.D.	
26) Benzoic acid	7.514	105	852	848.86 ng/ml#	39
27) 2,4-Dichlorophenol	7.643	162	154	14.06 ng/ml#	30
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.808	128	188624	759.66 ng/ml	100
30) 4-Chloroaniline	7.921	127	119	N.D.	
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.349	107	309	30.80 ng/ml#	1
33) 2-Methylnaphthalene	8.509	142	84821	480.02 ng/ml	99
34) 1-Methylnaphthalene	8.605	142	48171	288.54 ng/ml	99
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	8.793	196	149	29.66 ng/ml#	11
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	8.974	154	29205	159.05 ng/ml	100
41) 2-Chloronaphthalene	8.980	162	542	3.99 ng/ml#	1
42) 2-Nitroaniline	9.081	138	261	6.17 ng/ml#	1
43) 2,6-Dimethylnaphthalene	9.140	156	56405	427.59 ng/ml	98

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

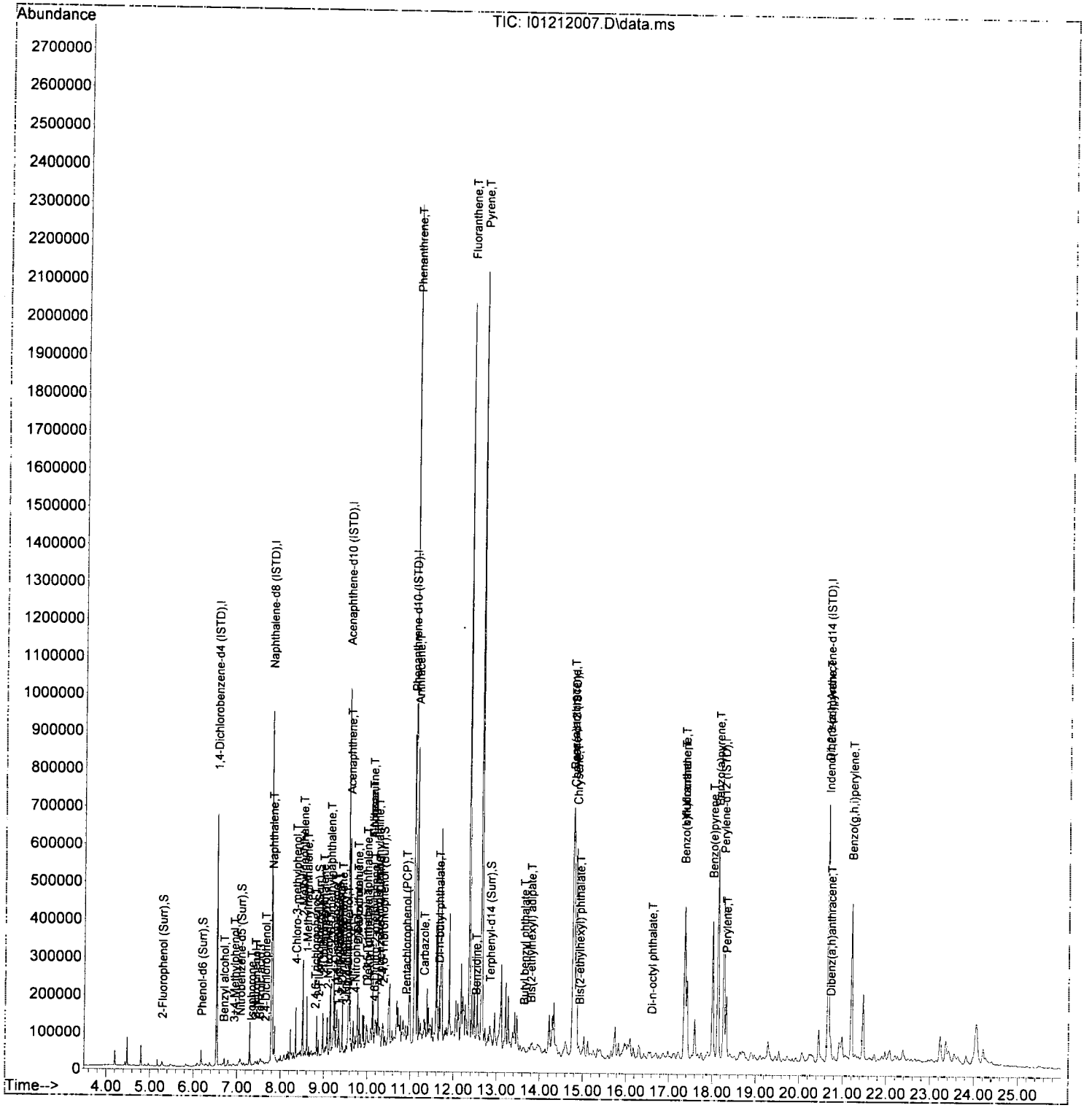
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.253	168	677	100.67 ng/ml#	59
45) Dimethyl phthalate	9.285	163	171	N.D.	
46) 1,3-Dinitrobenzene	9.311	168	107	4.72 ng/ml#	1
47) 2,6-Dinitrotoluene	9.338	165	201	6.06 ng/ml#	1
48) 1,2-Dinitrobenzene	9.402	168	116	7.11 ng/ml#	1
49) Acenaphthylene	9.418	152	45517	218.62 ng/ml	96
50) 3-Nitroaniline	9.520	138	88	2.81 ng/ml#	47
51) Acenaphthene	9.600	153	148039	1068.48 ng/ml	100
52) 2,4-Dinitrophenol	9.541	184	55	188.52 ng/ml#	1
53) 4-Nitrophenol	9.718	139	583	106.26 ng/ml#	1
54) 2,4-Dinitrotoluene	9.771	165	1322	87.61 ng/ml#	19
55) Dibenzofuran	9.771	168	18983	102.13 ng/ml	89
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	9.996	149	419	3.12 ng/ml#	1
59) 2,3,5-Trimethylnaphtha...	9.980	170	26760	226.79 ng/ml	94
60) Fluorene	10.119	166	122196	863.85 ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.135	204	79	N.D.	
62) 4-Nitroaniline	10.119	138	1440	48.44 ng/ml#	41
63) 4,6-Dinitro-2-methylph...	10.156	198	115	152.15 ng/ml#	1
65) N-Nitrosodiphenylamine	10.242	169	9500	85.04 ng/ml	81
66) Azobenzene (1,2-DPH)	10.274	77	1279	9.78 ng/ml#	1
68) 4-Bromophenyl phenyl e...	10.606	248	79	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	10.895	266	69	83.04 ng/ml#	36
71) Phenanthrene	11.109	178	991598	4938.46 ng/ml	95
72) Anthracene	11.157	178	319943	1718.61 ng/ml	99
73) Carbazole	11.312	167	22503	129.98 ng/ml	93
74) Di-n-butyl phthalate	11.659	149	766	3.93 ng/ml#	1
75) Fluoranthene	12.365	202	1065969	5203.47 ng/ml	98
76) Benzidine	12.515	184	96	167.52 ng/ml#	1
77) Pyrene	12.654	202	1306099	6287.15 ng/ml	95
80) Butyl benzyl phthalate	13.633	149	297	69.20 ng/ml#	21
81) Bis(2-ethylhexyl) adipate	13.788	129	770	83.91 ng/ml#	38
82) 3,3-Dichlorobenzidine	14.746	252	178	Below Cal #	1
83) Benz(a)anthracene	14.772	228	377934	2069.46 ng/ml	81
84) Chrysene	14.853	228	418108	2343.31 ng/ml	99
85) Bis(2-ethylhexyl) phth...	14.922	149	808	75.52 ng/ml	83
87) Di-n-octyl phthalate	16.602	149	109	84.08 ng/ml#	1
88) Benzo(b)fluoranthene	17.356	252	455418	2395.45 ng/ml	99
89) Benzo(k)fluoranthene	17.356	252	587942	3183.85 ng/ml	98
90) Benzo(b+k)fluoranthene	17.356	252	667681	3479.21 ng/ml	98
91) Benzo(e)pyrene	18.003	252	303253	1674.48 ng/ml	99
92) Benzo(a)pyrene	18.131	252	461583	2758.92 ng/ml	99
93) Perylene	18.324	252	127723	789.22 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.672	276	312467	1769.15 ng/ml	99
96) Dibenz(a,h)anthracene	20.720	278	34919	216.02 ng/ml	87
97) Benzo(g,h,i)perylene	21.207	276	379138	2181.40 ng/ml	99

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**0A21026**	Instrument:	**SV-GCMS9**
Date:	**01/21/20 07:53**	Calibration:	**A9L0505**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A21026-TUN1	Sediment	QC	QC			A19K206	A20A236
2	0A21026-CCV1	Sediment	QC	QC			A19K206	A19L374
3	0A21026-CCB1	Sediment	QC	QC			A19K206	
4	A0A0538-01RE2	Sediment	8270D LL Full List	Anchor QEA, LLC	01/27/20	0010574	A19K206	
5	0010574-DUP2	Sediment	QC	QC		0010574	A19K206	
6	A0A0538-02RE2	Sediment	8270D LL Full List	Anchor QEA, LLC	01/27/20	0010574	A19K206	
7	A0A0539-01RE2	Sediment	8270D LL Full List	Anchor QEA, LLC	01/27/20	0010574	A19K206	
8	0A21026-IBL1	Sediment	QC	QC			A19K206	

Data Entered By: AMS 2/4/20

Data Reviewed By: JM 2/5/20

Comments: Add-on
Reassessed for ALL 8270D LL FULL LIST COMPOUNDS

No Name Entered Quantitation Report (Not Reviewed)

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Data File : I01212007.D
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AMS 2/4/20 FULL LIST-CPMOS

R02 MOS

AMS 1/22/20

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Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.530	152	134123	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	483418	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	216664	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.076	188	370511	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.794	240	351202	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.270	264	356315	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.661	292	320900	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.284	112	6077	68.11 ng/ml	0.00
5) Phenol-d6 (Surr)	6.188	99	7278	62.78 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.076	82	6869	75.04 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.873	172	14979	91.28 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.365	330	2007	114.15 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.842	244	16338	101.44 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	3.947	79	55	N.D.	
6) Phenol	6.209	94	276	N.D.	
7) Aniline	6.215	93	180	N.D.	
8) Bis(2-chloroethyl) ether	6.236	93	80	N.D.	
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	6.691	108	57	41.91 ng/ml#	1
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.782	107	65	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	6.910	70	96	N.D.	
17) 3+4-Methylphenol	6.931	107	1637	18.40 ng/ml#	72
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.081	77	95	N.D.	
22) Isophorone	7.322	82	452	2.62 ng/ml#	1
23) 2-Nitrophenol	7.418	139	147	32.52 ng/ml#	1
24) 2,4-Dimethylphenol	7.514	122	144	N.D.	
25) Bis(2-chloroethoxy) me...	7.541	93	210	N.D.	
26) Benzoic acid	7.514	105	852	848.86 ng/ml#	39
27) 2,4-Dichlorophenol	7.643	162	154	14.06 ng/ml#	30
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.808	128	188624	759.66 ng/ml	100
30) 4-Chloroaniline	7.921	127	119	N.D.	
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.349	107	309	30.80 ng/ml#	1
33) 2-Methylnaphthalene	8.509	142	84821	480.02 ng/ml	99
34) 1-Methylnaphthalene	8.605	142	48171	288.54 ng/ml	99
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	8.793	196	149	29.66 ng/ml#	11
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	8.974	154	29205	159.05 ng/ml	100
41) 2-Chloronaphthalene	8.980	162	542	3.99 ng/ml#	1
42) 2-Nitroaniline	9.081	138	261	6.17 ng/ml#	1
43) 2,6-Dimethylnaphthalene	9.140	156	56405	427.59 ng/ml	98

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ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.253	168	677	100.67 ng/ml#	59
45) Dimethyl phthalate	9.285	163	171	N.D.	
46) 1,3-Dinitrobenzene	9.311	168	107	4.72 ng/ml#	1
47) 2,6-Dinitrotoluene	9.338	165	201	6.06 ng/ml#	1
48) 1,2-Dinitrobenzene	9.402	168	116	7.11 ng/ml#	1
49) Acenaphthylene	9.418	152	45517	218.62 ng/ml	96
50) 3-Nitroaniline	9.520	138	88	2.81 ng/ml#	47
51) Acenaphthene	9.600	153	148039	1068.48 ng/ml	100
52) 2,4-Dinitrophenol	9.541	184	55	188.52 ng/ml#	1
53) 4-Nitrophenol	9.718	139	583	↑106.26 ng/ml#	1 MDL=MRL
54) 2,4-Dinitrotoluene	9.771	165	1322	87.61 ng/ml#	19
55) Dibenzofuran	9.771	168	18983	102.13 ng/ml	89
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	9.996	149	419	3.12 ng/ml#	1
59) 2,3,5-Trimethylnaphtha...	9.980	170	26760	226.79 ng/ml	94
60) Fluorene	10.119	166	122196	863.85 ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.135	204	79	N.D.	
62) 4-Nitroaniline	10.119	138	1440	48.44 ng/ml#	41
63) 4,6-Dinitro-2-methylph...	10.156	198	115	152.15 ng/ml#	1
65) N-Nitrosodiphenylamine	10.242	169	9500	↑85.04 ng/ml	81 RO2
66) Azobenzene (1,2-DPH)	10.274	77	1279	9.78 ng/ml#	1
68) 4-Bromophenyl phenyl e...	10.606	248	79	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	10.895	266	69	83.04 ng/ml#	36
71) Phenanthrene	11.109	178	991598	4938.46 ng/ml	95
72) Anthracene	11.157	178	319943	1718.61 ng/ml	99
73) Carbazole	11.312	167	22503	129.98 ng/ml	93
74) Di-n-butyl phthalate	11.659	149	766	3.93 ng/ml#	1
75) Fluoranthene	12.365	202	1065969	5203.47 ng/ml	98
76) Benzidine	12.515	184	96	167.52 ng/ml#	1
77) Pyrene	12.654	202	1306099	6287.15 ng/ml	95
80) Butyl benzyl phthalate	13.633	149	297	↑69.20 ng/ml#	21 MDL=MRL
81) Bis(2-ethylhexyl) adipate	13.788	129	770	83.91 ng/ml#	38
82) 3,3-Dichlorobenzidine	14.746	252	178	Below Cal #	1
83) Benz(a)anthracene	14.772	228	377934	2069.46 ng/ml	81
84) Chrysene	14.853	228	418108	2343.31 ng/ml	99
85) Bis(2-ethylhexyl) phth...	14.922	149	808	75.52 ng/ml	83
87) Di-n-octyl phthalate	16.602	149	109	84.08 ng/ml#	1
88) Benzo(b)fluoranthene	17.356	252	455418	2395.45 ng/ml	99
89) Benzo(k)fluoranthene	~~17.356~~	~~252~~	~~587942~~	~~3183.85 ng/ml~~	~~98~~ MI-MOS
90) Benzo(b+k)fluoranthene	17.356	252	667681	3479.21 ng/ml	98
91) Benzo(e)pyrene	18.003	252	303253	1674.48 ng/ml	99
92) Benzo(a)pyrene	18.131	252	461583	2758.92 ng/ml	99
93) Perylene	18.324	252	127723	789.22 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.672	276	312467	1769.15 ng/ml	99
96) Dibenz(a,h)anthracene	20.720	278	34919	216.02 ng/ml	87
97) Benzo(g,h,i)perylene	21.207	276	379138	2181.40 ng/ml	99

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

Quantitation Report (Qedit)

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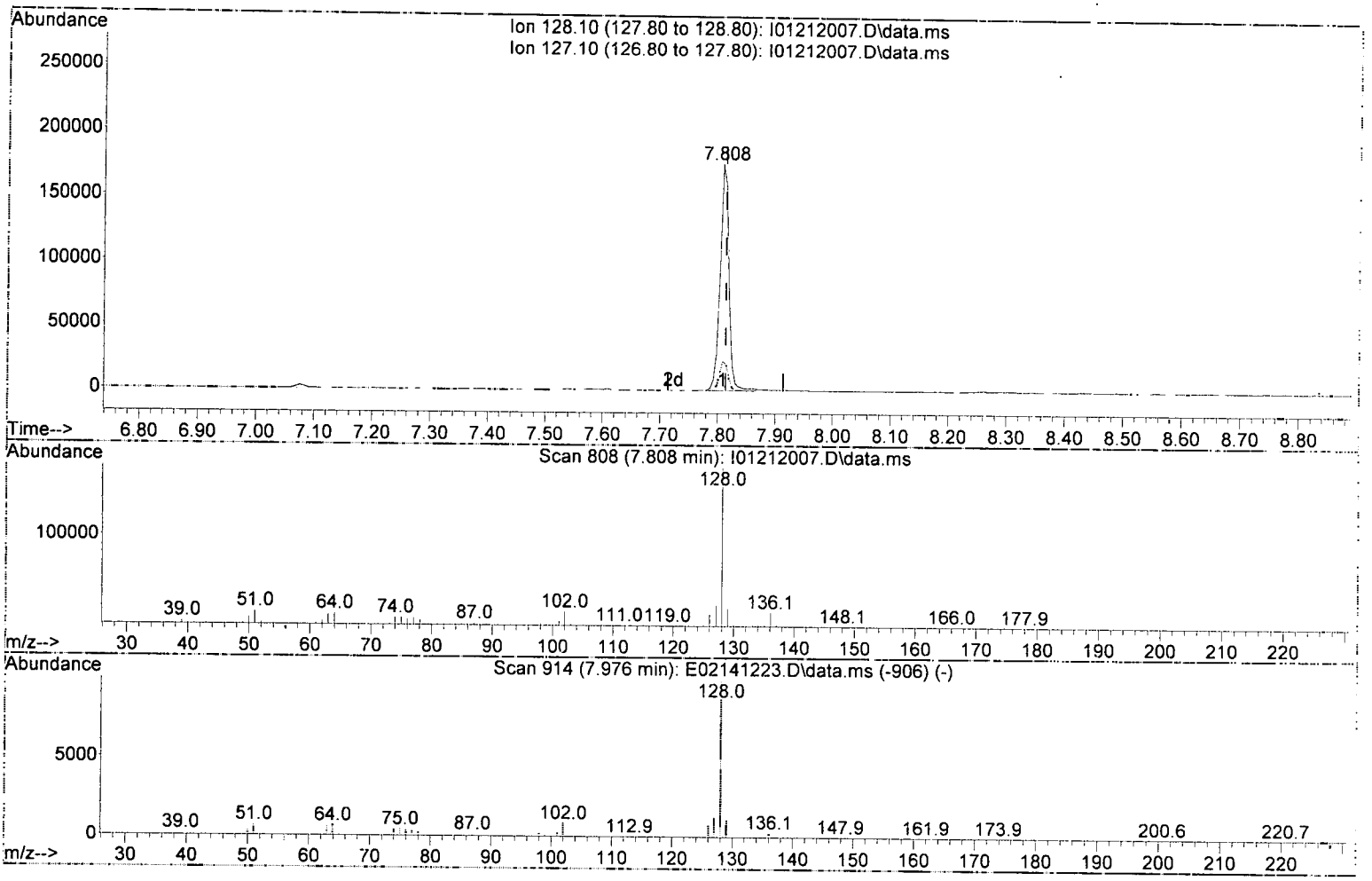
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(29) Naphthalene (T)

7.808min (-0.005) 759.66 ng/ml

response 188624

Ion	Exp%	Act%
128.10	100.00	100.00
127.10	13.10	13.07
0.00	0.00	0.00
0.00	0.00	0.00

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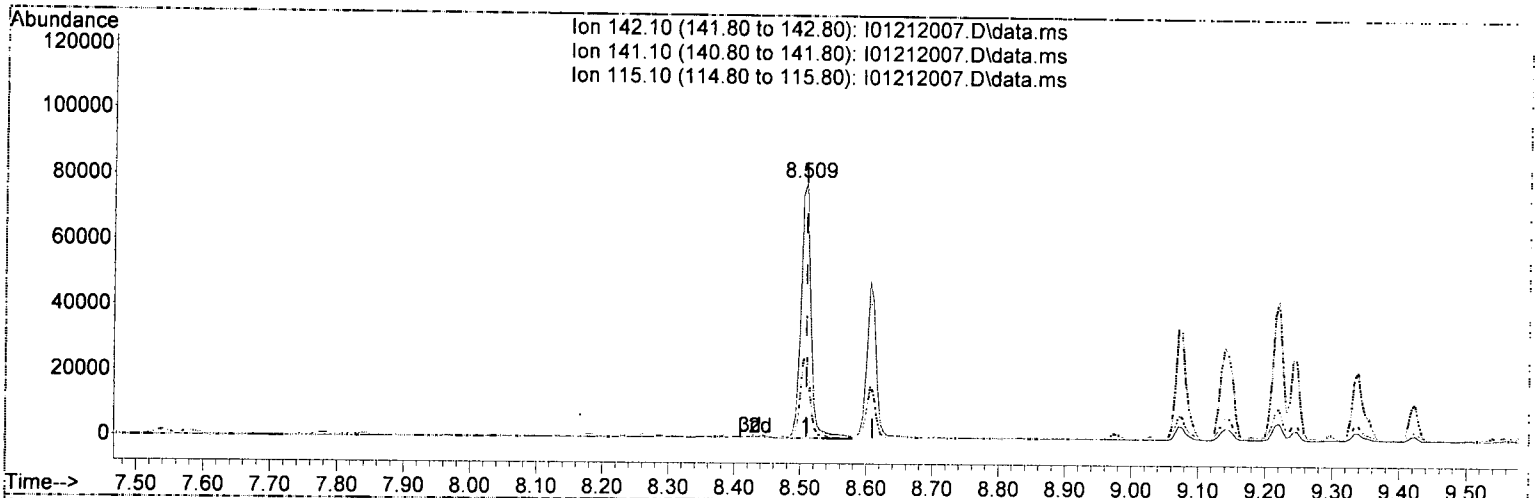

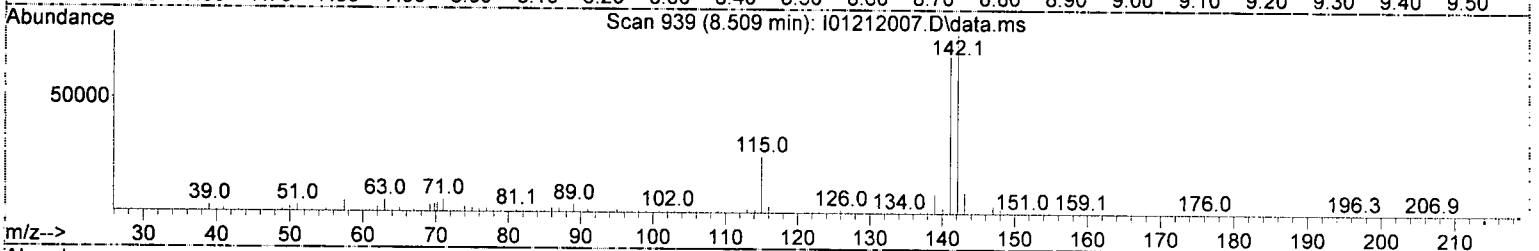

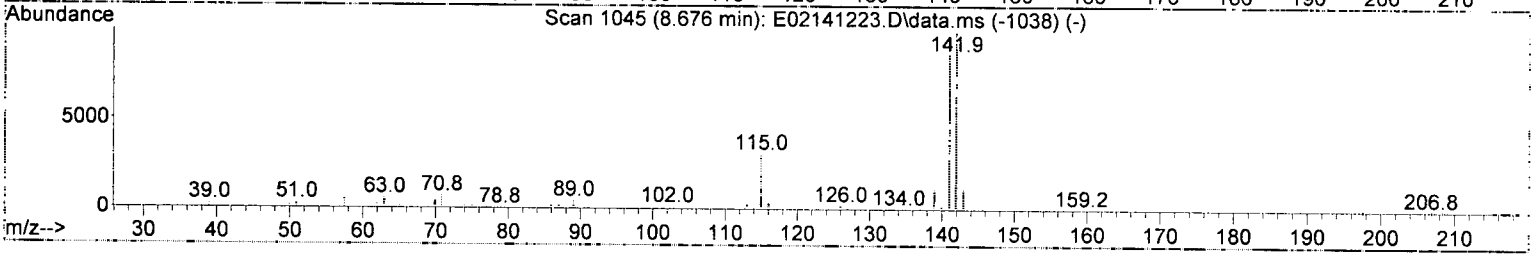

TIC: I01212007.D\data.ms

(33) 2-Methylnaphthalene (T)

8.509min (-0.000) 480.02 ng/ml

response 84821

Ion	Exp%	Act%
142.10	100.00	100.00
141.10	86.70	88.10
115.10	32.00	31.54
0.00	0.00	0.00

Quantitation Report (Qedit)

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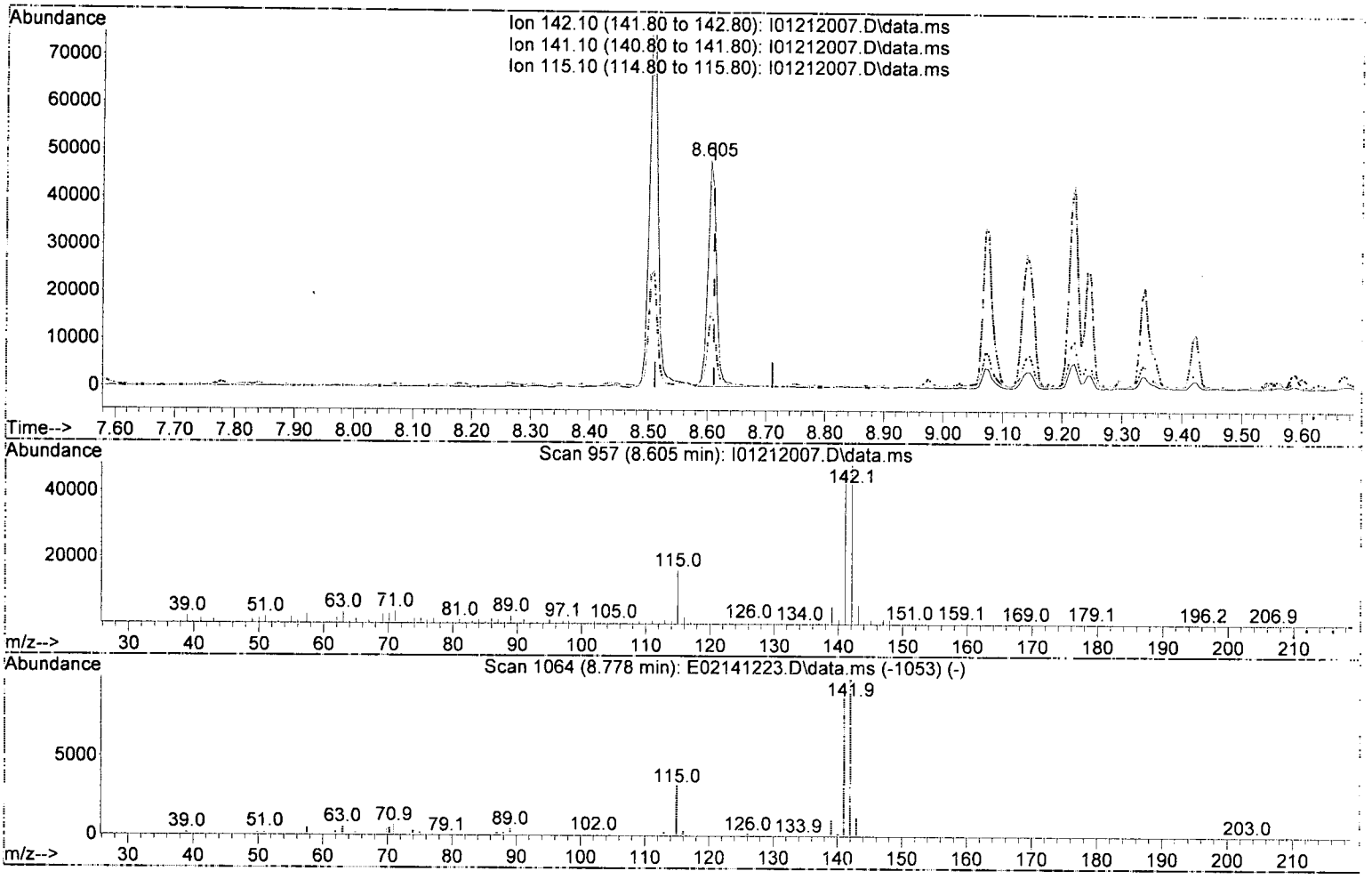

TIC: I01212007.D\data.ms

(34) 1-Methylnaphthalene (T)

8.605min (-0.005) 288.54 ng/ml

response 48171

Ion	Exp%	Act%
142.10	100.00	100.00
141.10	89.70	89.27
115.10	33.70	33.27
0.00	0.00	0.00

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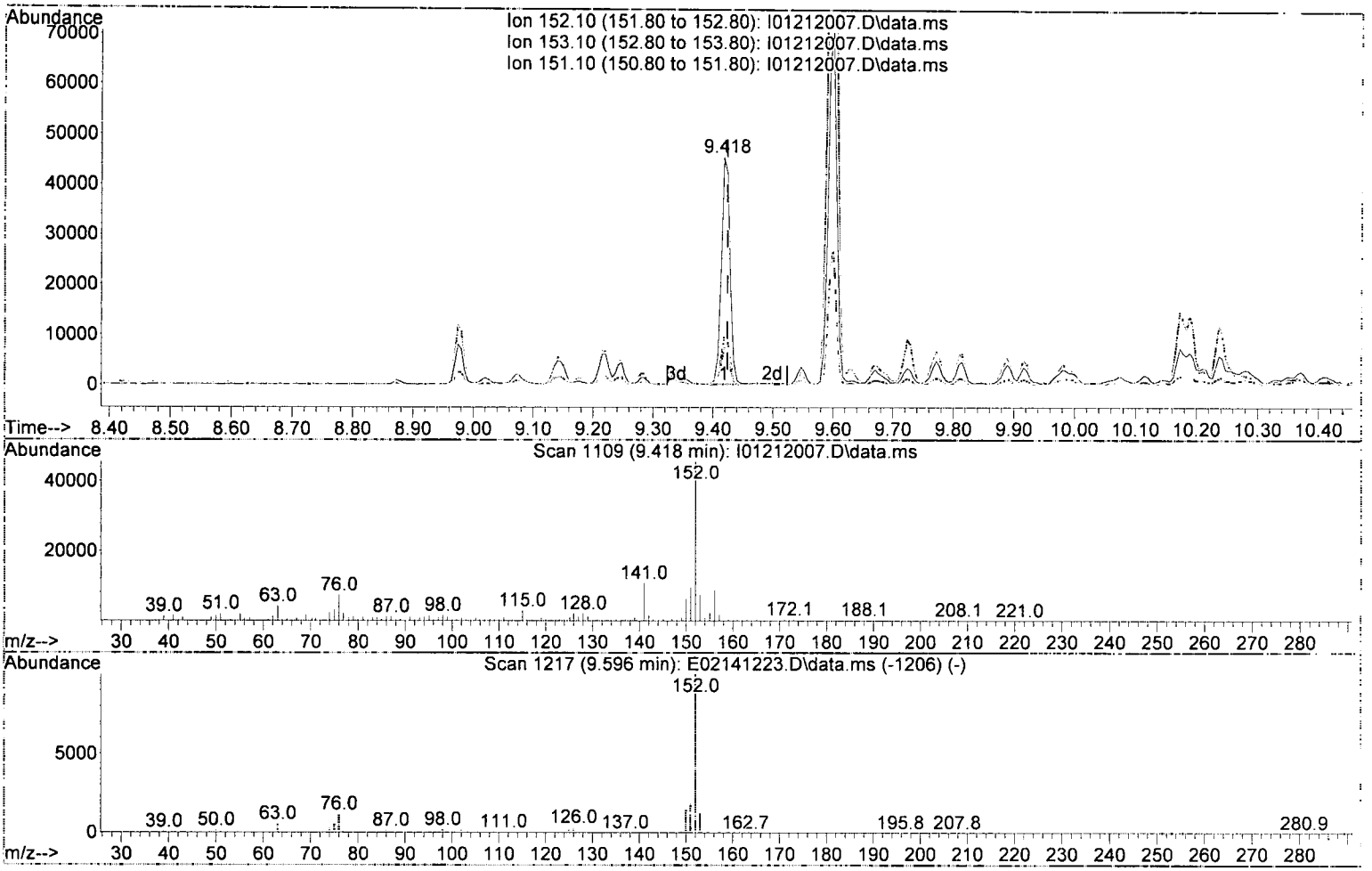

TIC: I01212007.D\data.ms

(49) Acenaphthylene (T)

9.418min (-0.005) 218.62 ng/ml

response 45517

Ion	Exp%	Act%
152.10	100.00	100.00
153.10	13.50	16.27
151.10	20.40	21.18
0.00	0.00	0.00

Quantitation Report (Qedit)

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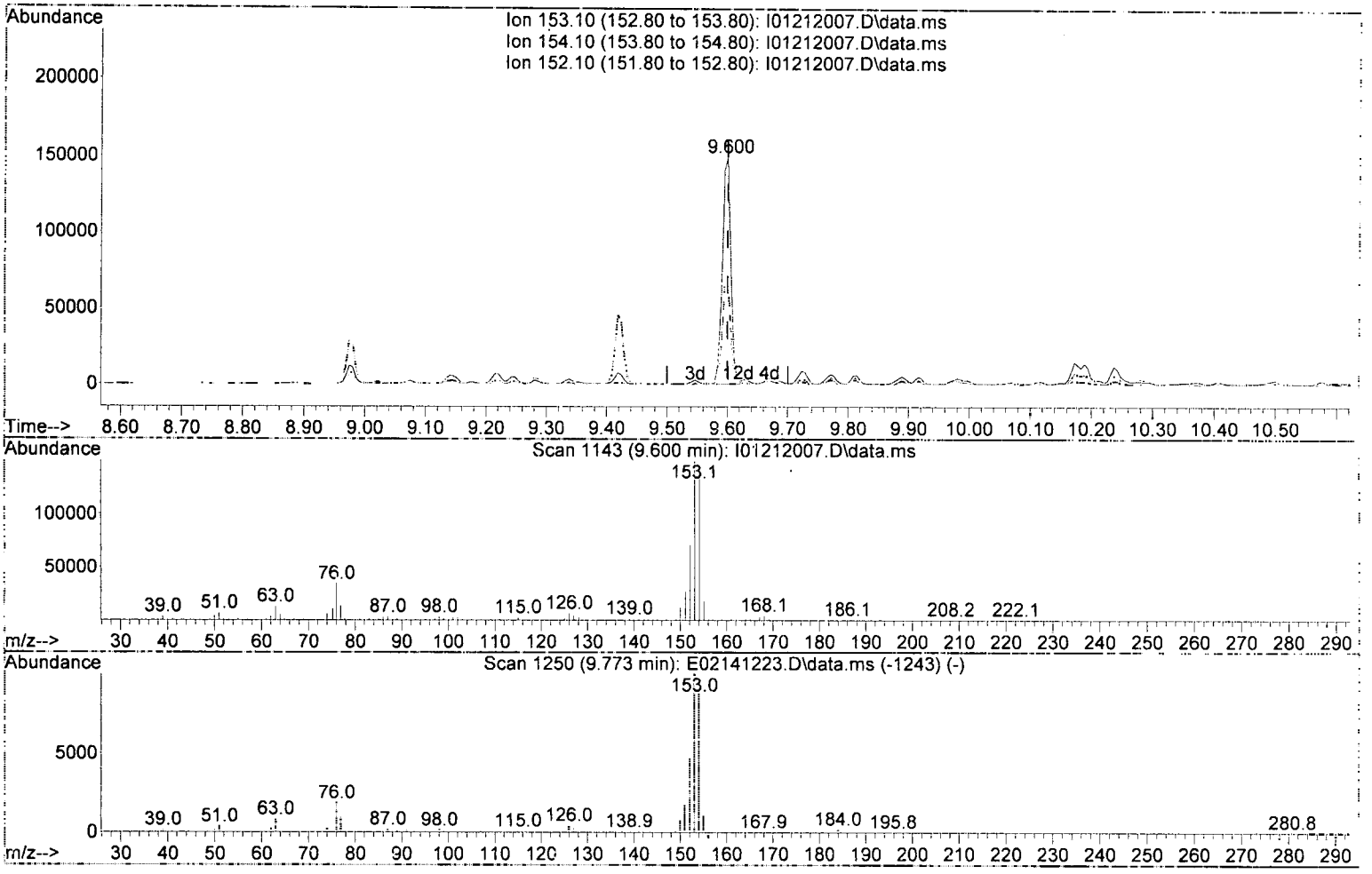
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(51) Acenaphthene (T)

9.600min (0.000) 1068.48 ng/ml

response 148039

Ion	Exp%	Act%
153.10	100.00	100.00
154.10	91.90	91.66
152.10	47.50	47.47
0.00	0.00	0.00

Quantitation Report (Qedit)

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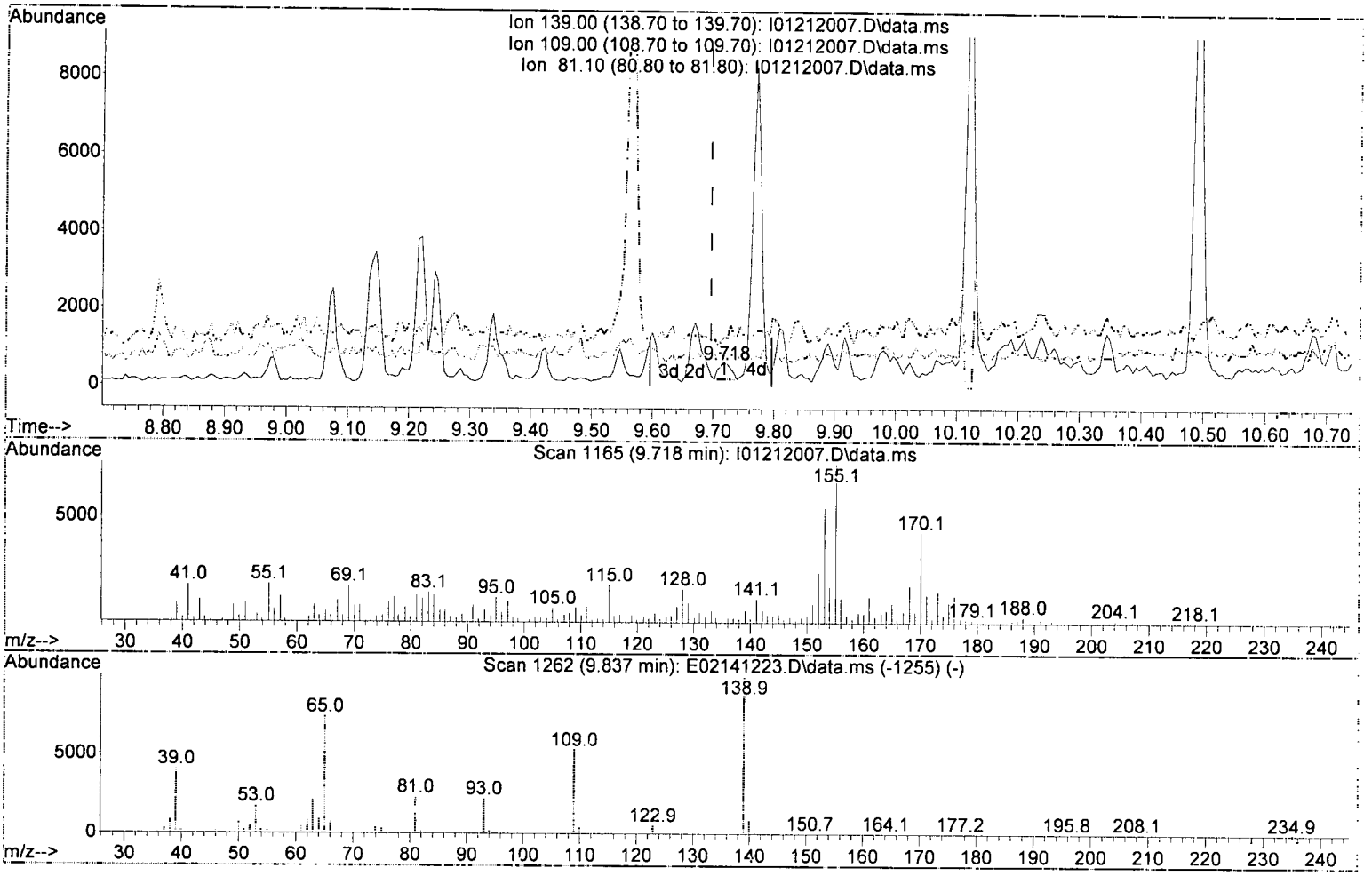


TIC: I01212007.D\data.ms

(53) 4-Nitrophenol (T)

9.718min (+ 0.021) 106.26 ng/ml

response 583

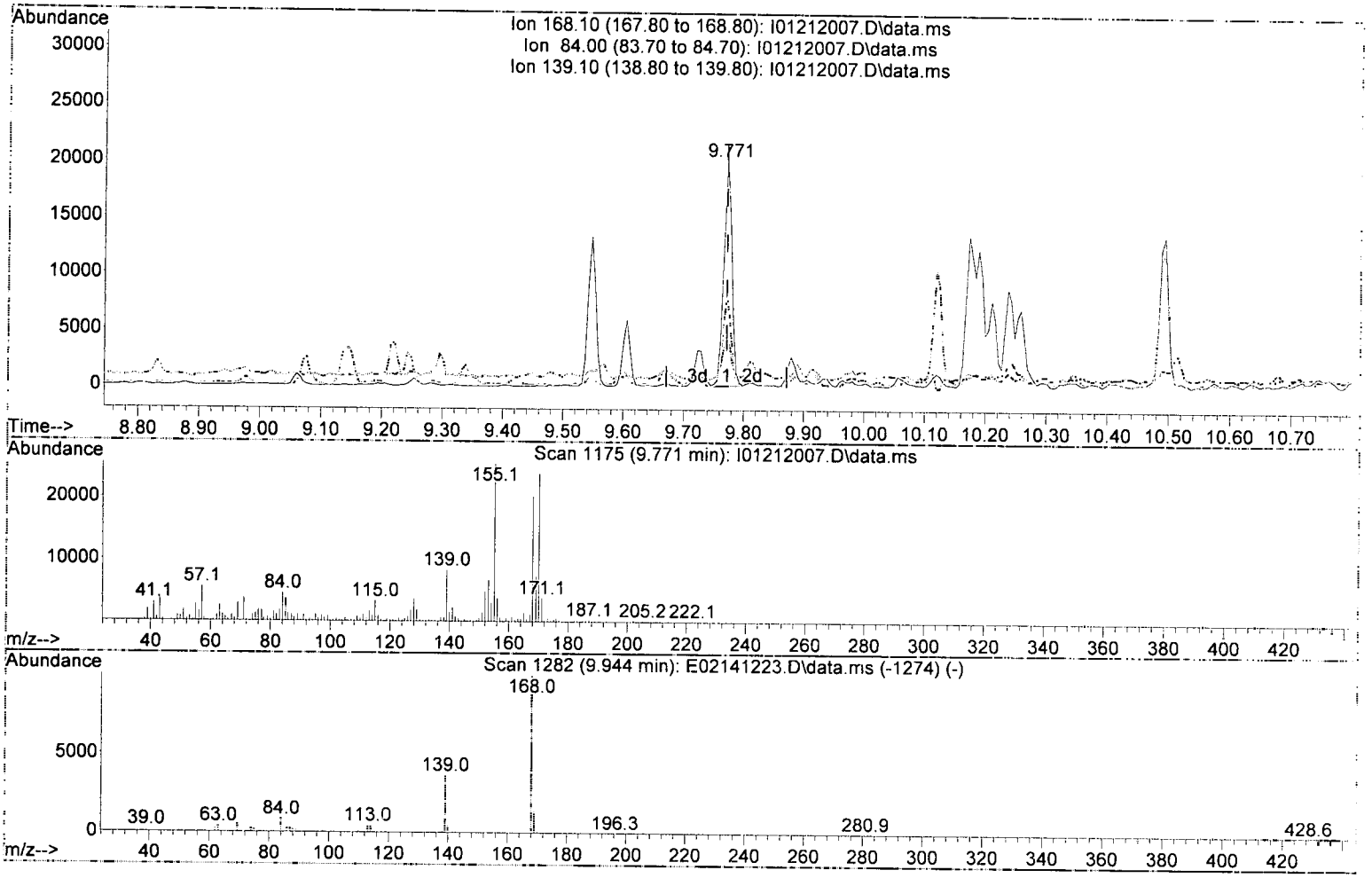
Ion	Exp%	Act%
139.00	100.00	100.00
109.00	61.50	121.59#
81.10	31.00	215.85#
0.00	0.00	0.00

MDLMRL

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(55) Dibenzofuran (T)

9.771min (-0.000) 102.13 ng/ml

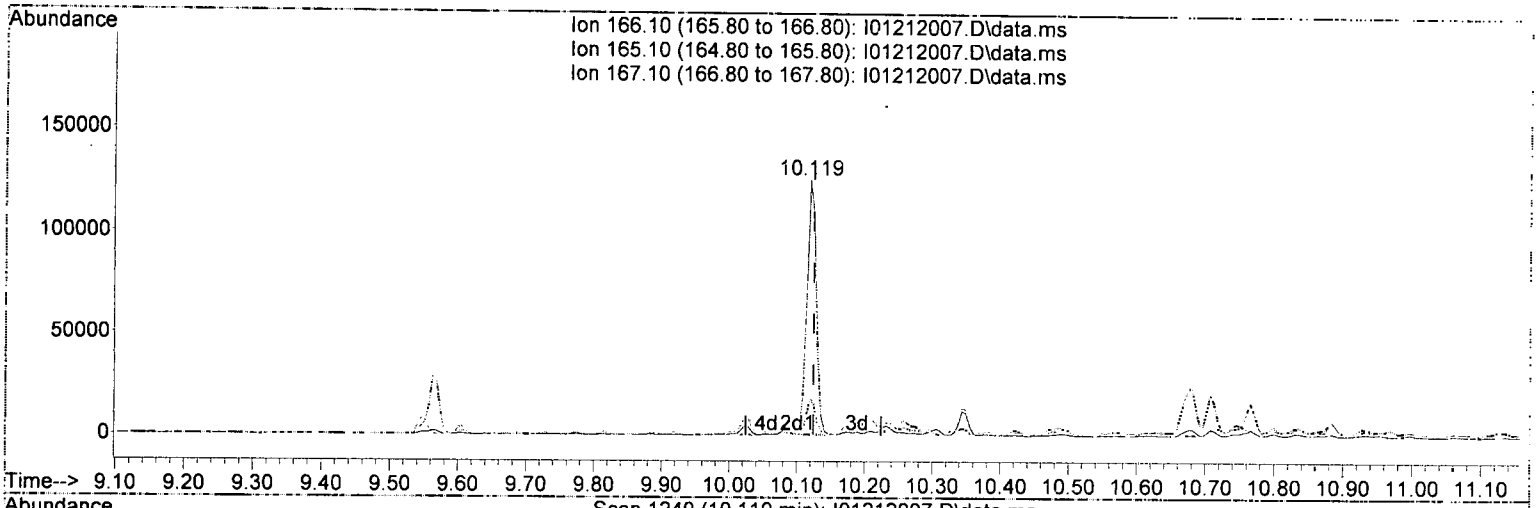
response 18983

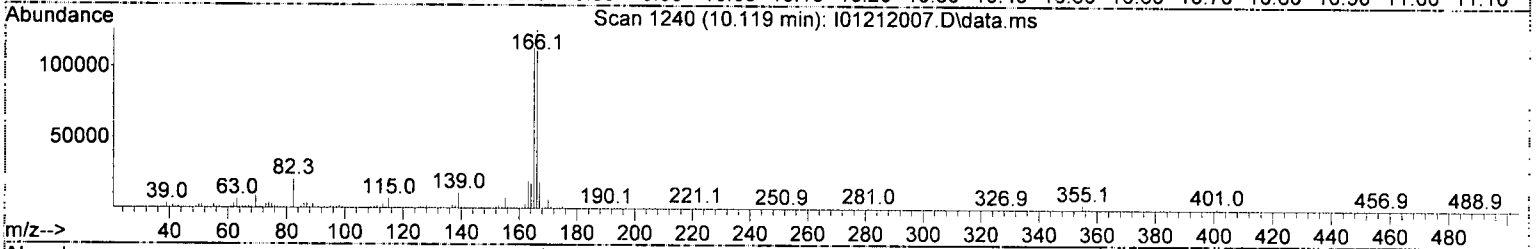
Ion	Exp%	Act%
168.10	100.00	100.00
84.00	10.20	22.30
139.10	38.20	41.13
0.00	0.00	0.00

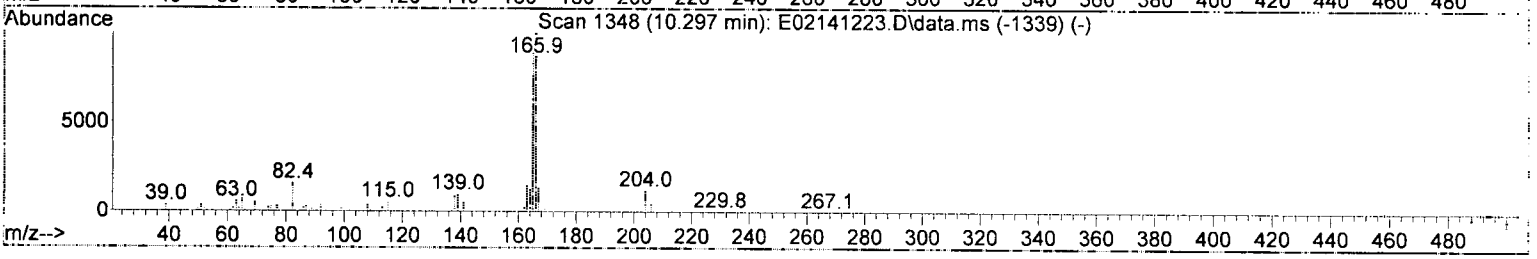
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I01212007.D\data.ms

(60) Fluorene (T)

10.119min (-0.005) 863.85 ng/ml

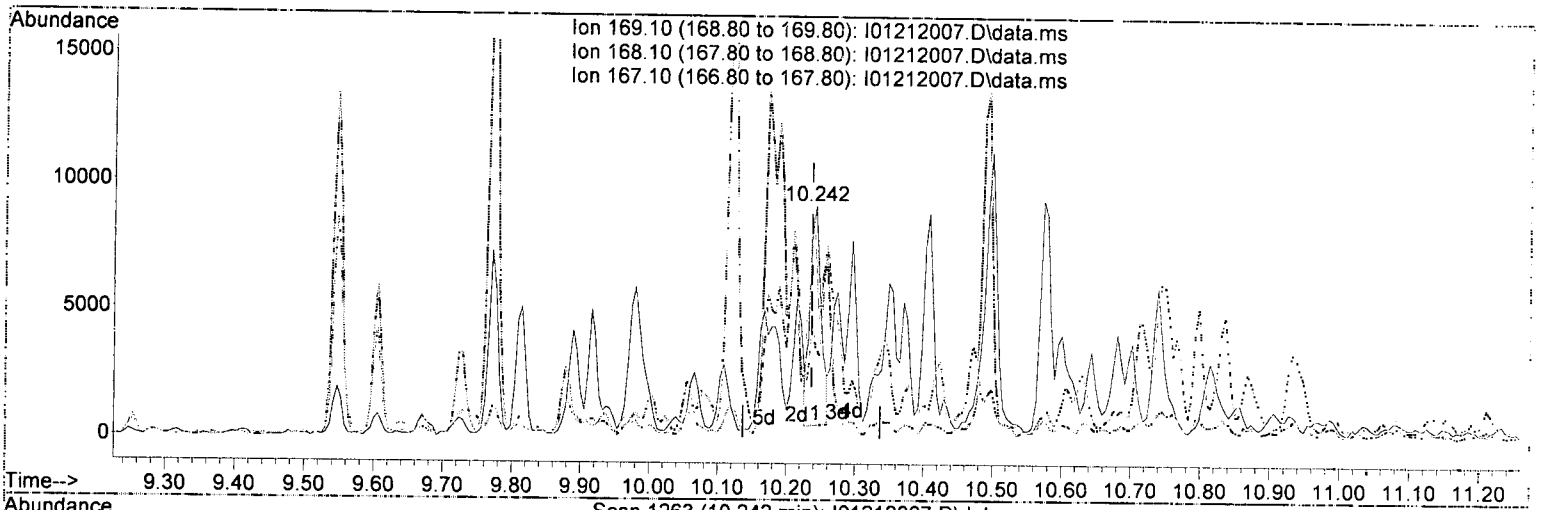
response 122196

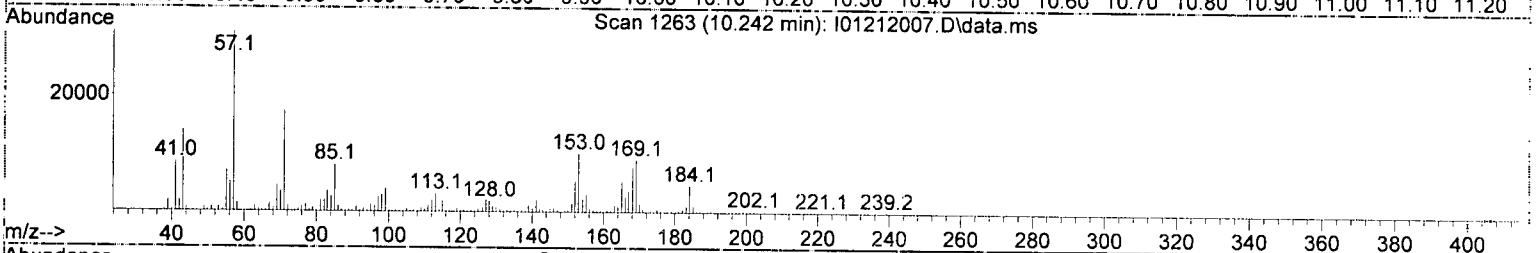
Ion	Exp%	Act%
166.10	100.00	100.00
165.10	92.80	93.15
167.10	13.30	14.44
0.00	0.00	0.00

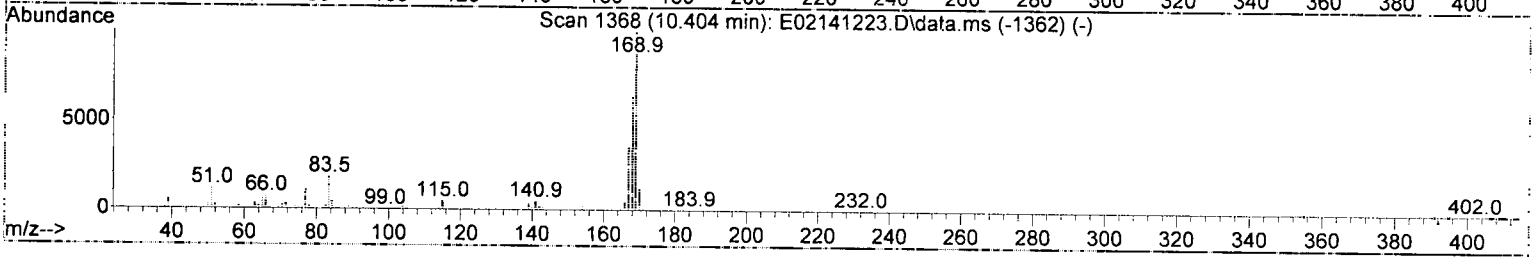
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I01212007.D\data.ms

(65) N-Nitrosodiphenylamine (T)

10.242min (+ 0.005) 85.04 ng/ml

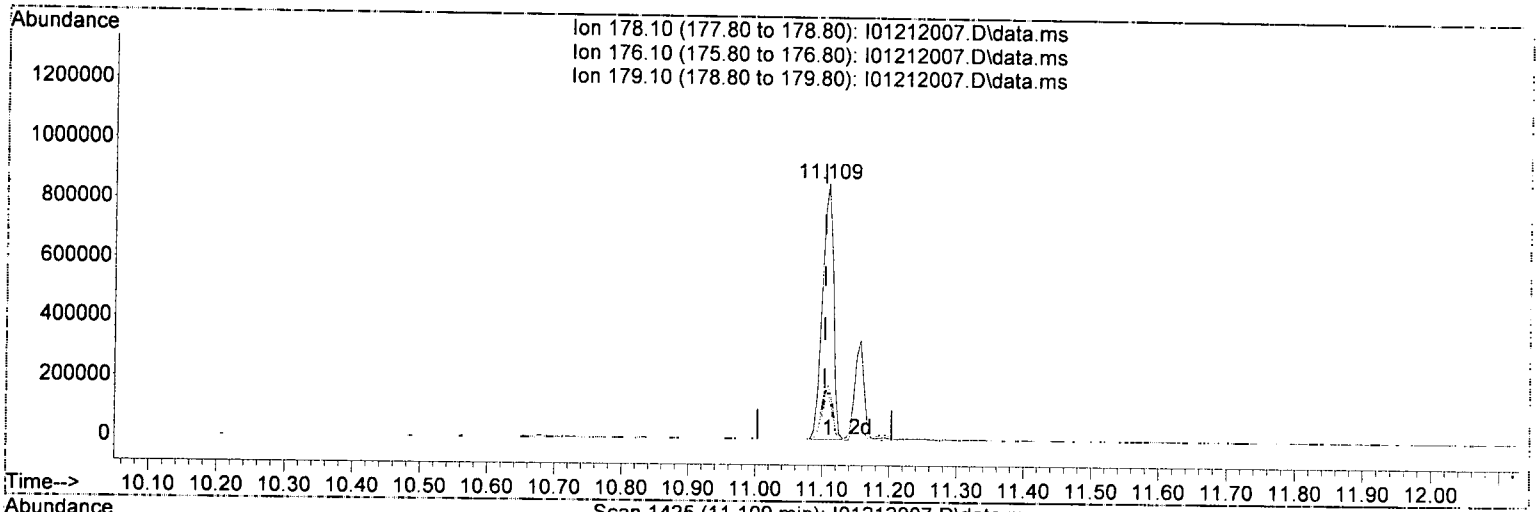
response 9500

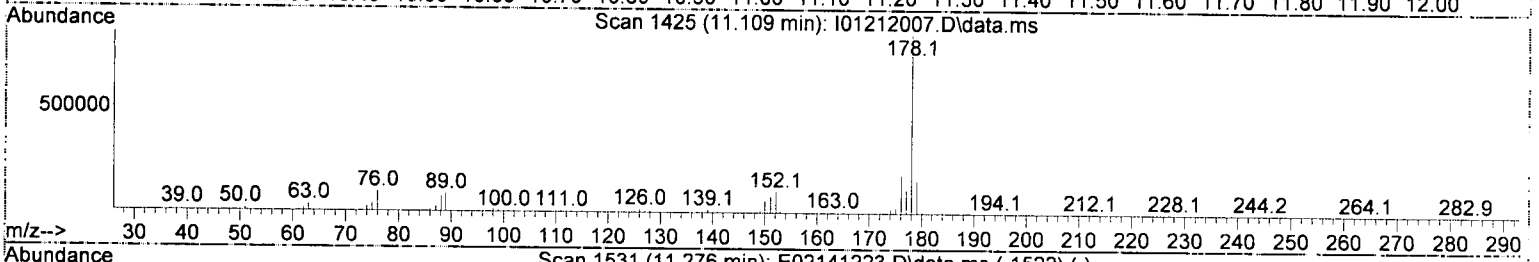
Ion	Exp%	Act%
169.10	100.00	100.00
168.10	65.50	85.62
167.10	35.40	39.14
0.00	0.00	0.00

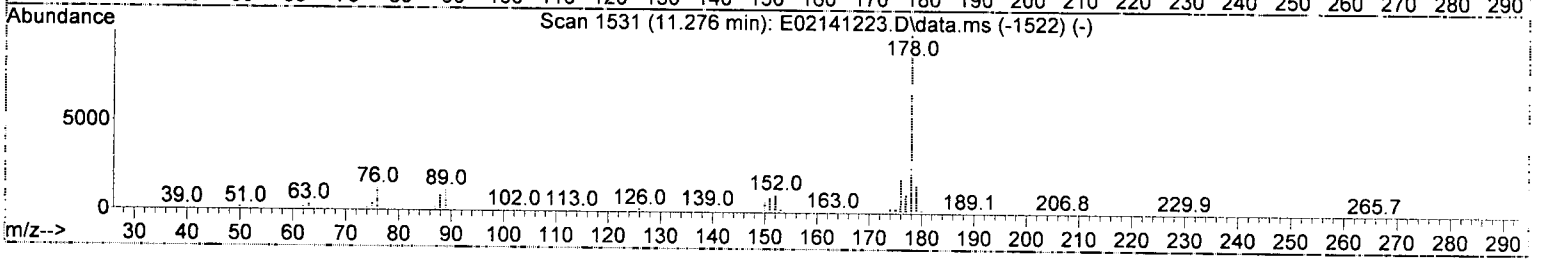
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I01212007.D\data.ms

(71) Phenanthrene (T)

11.109min (+ 0.005) 4938.46 ng/ml

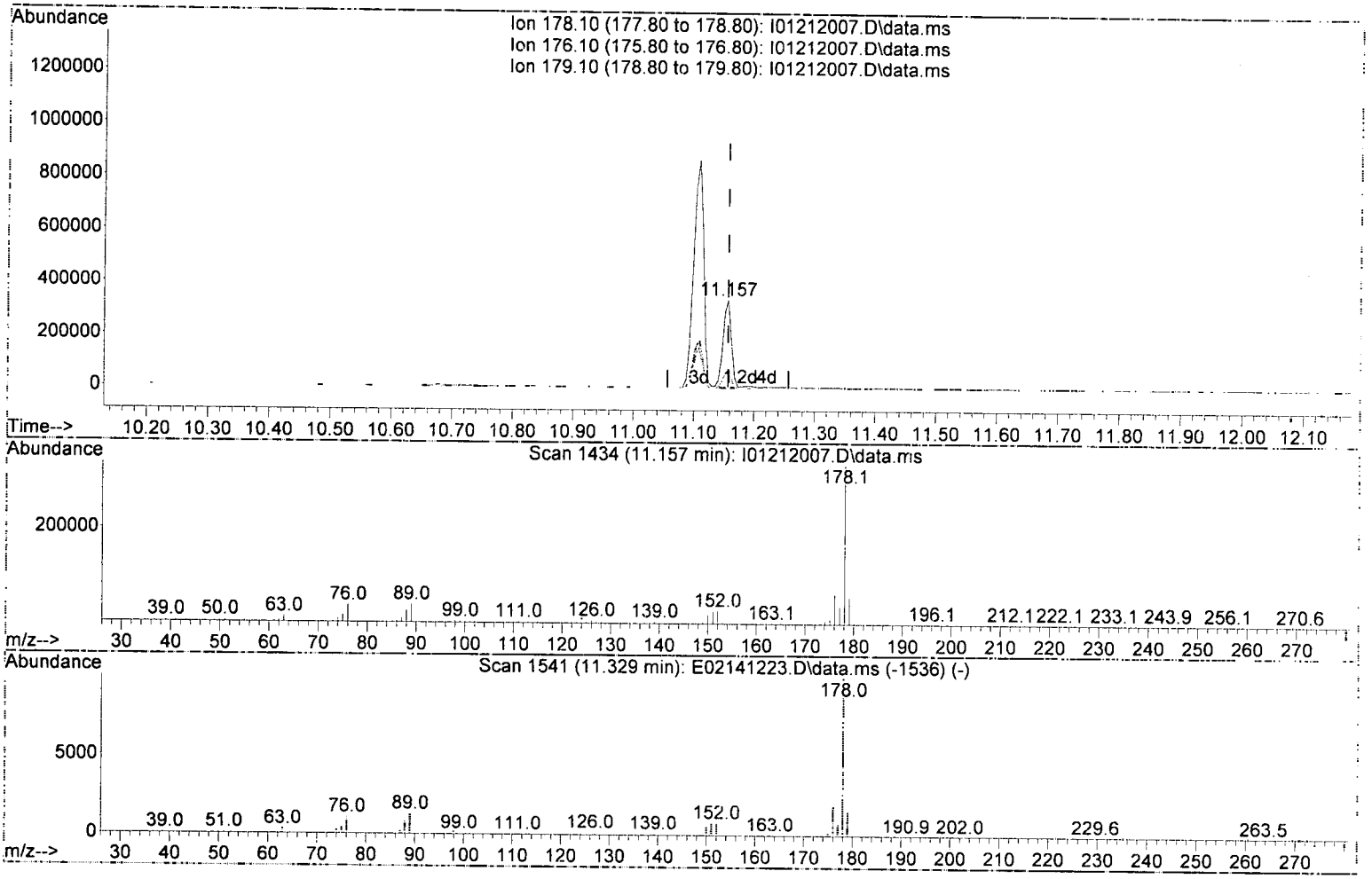
response 991598

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.90	21.38
179.10	15.80	18.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(72) Anthracene (T)

11.157min (-0.000) 1718.61 ng/ml

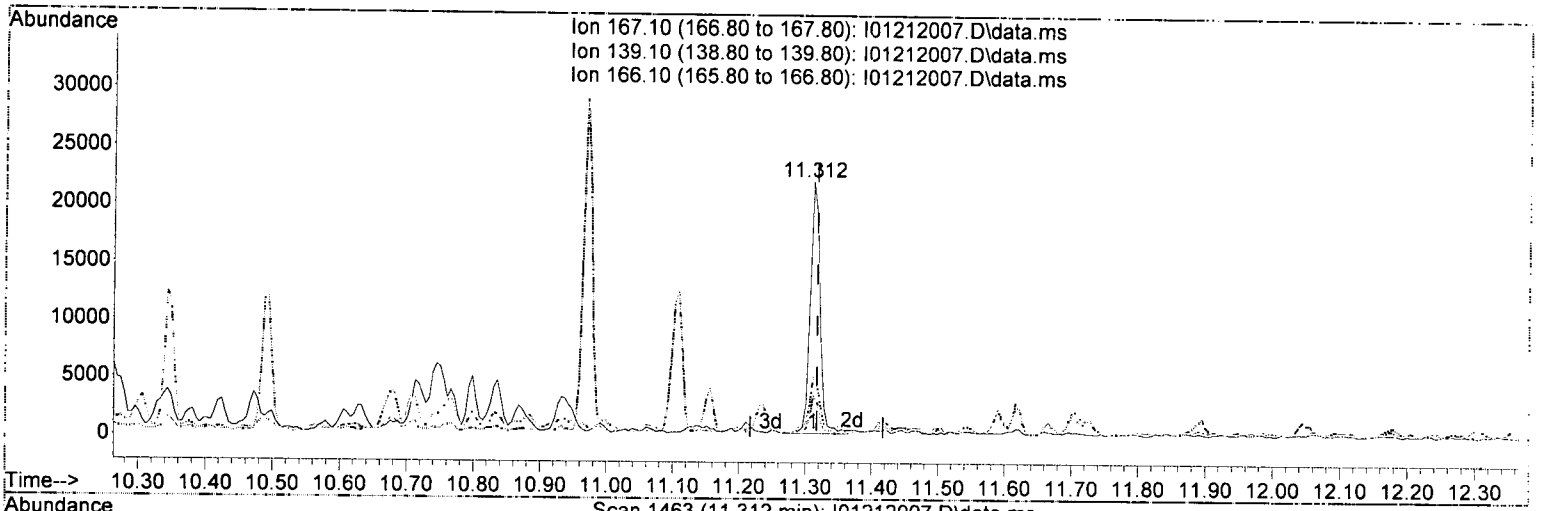
response 319943

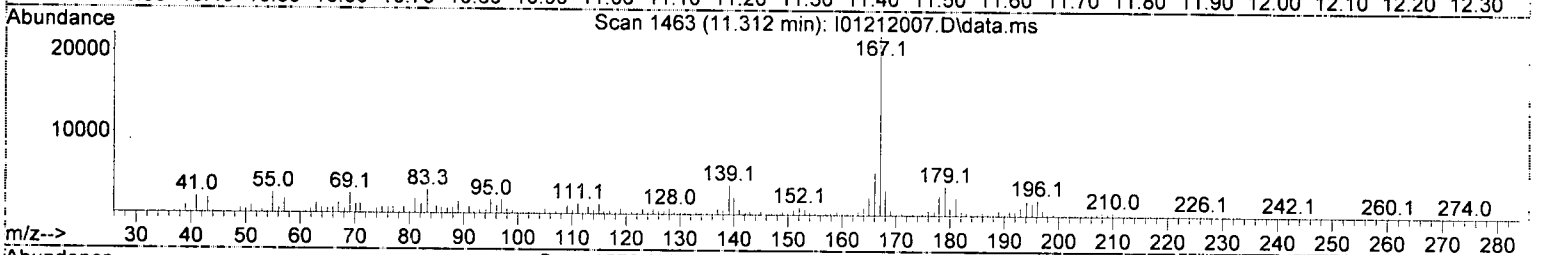
Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.40	18.73
179.10	16.00	16.24
0.00	0.00	0.00

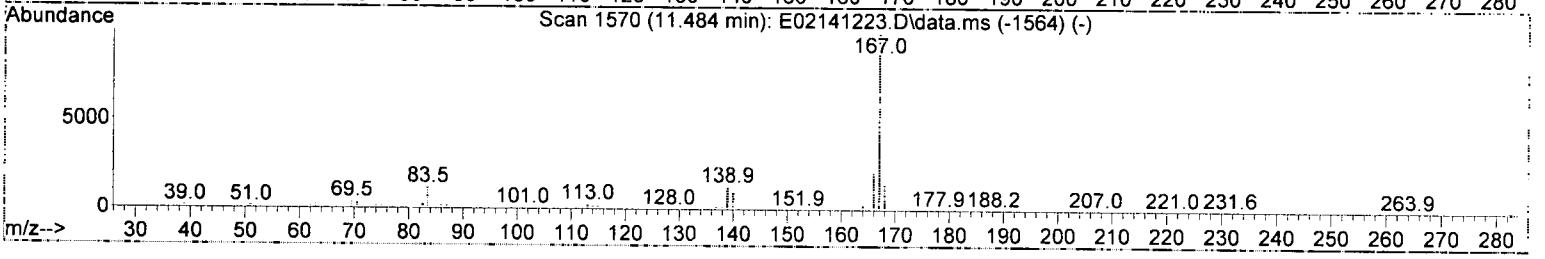
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I01212007.D\data.ms

(73) Carbazole (T)

11.312min (-0.005) 129.98 ng/ml

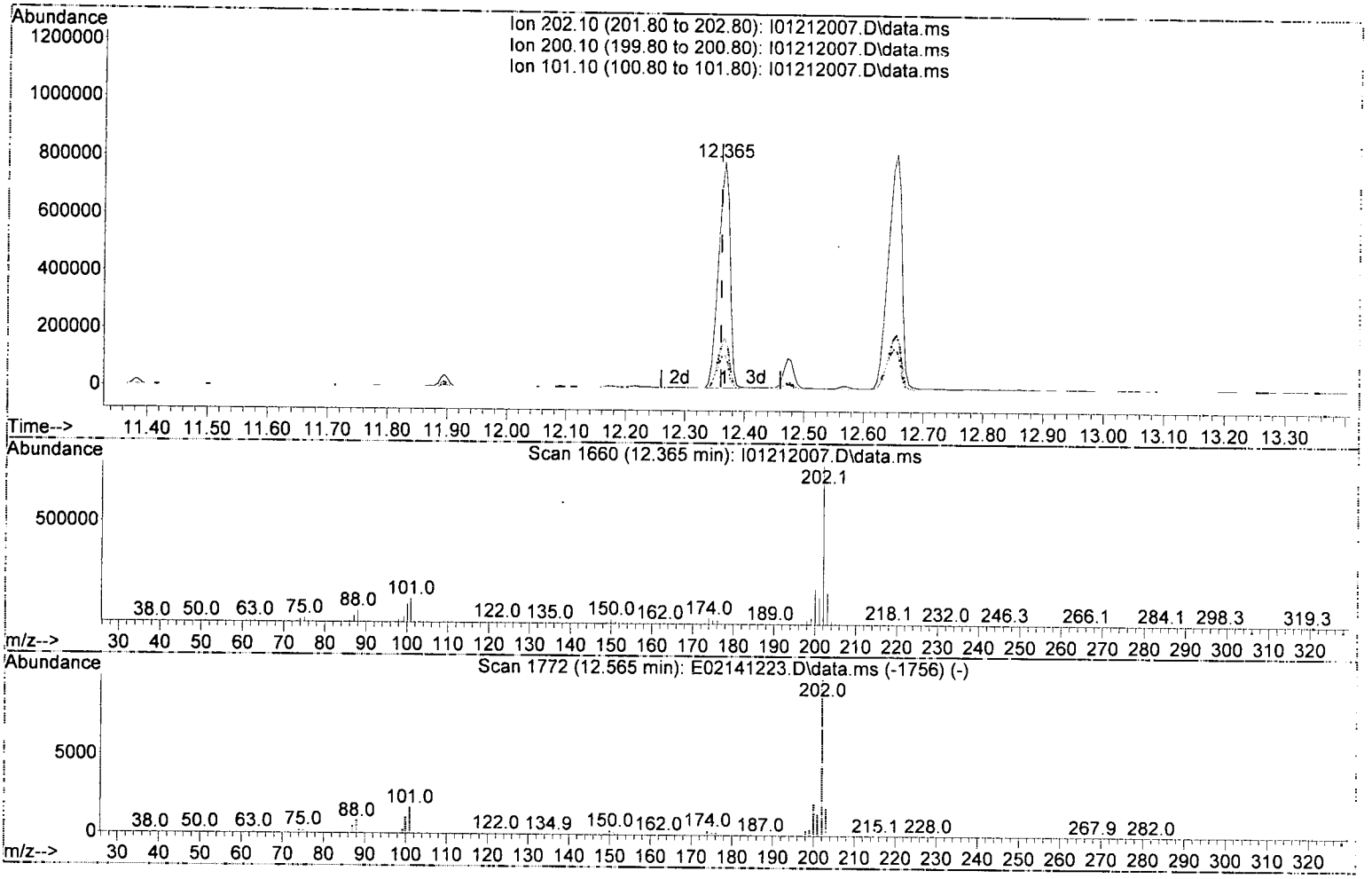
response 22503

Ion	Exp%	Act%
167.10	100.00	100.00
139.10	13.40	16.52
166.10	20.80	23.92
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(75) Fluoranthene (T)

12.365min (+ 0.005) 5203.47 ng/ml

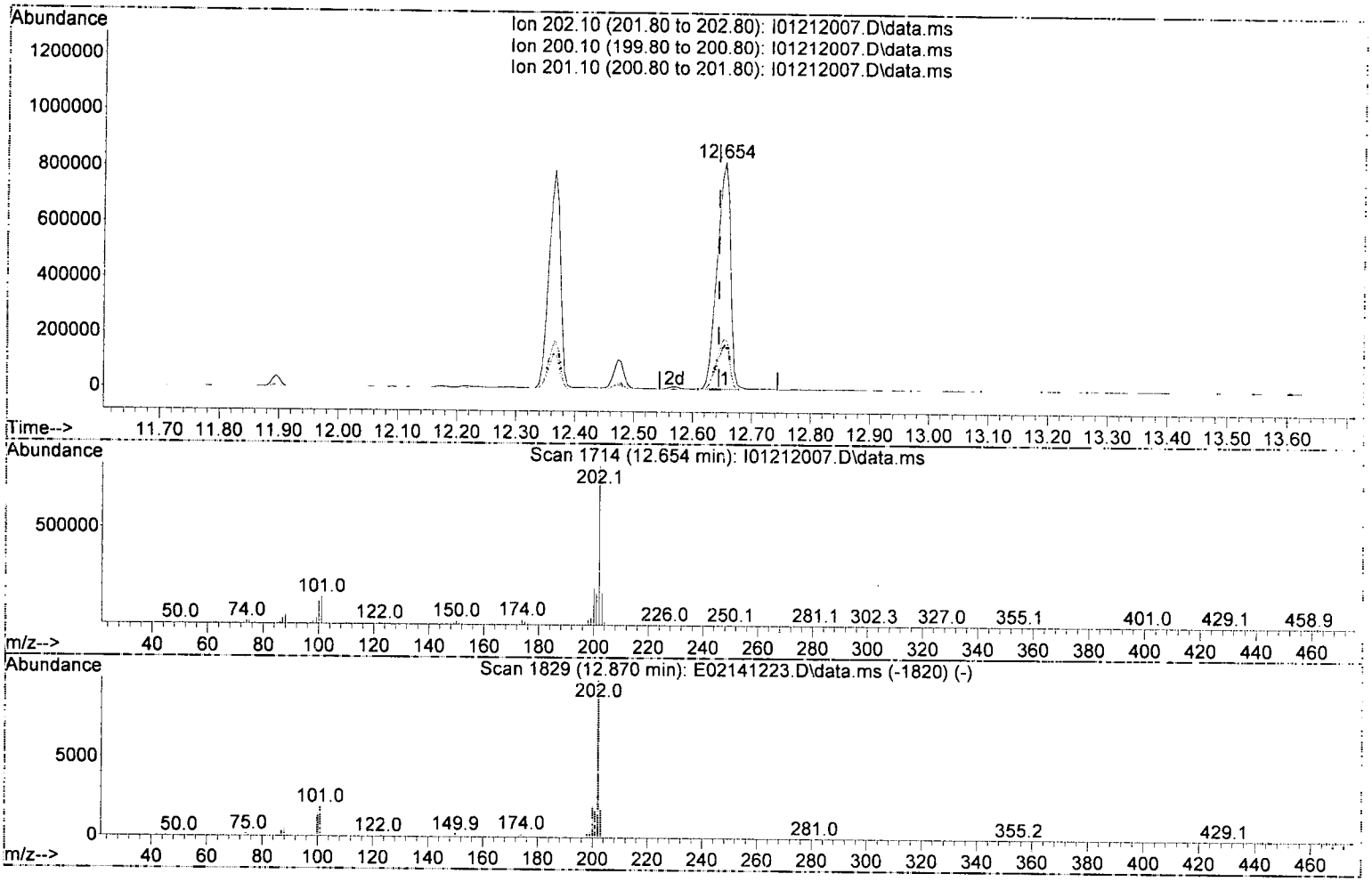
response 1065969

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.60	22.17
101.10	14.70	15.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(77) Pyrene (T)

12.654min (+ 0.011) 6287.15 ng/ml

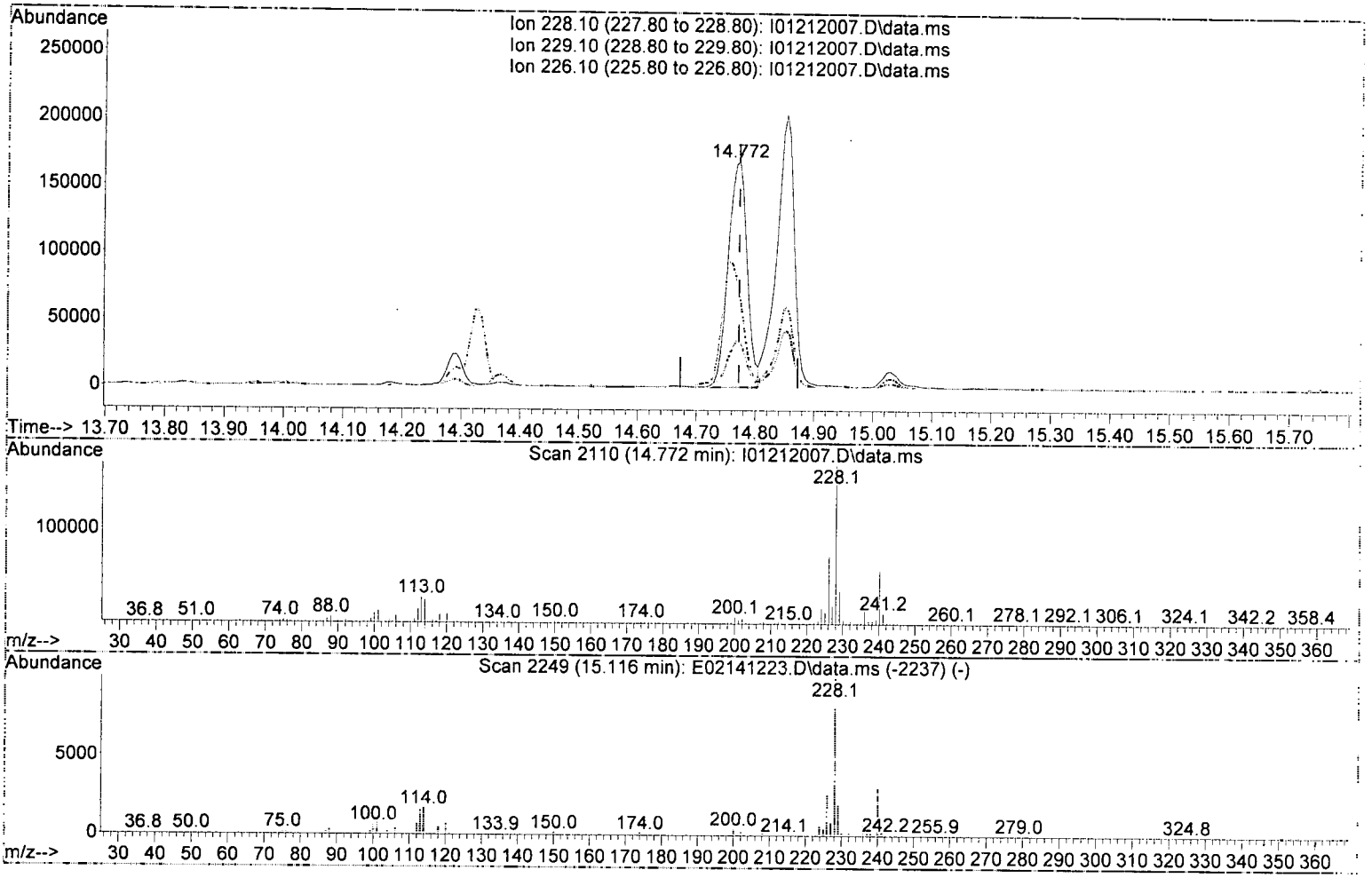
response 1306099

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	21.10	23.13
201.10	17.50	20.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(83) Benz(a)anthracene (T)

14.772min (0.000) 2069.46 ng/ml

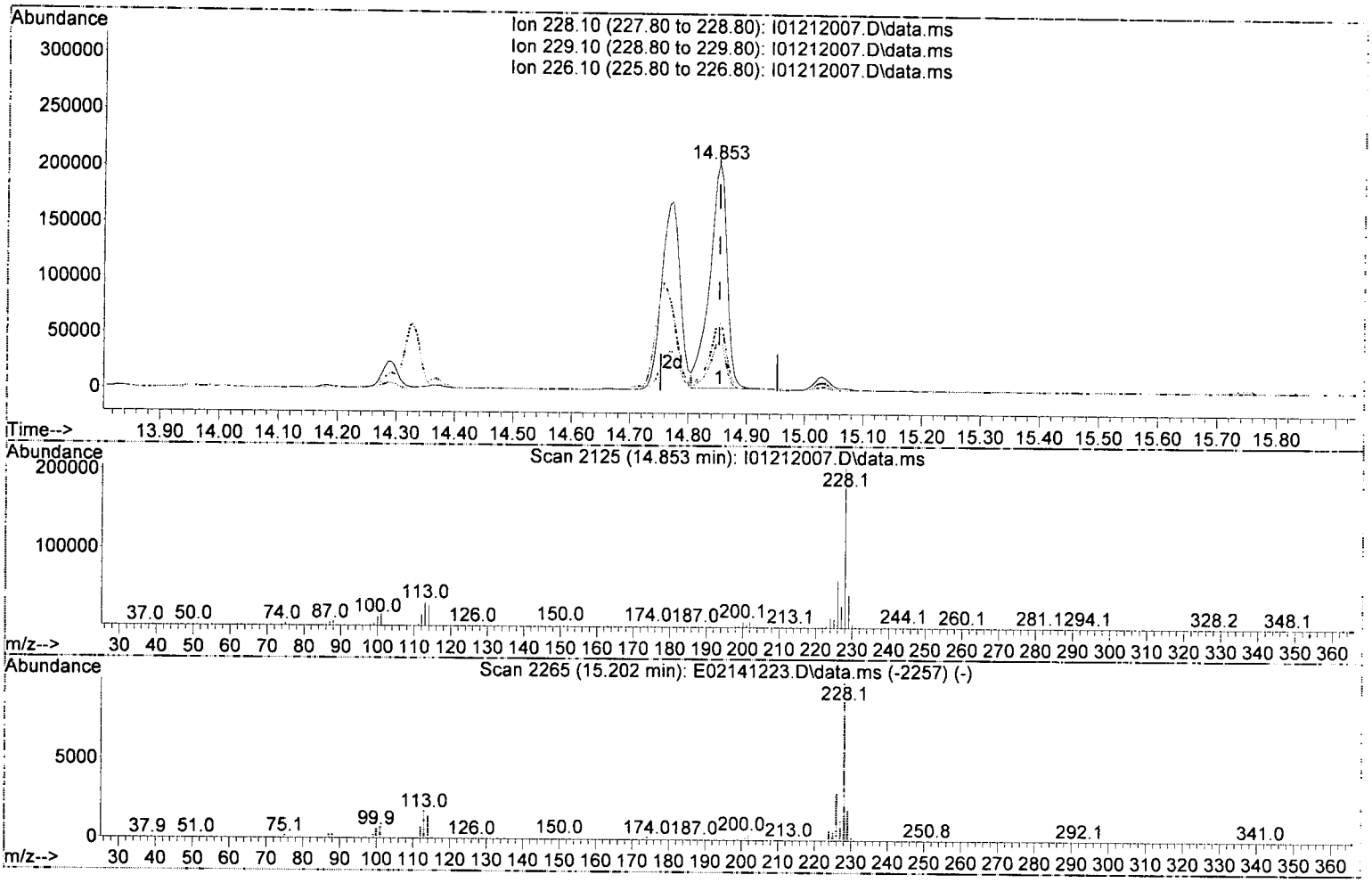
response 377934

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.70	20.57
226.10	25.00	41.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(84) Chrysene (T)

14.853min (-0.000) 2343.31 ng/ml

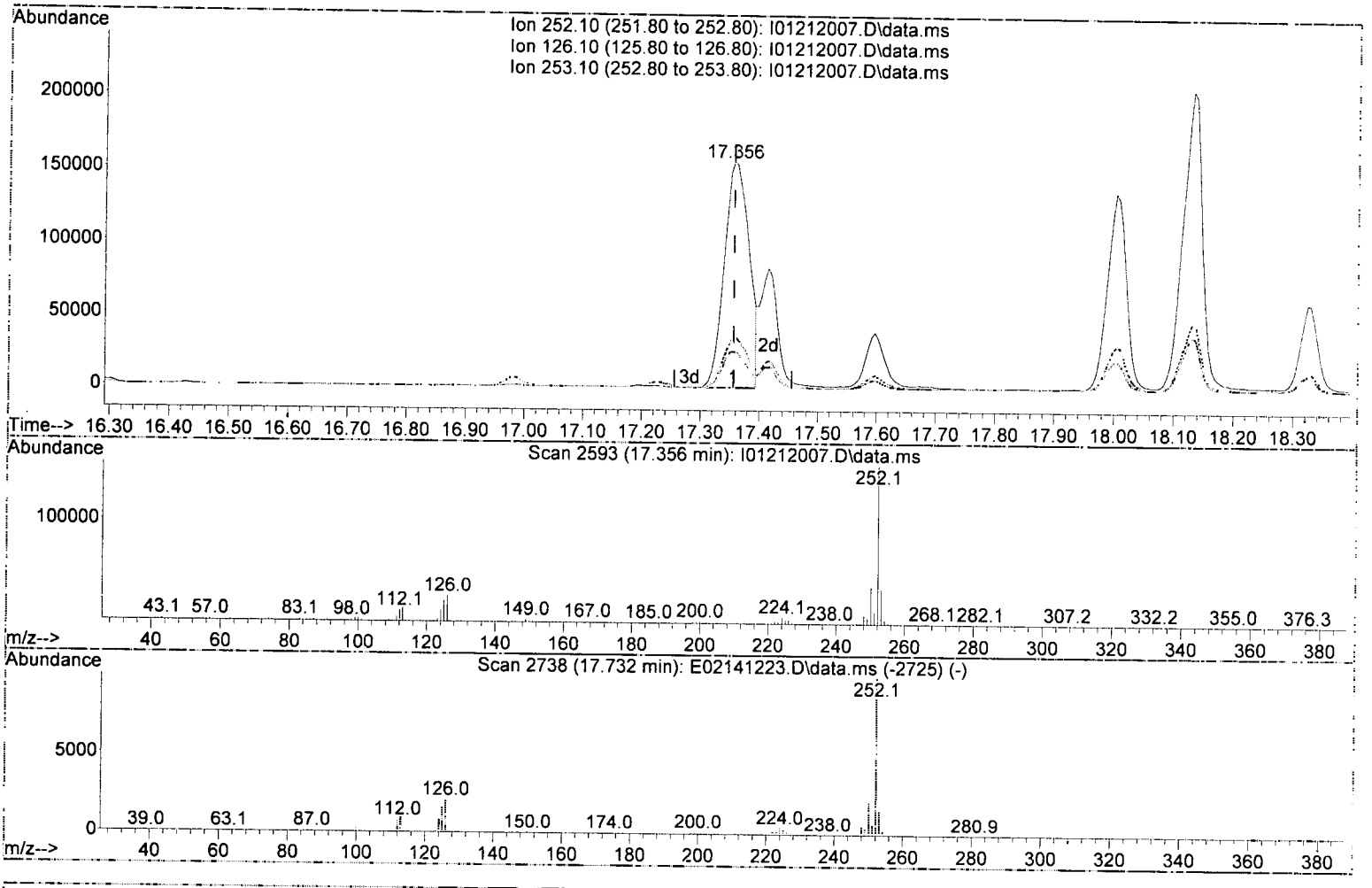
response 418108

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	20.10	20.81
226.10	29.40	30.04
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.356min (-0.000) 2395.45 ng/ml

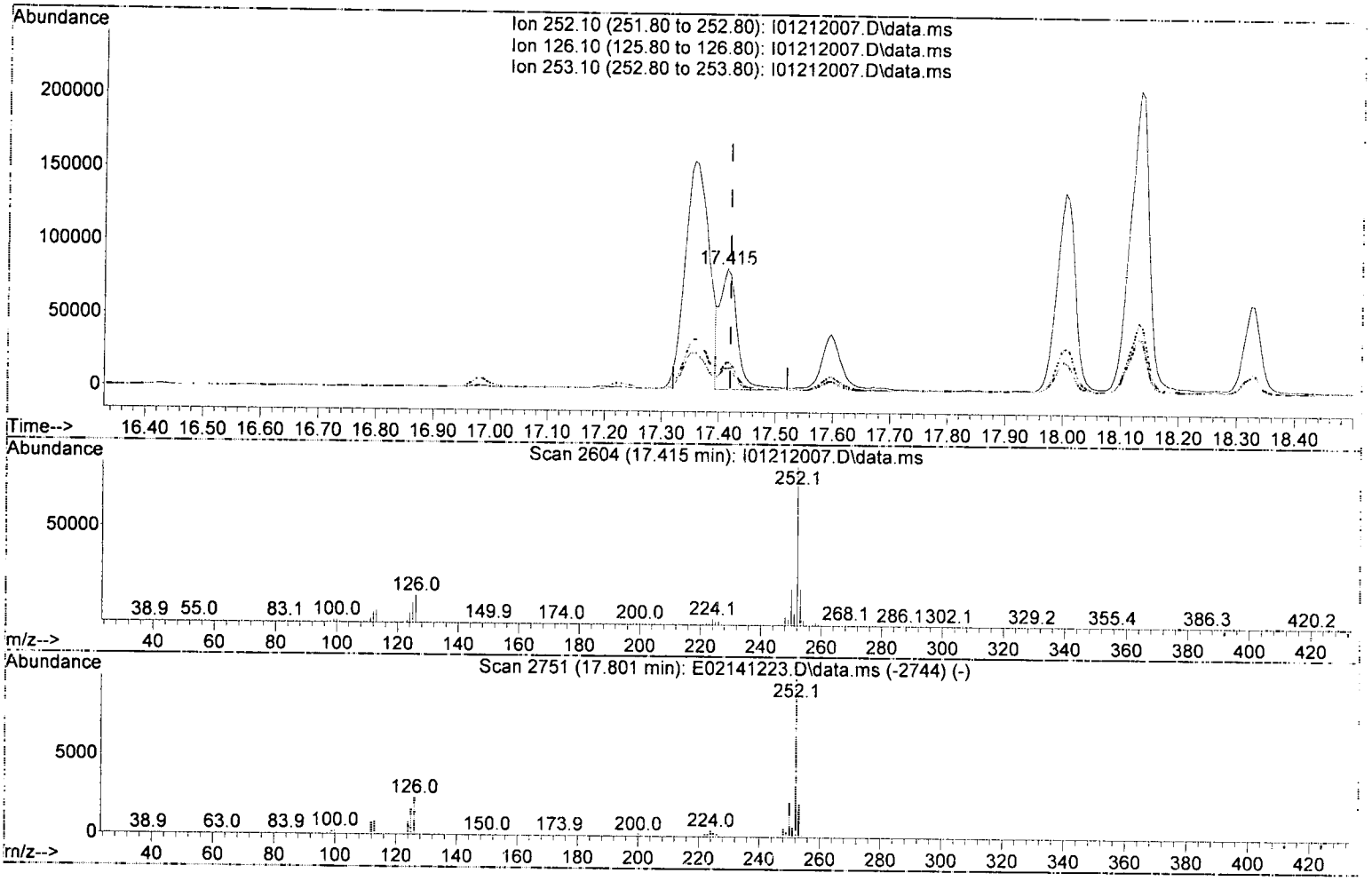
response 455418

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	16.90	16.14
253.10	21.90	22.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.415min (-0.005) 942.16 ng/ml m

response 171814

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	17.60	17.37
253.10	21.80	22.92
0.00	0.00	0.00

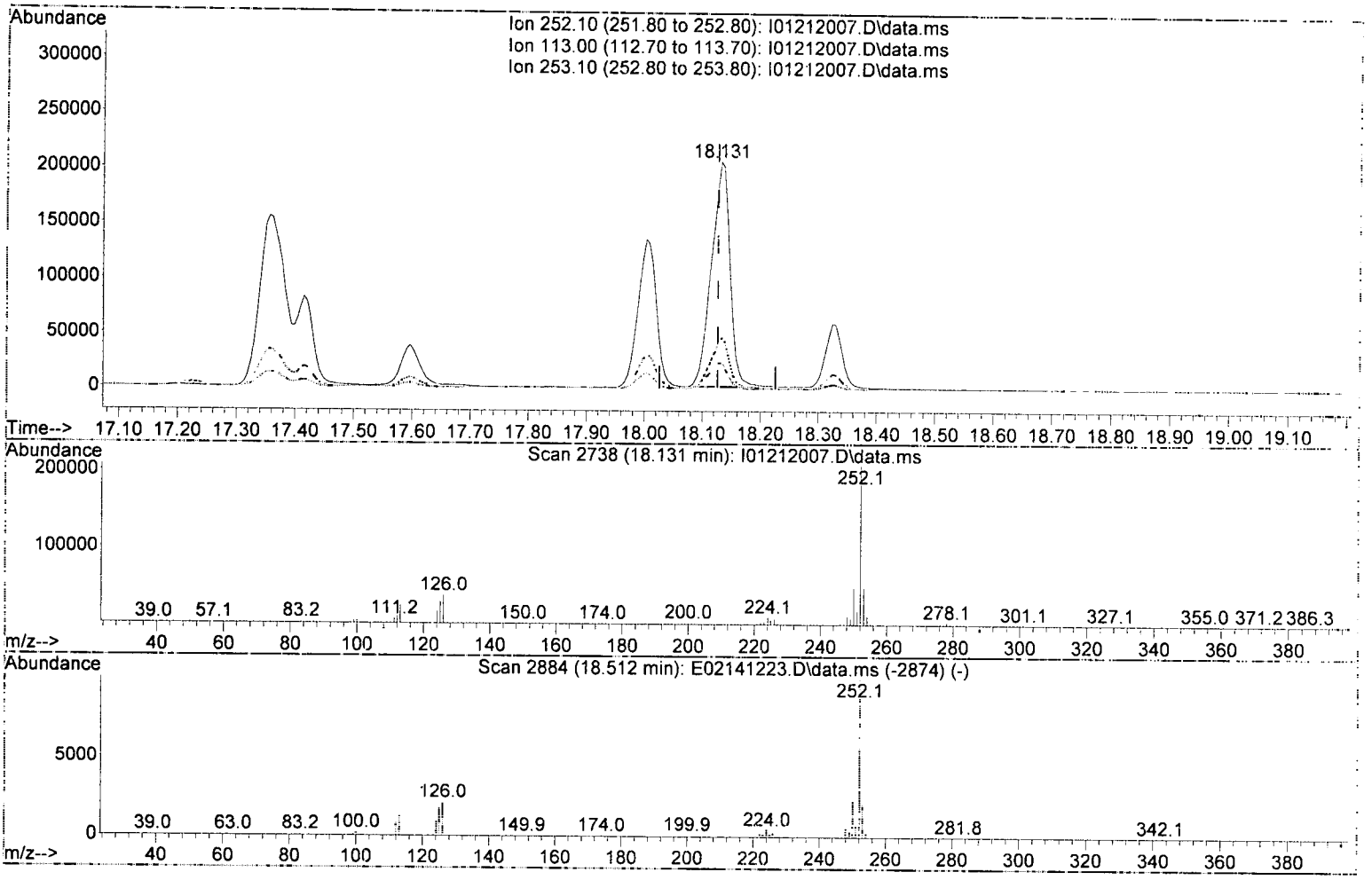
AMS 2/4/20

MOS

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(92) Benzo(a)pyrene (T)

18.131min (+ 0.005) 2758.92 ng/ml

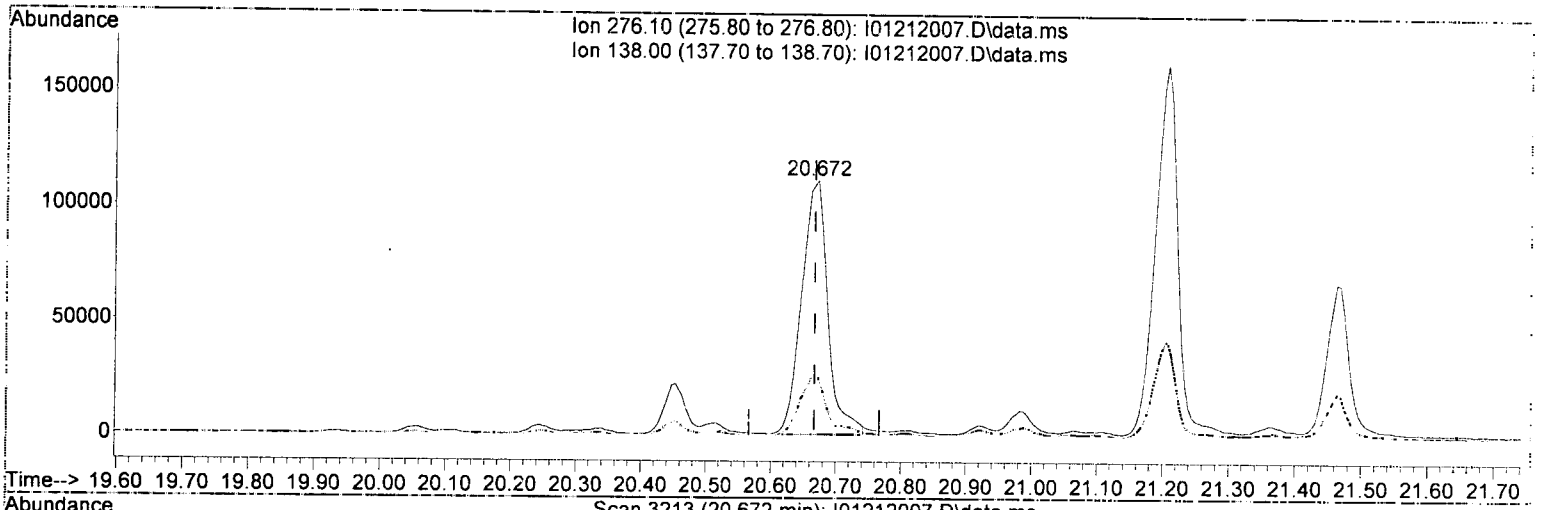
response 461583

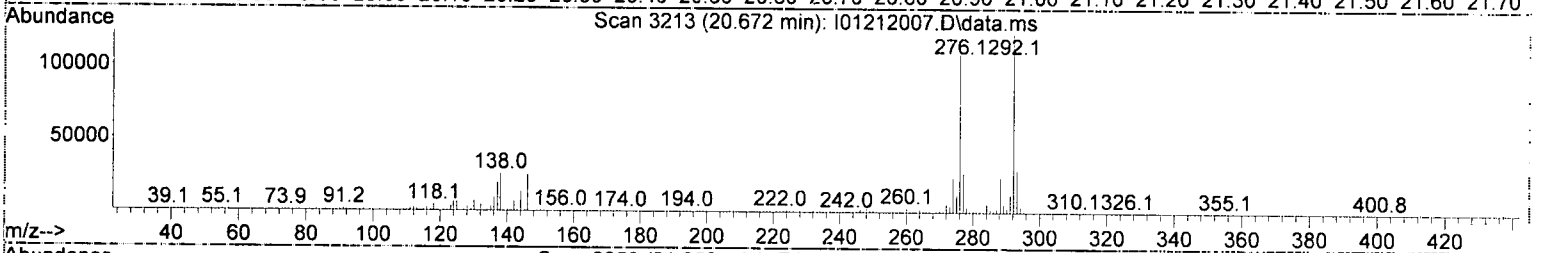
Ion	Exp%	Act%
252.10	100.00	100.00
113.00	10.80	11.44
253.10	22.90	23.03
0.00	0.00	0.00

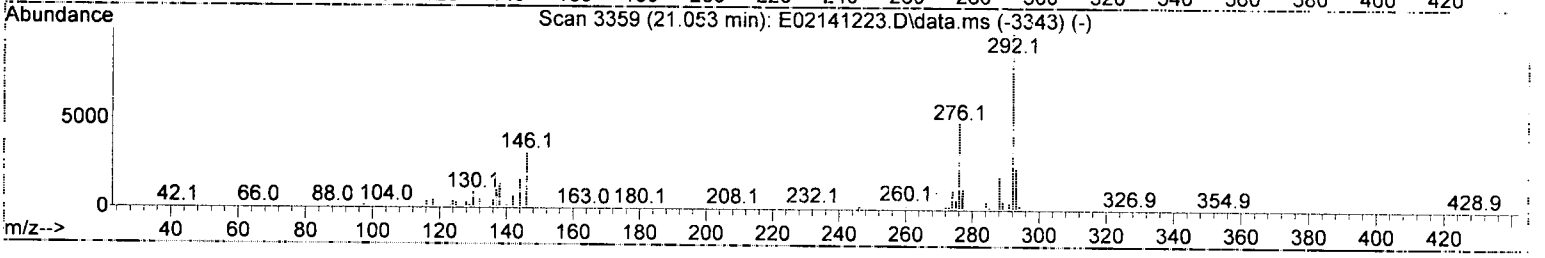
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I01212007.D\data.ms

(95) Indeno(1,2,3-cd)pyrene (T)

20.672min (+ 0.005) 1769.15 ng/ml

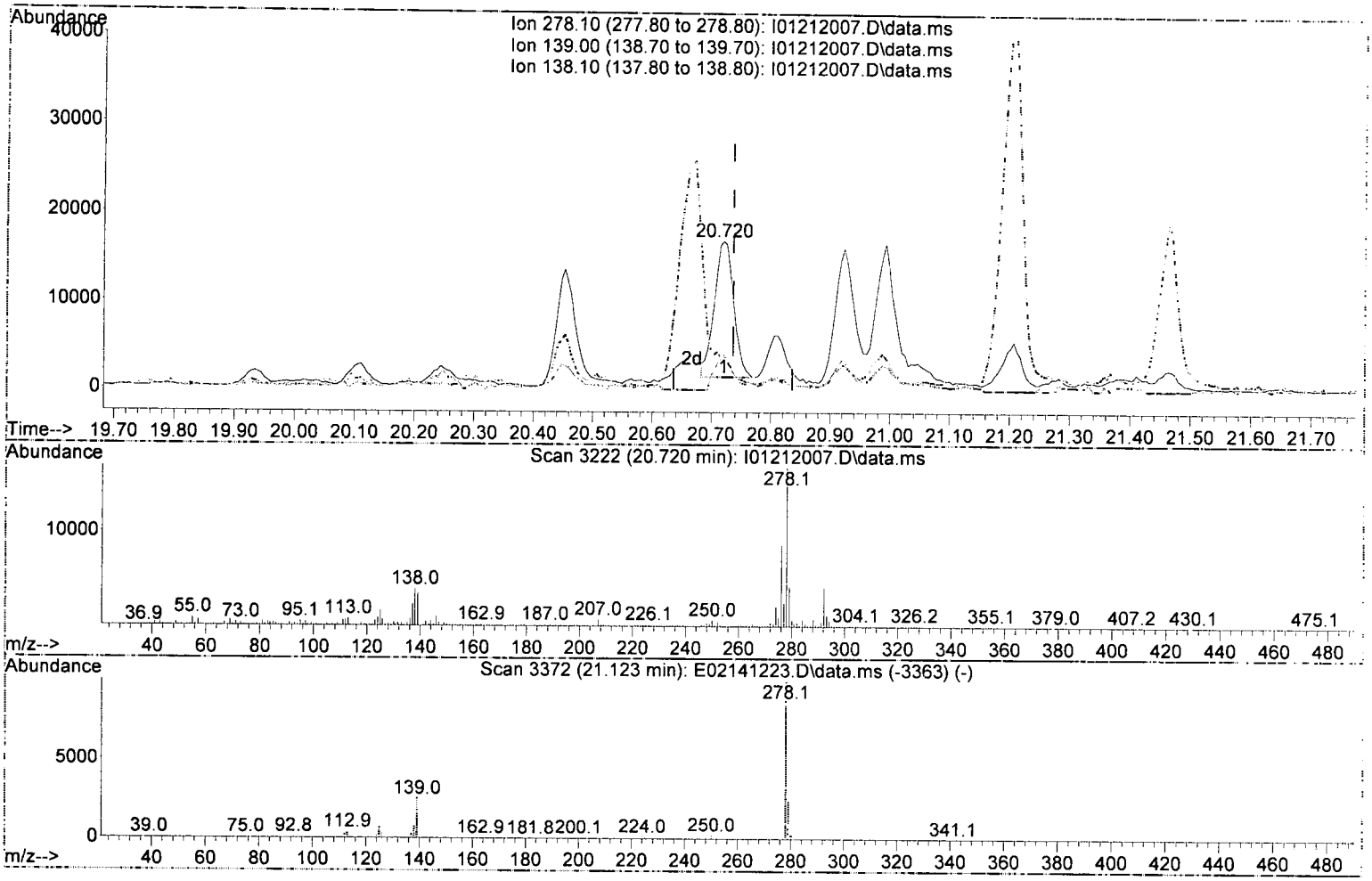
response 312467

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	23.80	23.14
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(96) Dibenz(a,h)anthracene (T)

20.720min (-0.016) 216.02 ng/ml

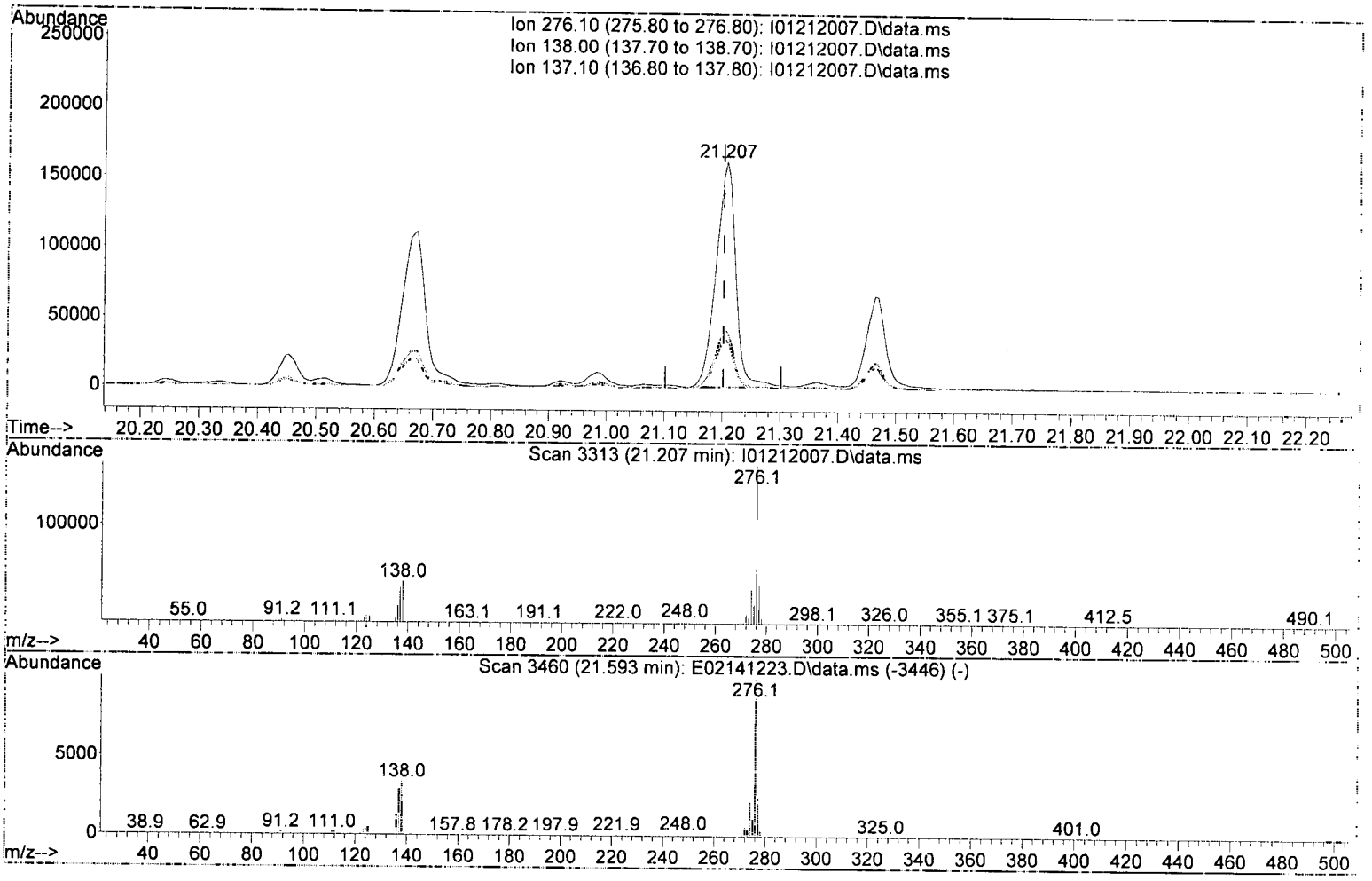
response 34919

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	18.30	20.57
138.10	13.80	23.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I01212007.D\data.ms

(97) Benzo(g,h,i)perylene (T)

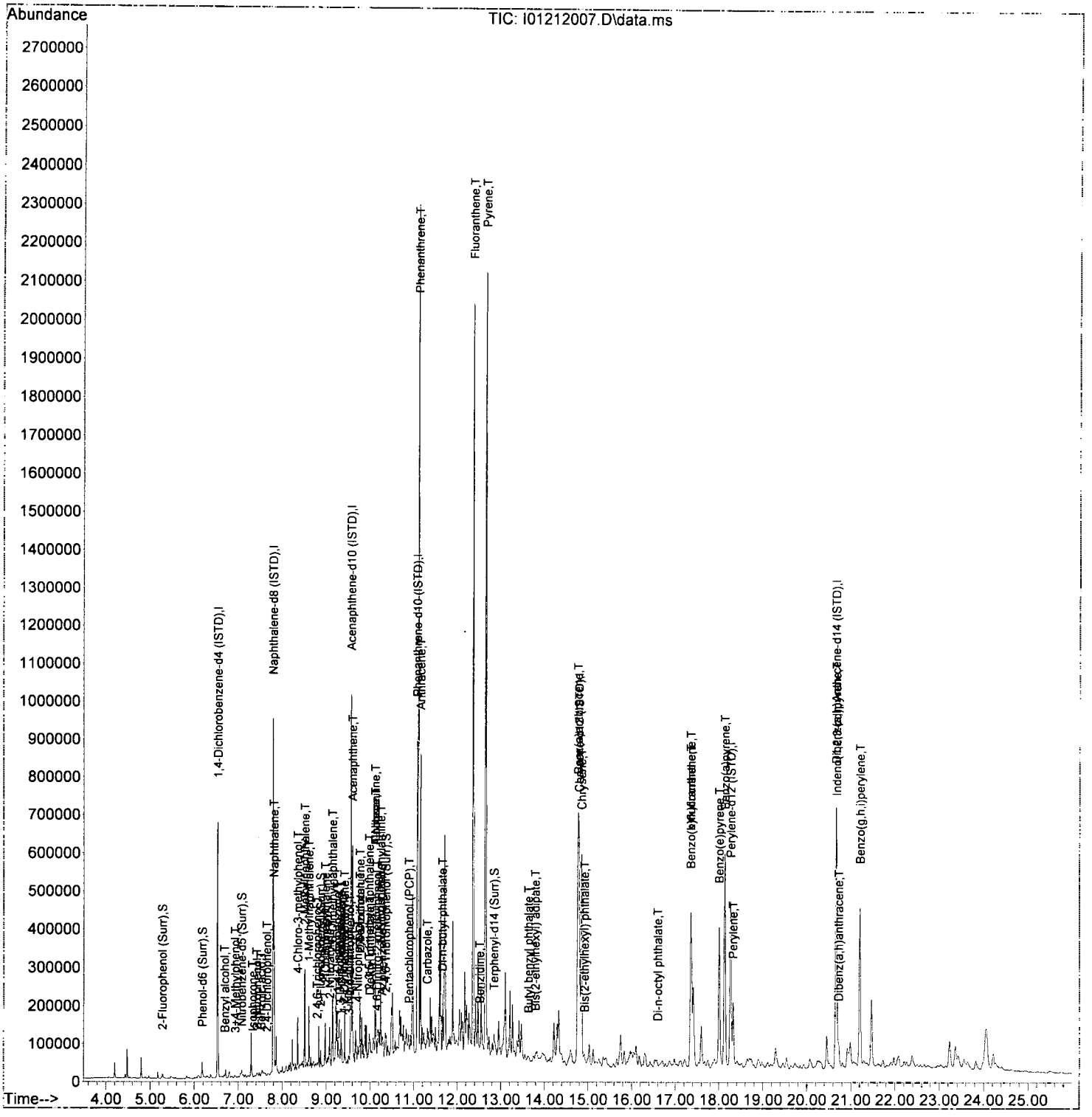
21.207min (+ 0.005) 2181.40 ng/ml

response 379138

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	26.80	25.78
137.10	21.90	21.76
0.00	0.00	0.00

Data Path : C:\msdchem\1\data\2020-01\0A21026\
Data File : I01212007.D
Acq On : 21 Jan 2020 16:41
Operator : JK /AMS /DTH
Sample : A0A0539-01RE2@20
Misc : 20x, 8270D LL Full List
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jan 21 17:22:17 2020
Quant Method : C:\msdchem\1\methods\SV9_120319R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Jan 06 12:41:08 2020
Response via : Initial Calibration
InstName : SV-GCMS9



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

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Calibration Data

Sequence 9L03048 (Cal ID A9L0505) SV-GCMS9

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9L03048**	Instrument:	**SV-GCMS9**
Date:	**12/03/19 14:57**	Calibration:	**A9L0505**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9L03048-TUN1	Water	QC	QC			A19I086	A19K329
2	9L03048-ICB1	Water	QC	QC			A19I086	
3	9L03048-CAL1	Water	QC	QC			A19I086	A19K211
4	9L03048-CAL2	Water	QC	QC			A19I086	A19K212
5	9L03048-CAL3	Water	QC	QC			A19I086	A19K213
6	9L03048-CAL4	Water	QC	QC			A19I086	A19K214
7	9L03048-CAL5	Water	QC	QC			A19I086	A19K215
8	9L03048-CAL6	Water	QC	QC			A19I086	A19K216
9	9L03048-CAL7	Water	QC	QC			A19I086	A19K217
10	9L03048-CAL8	Water	QC	QC			A19I086	A19K218
11	9L03048-CAL9	Water	QC	QC			A19I086	A19K219
12	9L03048-CALA	Water	QC	QC			A19I086	A19K220
13	9L03048-IBL1	Water	QC	QC			A19I086	
14	9L03048-ICV1	Water	QC	QC			A19I086	A19I254
15	9L03048-IBL2	Water	QC	QC			A19I086	

Data Entered By: 12/5/19

Data Reviewed By: 12/6/19

Comments:

Calibration Status Report SV-GCMS9

Method Path : T:\methods\
Method File : SV9_120319.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Wed Dec 04 10:57:36 2019
Response Via : Initial Calibration

A9L0505
12/5/19

#	ID	Conc	ISTD Conc	Path\File
1	20	20	2000	T:\data\2019-12\9L03048\I12031912.D
2	50	50	2000	T:\data\2019-12\9L03048\I12031913.D
3	100	100	2000	T:\data\2019-12\9L03048\I12031914.D
4	200	200	2000	T:\data\2019-12\9L03048\I12031915.D
5	500	500	2000	T:\data\2019-12\9L03048\I12031916.D
6	1000	1000	2000	T:\data\2019-12\9L03048\I12031917.D
7	2000	2000	2000	T:\data\2019-12\9L03048\I12031918.D
8	4000	4000	2000	T:\data\2019-12\9L03048\I12031919.D
9	6000	6000	2000	T:\data\2019-12\9L03048\I12031920.D
10	8000	8000	2000	T:\data\2019-12\9L03048\I12031921.D

#	ID	Update Time	Quant Time	Acquisition Time
1	20	Dec 04 10:56 2019	Dec 04 10:12 2019	3 Dec 2019 4:03 pm
2	50	Dec 04 10:57 2019	Dec 04 10:14 2019	3 Dec 2019 4:38 pm
3	100	Dec 04 10:57 2019	Dec 04 09:13 2019	3 Dec 2019 5:12 pm
4	200	Dec 04 10:57 2019	Dec 04 09:14 2019	3 Dec 2019 5:46 pm
5	500	Dec 04 10:57 2019	Dec 04 09:14 2019	3 Dec 2019 6:20 pm
6	1000	Dec 04 10:57 2019	Dec 04 09:14 2019	3 Dec 2019 6:54 pm
7	2000	Dec 04 10:57 2019	Dec 04 09:14 2019	3 Dec 2019 7:28 pm
8	4000	Dec 04 10:57 2019	Dec 04 09:14 2019	3 Dec 2019 8:02 pm
9	6000	Dec 04 10:57 2019	Dec 04 10:20 2019	3 Dec 2019 8:36 pm
10	8000	Dec 04 10:57 2019	Dec 04 10:33 2019	3 Dec 2019 9:10 pm

SV9_120319.M Thu Dec 05 10:37:13 2019

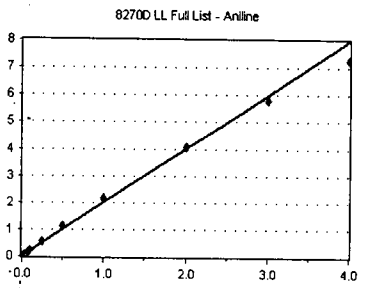
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Aniline

Curve Fit: **AVERAGE RF**

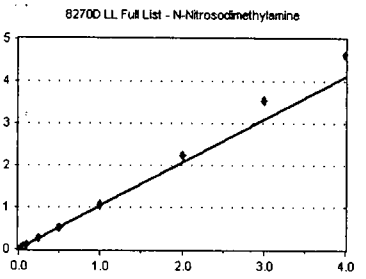


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1255	1.548	6.31
9L03048-CAL2	50	3454	1.797	6.30
9L03048-CAL3	100	7803	2.026	6.31
9L03048-CAL4	200	17717	2.110	6.31
9L03048-CAL5	500	46527	2.292	6.30
9L03048-CAL6	1000	90918	2.241	0.00
9L03048-CAL7	2000	163666	2.165	0.00
9L03048-CAL8	4000	276528	2.023	0.00
9L03048-CAL9	6000	400577	1.935	0.00
9L03048-CALA	8000	479598	1.815	0.00

AVE RF **1.995** RF RSD **11.44** AVE RT **3.15**

N-Nitrosodimethylamine

Curve Fit: **AVERAGE RF**

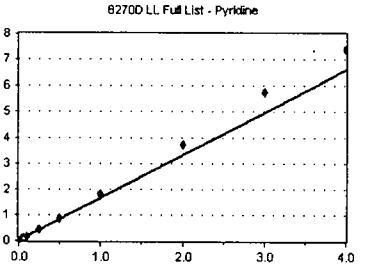


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	620	0.765	3.97
9L03048-CAL2	50	1783	0.927	3.96
9L03048-CAL3	100	3863	1.003	3.97
9L03048-CAL4	200	8304	0.989	3.96
9L03048-CAL5	500	21095	1.039	3.94
9L03048-CAL6	1000	42239	1.041	3.95
9L03048-CAL7	2000	80285	1.062	3.95
9L03048-CAL8	4000	153919	1.126	3.95
9L03048-CAL9	6000	244412	1.180	3.95
9L03048-CALA	8000	306026	1.158	3.96

AVE RF **1.029** RF RSD **11.80** AVE RT **3.96**

Pyridine

Curve Fit: **AVERAGE RF**

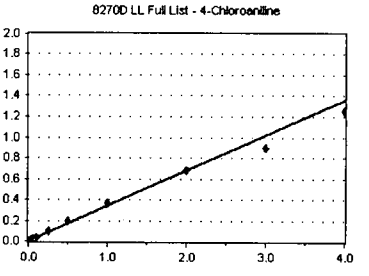


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1133	1.397	4.10
9L03048-CAL2	50	2675	1.391	4.04
9L03048-CAL3	100	5875	1.526	4.03
9L03048-CAL4	200	11415	1.360	4.01
9L03048-CAL5	500	33858	1.668	3.98
9L03048-CAL6	1000	71621	1.765	3.98
9L03048-CAL7	2000	138631	1.834	3.98
9L03048-CAL8	4000	253805	1.856	3.97
9L03048-CAL9	6000	396777	1.916	3.97
9L03048-CALA	8000	488420	1.848	3.98

AVE RF **1.656** RF RSD **13.21** AVE RT **4.00**

4-Chloroaniline

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	953	0.278	7.96
9L03048-CAL2	50	2616	0.315	7.96
9L03048-CAL3	100	5713	0.350	7.96
9L03048-CAL4	200	11829	0.355	7.96
9L03048-CAL5	500	32068	0.401	7.96
9L03048-CAL6	1000	59598	0.384	7.96
9L03048-CAL7	2000	104722	0.372	0.00
9L03048-CAL8	4000	175197	0.338	0.00
9L03048-CAL9	6000	227873	0.301	0.00
9L03048-CALA	8000	300670	0.313	0.00

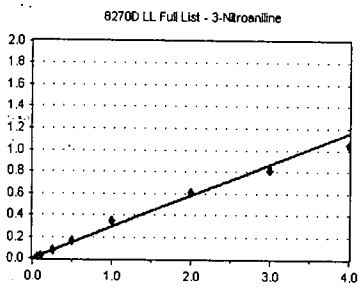
AVE RF **0.341** RF RSD **11.44** AVE RT **4.77**

Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

3-Nitroaniline

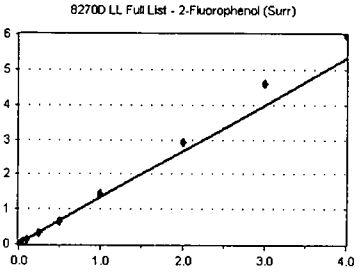


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~174~~	~~0.104~~	~~9.62~~
~~9L03048-CAL2~~	~~50~~	~~626~~	~~0.155~~	~~9.61~~
9L03048-CAL3	100	1701	0.213	9.61
9L03048-CAL4	200	4329	0.269	9.61
9L03048-CAL5	500	12379	0.318	9.61
9L03048-CAL6	1000	24616	0.331	9.61
9L03048-CAL7	2000	46707	0.341	0.00
9L03048-CAL8	4000	77930	0.305	0.00
9L03048-CAL9	6000	102695	0.270	0.00
9L03048-CALA	8000	129027	0.263	0.00

AVE RF **0.289** RF RSD **14.85** AVE RT **4.81**

2-Fluorophenol (Surr)

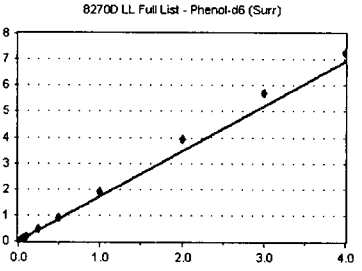


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~760~~	~~0.937~~	~~5.36~~
9L03048-CAL2	50	1965	1.022	5.36
9L03048-CAL3	100	4493	1.167	5.36
9L03048-CAL4	200	10166	1.211	5.36
9L03048-CAL5	500	27016	1.331	5.35
9L03048-CAL6	1000	53313	1.314	5.36
9L03048-CAL7	2000	108351	1.433	5.36
9L03048-CAL8	4000	200194	1.464	5.36
9L03048-CAL9	6000	318044	1.536	5.36
9L03048-CALA	8000	395455	1.496	5.36

AVE RF **1.331** RF RSD **12.88** AVE RT **5.36**

Phenol-d6 (Surr)

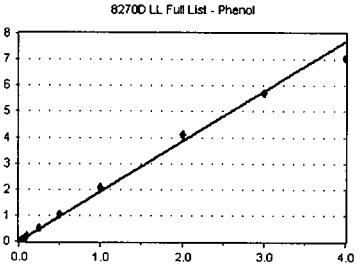


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1072	1.322	6.26
9L03048-CAL2	50	2800	1.456	6.26
9L03048-CAL3	100	6110	1.587	6.26
9L03048-CAL4	200	13867	1.652	6.26
9L03048-CAL5	500	37469	1.846	6.26
9L03048-CAL6	1000	75331	1.857	6.26
9L03048-CAL7	2000	142632	1.887	6.26
9L03048-CAL8	4000	268309	1.962	6.26
9L03048-CAL9	6000	393576	1.901	6.27
9L03048-CALA	8000	479889	1.816	6.27

AVE RF **1.729** RF RSD **12.39** AVE RT **6.26**

Phenol



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1298	1.601	6.27
9L03048-CAL2	50	3365	1.750	6.27
9L03048-CAL3	100	7079	1.838	6.27
9L03048-CAL4	200	16464	1.961	6.27
9L03048-CAL5	500	43537	2.145	6.27
9L03048-CAL6	1000	85835	2.116	6.27
9L03048-CAL7	2000	157741	2.087	6.27
9L03048-CAL8	4000	280072	2.049	6.28
9L03048-CAL9	6000	395390	1.910	6.28
9L03048-CALA	8000	466321	1.765	6.29

AVE RF **1.922** RF RSD **9.45** AVE RT **6.27**

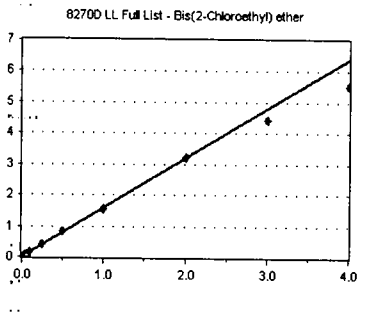
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Bis(2-Chloroethyl) ether

Curve Fit: **AVERAGE RF**

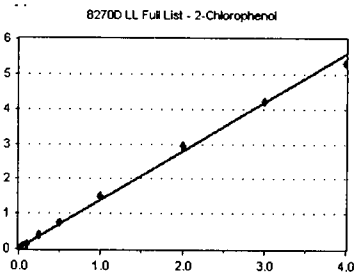


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1322	1.630	6.36
9L03048-CAL2	50	3277	1.705	6.36
9L03048-CAL3	100	6496	1.687	6.36
9L03048-CAL4	200	13753	1.638	6.36
9L03048-CAL5	500	33605	1.656	6.36
9L03048-CAL6	1000	66252	1.633	6.36
9L03048-CAL7	2000	117371	1.553	6.36
9L03048-CAL8	4000	220646	1.614	6.36
9L03048-CAL9	6000	304655	1.471	6.36
9L03048-CALA	8000	363767	1.377	6.37

AVE RF **1.596** RF RSD **6.39** AVE RT **6.36**

2-Chlorophenol

Curve Fit: **AVERAGE RF**

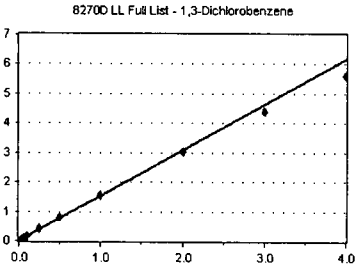


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	967	1.192	6.43
9L03048-CAL2	50	2376	1.236	6.42
9L03048-CAL3	100	5309	1.379	6.42
9L03048-CAL4	200	12018	1.431	6.42
9L03048-CAL5	500	31029	1.529	6.42
9L03048-CAL6	1000	61716	1.521	6.42
9L03048-CAL7	2000	112266	1.485	6.42
9L03048-CAL8	4000	200851	1.469	6.42
9L03048-CAL9	6000	290434	1.403	6.42
9L03048-CALA	8000	351884	1.332	6.42

AVE RF **1.398** RF RSD **8.24** AVE RT **6.42**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

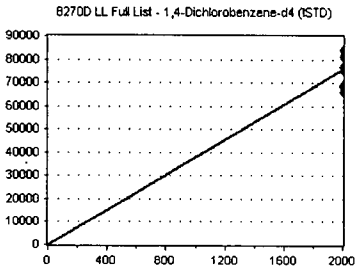


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1153	1.422	6.57
9L03048-CAL2	50	3054	1.589	6.57
9L03048-CAL3	100	6120	1.589	6.57
9L03048-CAL4	200	13821	1.646	6.57
9L03048-CAL5	500	33584	1.655	6.57
9L03048-CAL6	1000	64447	1.589	6.57
9L03048-CAL7	2000	117219	1.551	6.57
9L03048-CAL8	4000	206523	1.511	6.57
9L03048-CAL9	6000	303755	1.467	6.57
9L03048-CALA	8000	369308	1.398	6.57

AVE RF **1.541** RF RSD **5.81** AVE RT **6.57**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	2000	81092	40.546	6.63
9L03048-CAL2	2000	76901	38.451	6.63
9L03048-CAL3	2000	77018	38.509	6.63
9L03048-CAL4	2000	83955	41.978	6.63
9L03048-CAL5	2000	81192	40.596	6.63
9L03048-CAL6	2000	81140	40.570	6.63
9L03048-CAL7	2000	75585	37.793	6.63
9L03048-CAL8	2000	68360	34.180	6.63
9L03048-CAL9	2000	69018	34.509	6.63
9L03048-CALA	2000	66064	33.032	6.63

AVE RF **38.016** RF RSD **8.21** AVE RT **6.63**

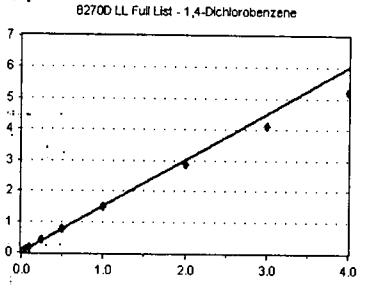
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

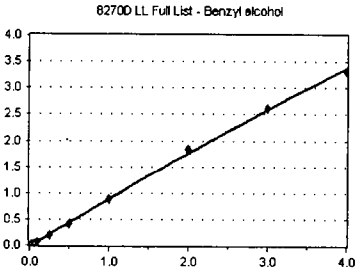


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1163	1.434	6.64
9L03048-CAL2	50	3134	1.630	6.64
9L03048-CAL3	100	6240	1.620	6.64
9L03048-CAL4	200	13571	1.616	6.64
9L03048-CAL5	500	32938	1.623	6.64
9L03048-CAL6	1000	62870	1.550	6.64
9L03048-CAL7	2000	112952	1.494	6.64
9L03048-CAL8	4000	196929	1.440	6.64
9L03048-CAL9	6000	284898	1.376	6.64
9L03048-CALA	8000	343825	1.301	6.64

AVE RF **1.509** RF RSD **7.80** AVE RT **6.64**

Benzyl alcohol

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

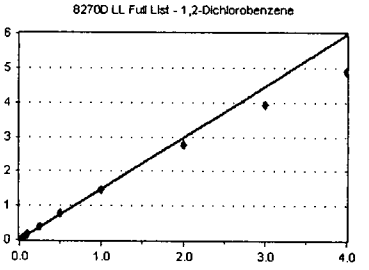


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~203~~	~~0.250~~	~~6.77~~
9L03048-CAL2	50	947	0.493	6.76
9L03048-CAL3	100	1740	0.452	6.76
9L03048-CAL4	200	5100	0.607	6.76
9L03048-CAL5	500	15610	0.769	6.76
9L03048-CAL6	1000	33704	0.831	6.76
9L03048-CAL7	2000	67600	0.894	6.76
9L03048-CAL8	4000	126371	0.924	6.76
9L03048-CAL9	6000	180424	0.871	6.77
9L03048-CALA	8000	218745	0.828	6.77

AVE RF **0.741** RF RSD **24.03** AVE RT **6.76**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

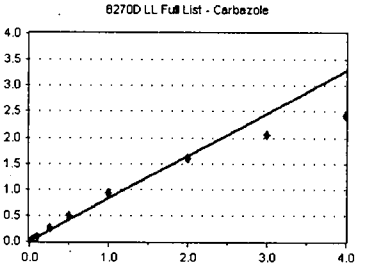


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1271	1.567	6.79
9L03048-CAL2	50	3087	1.606	6.80
9L03048-CAL3	100	6036	1.567	6.80
9L03048-CAL4	200	13817	1.646	6.80
9L03048-CAL5	500	32535	1.603	6.79
9L03048-CAL6	1000	62351	1.537	6.80
9L03048-CAL7	2000	109758	1.452	6.80
9L03048-CAL8	4000	189553	1.386	6.80
9L03048-CAL9	6000	269994	1.304	6.80
9L03048-CALA	8000	323930	1.226	6.80

AVE RF **1.489** RF RSD **9.52** AVE RT **6.80**

Carbazole

Curve Fit: **AVERAGE RF** Q 11/q2 MKT 12/11/19



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1783	0.633	11.42
9L03048-CAL2	50	5043	0.736	11.41
9L03048-CAL3	100	11582	0.854	11.41
9L03048-CAL4	200	26791	0.956	11.41
9L03048-CAL5	500	70636	1.039	11.41
9L03048-CAL6	1000	129438	0.973	11.41
9L03048-CAL7	2000	236632	0.931	0.00
9L03048-CAL8	4000	389068	0.802	0.00
9L03048-CAL9	6000	500765	0.682	0.00
9L03048-CALA	8000	575598	0.605	0.00

AVE RF **0.821** RF RSD **18.65** AVE RT **6.85**

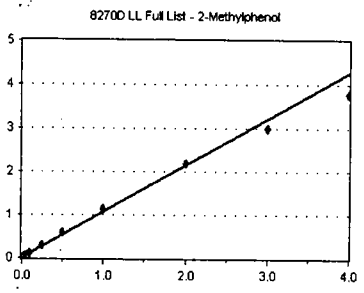
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

2-Methylphenol

Curve Fit: **AVERAGE RF**

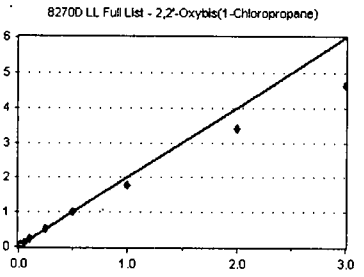


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	726	0.895	6.87
9L03048-CAL2	50	2000	1.040	6.86
9L03048-CAL3	100	4228	1.098	6.86
9L03048-CAL4	200	9605	1.144	6.86
9L03048-CAL5	500	24147	1.190	6.86
9L03048-CAL6	1000	47344	1.167	6.86
9L03048-CAL7	2000	85445	1.130	6.86
9L03048-CAL8	4000	148793	1.088	6.87
9L03048-CAL9	6000	207314	1.001	6.87
9L03048-CALA	8000	249183	0.943	6.87

AVE RF **1.070** RF RSD **9.15** AVE RT **6.86**

2,2'-Oxybis(1-Chloropropane)

Curve Fit: **AVERAGE RF**

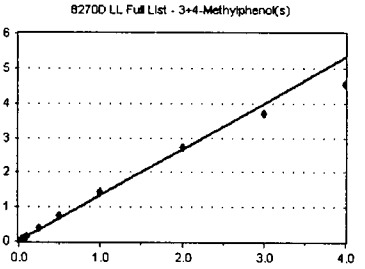


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1701	2.098	6.89
9L03048-CAL2	50	4371	2.274	6.89
9L03048-CAL3	100	8672	2.252	6.89
9L03048-CAL4	200	18847	2.245	6.89
9L03048-CAL5	500	42485	2.093	6.89
9L03048-CAL6	1000	80267	1.978	6.89
9L03048-CAL7	2000	135468	1.792	6.89
9L03048-CAL8	4000	233716	1.709	6.89
9L03048-CAL9	6000	319137	1.541	6.89
~~9L03048-CALA~~	~~8000~~	~~371752~~	~~1.407~~	~~6.89~~

AVE RF **1.998** RF RSD **13.18** AVE RT **6.89**

3+4-Methylphenol(s)

Curve Fit: **AVERAGE RF**

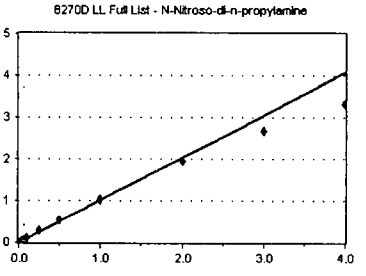


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	826	1.019	7.02
9L03048-CAL2	50	2417	1.257	7.01
9L03048-CAL3	100	5361	1.392	7.01
9L03048-CAL4	200	11818	1.408	7.01
9L03048-CAL5	500	31405	1.547	7.01
9L03048-CAL6	1000	59927	1.477	7.01
9L03048-CAL7	2000	108523	1.436	7.01
9L03048-CAL8	4000	186013	1.361	7.02
9L03048-CAL9	6000	254837	1.231	7.02
9L03048-CALA	8000	300974	1.139	7.03

AVE RF **1.327** RF RSD **12.29** AVE RT **7.02**

N-Nitroso-di-n-propylamine

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	798	0.984	7.02
9L03048-CAL2	50	1987	1.034	7.02
9L03048-CAL3	100	4176	1.084	7.02
9L03048-CAL4	200	9090	1.083	7.02
9L03048-CAL5	500	23607	1.163	7.01
9L03048-CAL6	1000	44516	1.097	7.02
9L03048-CAL7	2000	78452	1.038	7.02
9L03048-CAL8	4000	133289	0.975	7.02
9L03048-CAL9	6000	183872	0.888	7.03
9L03048-CALA	8000	219865	0.832	7.03

AVE RF **1.018** RF RSD **9.88** AVE RT **7.02**

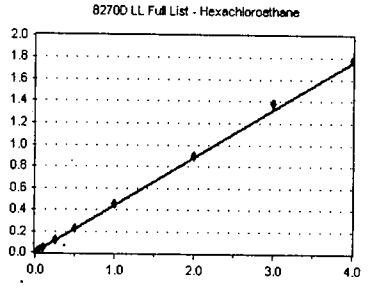
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Hexachloroethane

Curve Fit: **AVERAGE RF**

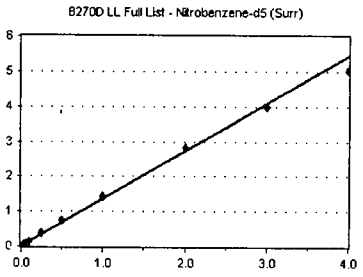


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	302	0.372	7.14
9L03048-CAL2	50	789	0.410	7.13
9L03048-CAL3	100	1645	0.427	7.13
9L03048-CAL4	200	3881	0.462	7.14
9L03048-CAL5	500	9529	0.469	7.13
9L03048-CAL6	1000	18186	0.448	7.14
9L03048-CAL7	2000	34553	0.457	7.14
9L03048-CAL8	4000	61522	0.450	7.14
9L03048-CAL9	6000	95333	0.460	7.14
9L03048-CALA	8000	117991	0.447	7.14

AVE RF **0.440** RF RSD **6.72** AVE RT **7.13**

Nitrobenzene-d5 (Surr)

Curve Fit: **AVERAGE RF**

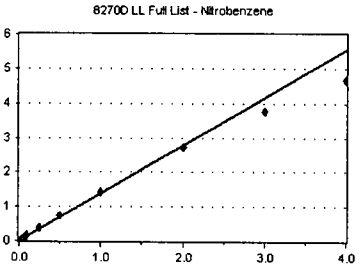


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	968	1.194	7.17
9L03048-CAL2	50	2472	1.286	7.17
9L03048-CAL3	100	5323	1.382	7.17
9L03048-CAL4	200	11763	1.401	7.17
9L03048-CAL5	500	30295	1.493	7.17
9L03048-CAL6	1000	60018	1.479	7.17
9L03048-CAL7	2000	107962	1.428	7.17
9L03048-CAL8	4000	192378	1.407	7.17
9L03048-CAL9	6000	274563	1.326	7.17
9L03048-CALA	8000	331420	1.254	7.18

AVE RF **1.365** RF RSD **7.17** AVE RT **7.17**

Nitrobenzene

Curve Fit: **AVERAGE RF**

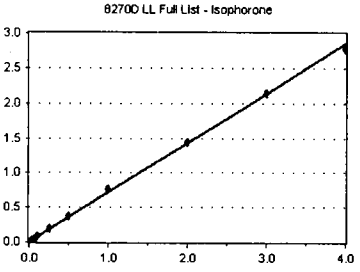


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1029	1.269	7.19
9L03048-CAL2	50	2592	1.348	7.19
9L03048-CAL3	100	5634	1.463	7.19
9L03048-CAL4	200	12932	1.540	7.19
9L03048-CAL5	500	32003	1.577	7.18
9L03048-CAL6	1000	61196	1.508	7.19
9L03048-CAL7	2000	106719	1.412	7.19
9L03048-CAL8	4000	186102	1.361	7.19
9L03048-CAL9	6000	260146	1.256	7.19
9L03048-CALA	8000	307605	1.164	7.20

AVE RF **1.390** RF RSD **9.69** AVE RT **7.19**

Isophorone

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2062	0.601	7.42
9L03048-CAL2	50	5441	0.656	7.42
9L03048-CAL3	100	11206	0.686	7.42
9L03048-CAL4	200	24749	0.743	7.42
9L03048-CAL5	500	63524	0.794	7.42
9L03048-CAL6	1000	118024	0.760	7.42
9L03048-CAL7	2000	213192	0.756	7.42
9L03048-CAL8	4000	375433	0.724	7.43
9L03048-CAL9	6000	541874	0.715	7.43
9L03048-CALA	8000	665888	0.693	7.44

AVE RF **0.713** RF RSD **7.89** AVE RT **7.43**

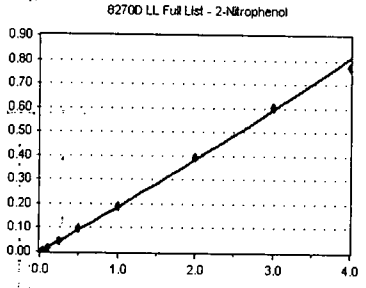
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

2-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

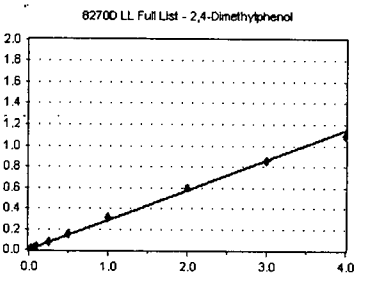


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~250~~	~~7.291~~	~~7.51~~
9L03048-CAL2	50	751	9.057	7.50
9L03048-CAL3	100	1804	0.110	7.51
9L03048-CAL4	200	4437	0.133	7.51
9L03048-CAL5	500	14203	0.178	7.50
9L03048-CAL6	1000	30876	0.199	7.50
9L03048-CAL7	2000	54150	0.192	7.50
9L03048-CAL8	4000	102512	0.198	7.51
9L03048-CAL9	6000	152907	0.202	7.51
9L03048-CALA	8000	185322	0.193	7.51

AVE RF **0.166** RF RSD **25.84** AVE RT **7.51**

2,4-Dimethylphenol

Curve Fit: **AVERAGE RF**

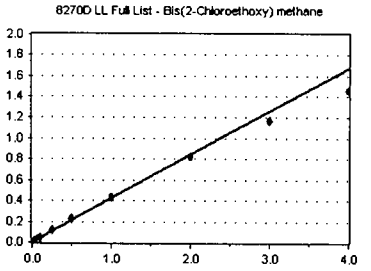


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~660~~	~~0.192~~	~~7.54~~
9L03048-CAL2	50	2005	0.242	7.54
9L03048-CAL3	100	4258	0.261	7.54
9L03048-CAL4	200	9473	0.285	7.54
9L03048-CAL5	500	25236	0.315	7.54
9L03048-CAL6	1000	48041	0.309	7.54
9L03048-CAL7	2000	87956	0.312	7.54
9L03048-CAL8	4000	154105	0.297	7.55
9L03048-CAL9	6000	217024	0.286	7.55
9L03048-CALA	8000	262222	0.273	7.55

AVE RF **0.287** RF RSD **8.70** AVE RT **7.54**

Bis(2-Chloroethoxy) methane

Curve Fit: **AVERAGE RF**

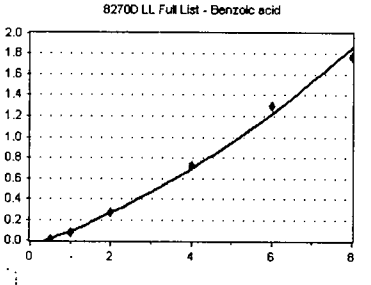


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1334	0.389	7.63
9L03048-CAL2	50	3419	0.412	7.63
9L03048-CAL3	100	7097	0.435	7.63
9L03048-CAL4	200	14981	0.450	7.63
9L03048-CAL5	500	37517	0.469	7.63
9L03048-CAL6	1000	69778	0.449	7.63
9L03048-CAL7	2000	122646	0.435	7.63
9L03048-CAL8	4000	212599	0.410	7.64
9L03048-CAL9	6000	294291	0.388	7.64
9L03048-CALA	8000	349639	0.364	7.64

AVE RF **0.420** RF RSD **7.87** AVE RT **7.63**

Benzoic acid

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~40~~	~~0~~	~~0.000~~	~~0.00~~
~~9L03048-CAL2~~	~~100~~	~~0~~	~~0.000~~	~~0.00~~
~~9L03048-CAL3~~	~~200~~	~~139~~	~~4.256~~	~~7.54~~
~~9L03048-CAL4~~	~~400~~	~~633~~	~~9.507~~	~~7.58~~
9L03048-CAL5	1000	5088	3.180	7.60
9L03048-CAL6	2000	23552	7.582	7.62
9L03048-CAL7	4000	75163	0.133	7.65
9L03048-CAL8	8000	187586	0.181	7.70
9L03048-CAL9	12000	327041	0.216	7.73
9L03048-CALA	16000	425227	0.221	7.74

AVE RF **0.143** RF RSD **53.96** AVE RT **7.67**

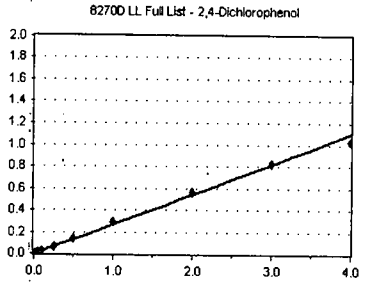
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

2,4-Dichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

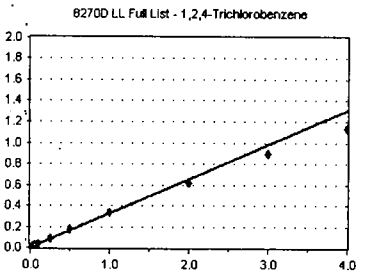


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	445	0.130	7.74
9L03048-CAL2	50	1440	0.174	7.74
9L03048-CAL3	100	3184	0.195	7.74
9L03048-CAL4	200	7872	0.236	7.74
9L03048-CAL5	500	22117	0.276	7.74
9L03048-CAL6	1000	43869	0.282	7.74
9L03048-CAL7	2000	82288	0.292	7.74
9L03048-CAL8	4000	146333	0.282	7.75
9L03048-CAL9	6000	208408	0.275	7.76
9L03048-CALA	8000	246195	0.256	7.76

AVE RF **0.240** RF RSD **23.12** AVE RT **7.75**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**

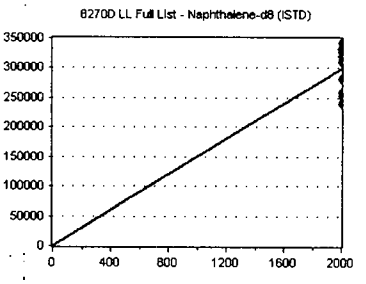


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1085	0.316	7.83
9L03048-CAL2	50	2902	0.350	7.83
9L03048-CAL3	100	5594	0.343	7.84
9L03048-CAL4	200	11689	0.351	7.84
9L03048-CAL5	500	28376	0.355	7.84
9L03048-CAL6	1000	52938	0.341	7.84
9L03048-CAL7	2000	93155	0.330	7.84
9L03048-CAL8	4000	159886	0.309	7.84
9L03048-CAL9	6000	225381	0.297	7.84
9L03048-CALA	8000	271812	0.283	7.84

AVE RF **0.327** RF RSD **7.61** AVE RT **7.83**

Naphthalene-d8 (ISTD)

Curve Fit: **AVERAGE RF**

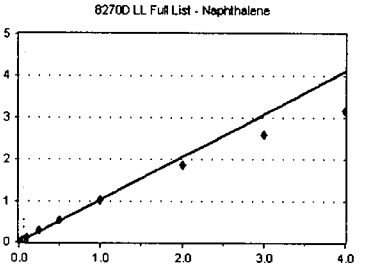


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	2000	342890	171.445	7.89
9L03048-CAL2	2000	331693	165.847	7.89
9L03048-CAL3	2000	326606	163.303	7.89
9L03048-CAL4	2000	332902	166.451	7.89
9L03048-CAL5	2000	320013	160.006	7.89
9L03048-CAL6	2000	310642	155.321	7.89
9L03048-CAL7	2000	281885	140.943	7.89
9L03048-CAL8	2000	259116	129.558	7.89
9L03048-CAL9	2000	252672	126.336	7.89
9L03048-CALA	2000	240133	120.066	7.89

AVE RF **149.928** RF RSD **12.66** AVE RT **7.89**

Naphthalene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	3690	1.076	7.91
9L03048-CAL2	50	9311	1.123	7.91
9L03048-CAL3	100	18476	1.131	7.91
9L03048-CAL4	200	37855	1.137	7.91
9L03048-CAL5	500	91141	1.139	7.91
9L03048-CAL6	1000	164864	1.061	7.91
9L03048-CAL7	2000	288400	1.023	7.92
9L03048-CAL8	4000	480003	0.926	7.92
9L03048-CAL9	6000	653583	0.862	7.92
9L03048-CALA	8000	761715	0.793	7.92

AVE RF **1.027** RF RSD **12.16** AVE RT **7.91**

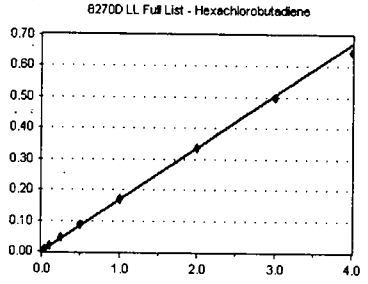
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

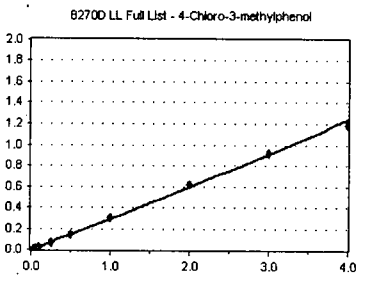


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	513	0.150	8.04
9L03048-CAL2	50	1319	0.159	8.04
9L03048-CAL3	100	2839	0.174	8.04
9L03048-CAL4	200	6085	0.183	8.04
9L03048-CAL5	500	14186	0.177	8.04
9L03048-CAL6	1000	27231	0.175	8.04
9L03048-CAL7	2000	48144	0.171	8.04
9L03048-CAL8	4000	86790	0.167	8.04
9L03048-CAL9	6000	126095	0.166	8.04
9L03048-CALA	8000	155277	0.162	8.04

AVE RF **0.168** RF RSD **5.81** AVE RT **8.04**

4-Chloro-3-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

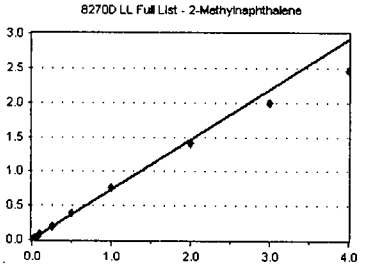


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~340~~	~~9.916~~	~~8.44~~
9L03048-CAL2	50	1256	0.151	8.44
9L03048-CAL3	100	3107	0.190	8.44
9L03048-CAL4	200	7447	0.224	8.44
9L03048-CAL5	500	22351	0.279	8.44
9L03048-CAL6	1000	45215	0.291	8.44
9L03048-CAL7	2000	85765	0.304	8.44
9L03048-CAL8	4000	159539	0.308	8.44
9L03048-CAL9	6000	232146	0.306	8.45
9L03048-CALA	8000	286207	0.298	8.45

AVE RF **0.261** RF RSD **22.28** AVE RT **8.44**

2-Methylnaphthalene

Curve Fit: **AVERAGE RF**

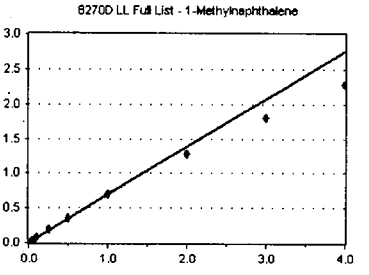


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2430	0.709	8.61
9L03048-CAL2	50	6232	0.752	8.61
9L03048-CAL3	100	12389	0.759	8.61
9L03048-CAL4	200	25881	0.777	8.61
9L03048-CAL5	500	64287	0.804	8.61
9L03048-CAL6	1000	119447	0.769	8.61
9L03048-CAL7	2000	214169	0.760	8.61
9L03048-CAL8	4000	365323	0.705	8.61
9L03048-CAL9	6000	502226	0.663	8.61
9L03048-CALA	8000	590164	0.614	8.61

AVE RF **0.731** RF RSD **7.94** AVE RT **8.61**

1-Methylnaphthalene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2328	0.679	8.71
9L03048-CAL2	50	6060	0.731	8.71
9L03048-CAL3	100	12294	0.753	8.71
9L03048-CAL4	200	24634	0.740	8.71
9L03048-CAL5	500	62032	0.775	8.71
9L03048-CAL6	1000	111578	0.718	8.71
9L03048-CAL7	2000	196570	0.697	8.71
9L03048-CAL8	4000	333327	0.643	8.71
9L03048-CAL9	6000	454977	0.600	8.71
9L03048-CALA	8000	547369	0.570	8.71

AVE RF **0.691** RF RSD **9.78** AVE RT **8.71**

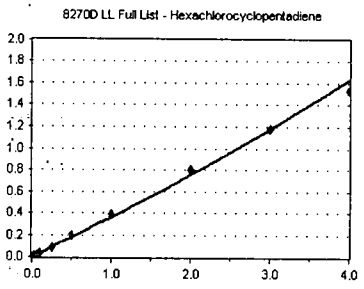
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Hexachlorocyclopentadiene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

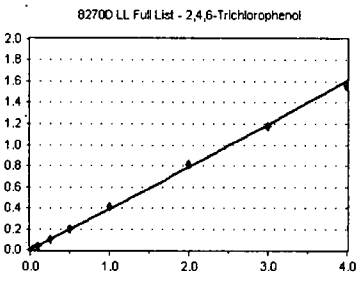


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	396	0.236	8.78
9L03048-CAL2	50	1037	0.256	8.78
9L03048-CAL3	100	2263	0.283	8.78
9L03048-CAL4	200	5088	0.316	8.78
9L03048-CAL5	500	13870	0.356	8.78
9L03048-CAL6	1000	28270	0.380	8.78
9L03048-CAL7	2000	53845	0.394	8.78
9L03048-CAL8	4000	101731	0.398	8.78
9L03048-CAL9	6000	149931	0.394	8.78
9L03048-CALA	8000	188518	0.385	8.78

AVE RF **0.340** RF RSD **18.27** AVE RT **8.78**

2,4,6-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

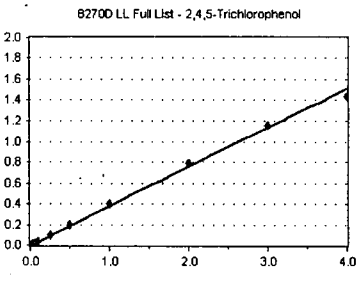


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~293~~	~~0.175~~	~~8.89~~
9L03048-CAL2	50	859	0.212	8.89
9L03048-CAL3	100	1979	0.247	8.89
9L03048-CAL4	200	4861	0.302	8.89
9L03048-CAL5	500	14788	0.380	8.89
9L03048-CAL6	1000	29391	0.395	8.89
9L03048-CAL7	2000	56718	0.415	8.89
9L03048-CAL8	4000	103786	0.406	8.89
9L03048-CAL9	6000	150184	0.394	8.89
9L03048-CALA	8000	191296	0.391	8.89

AVE RF **0.349** RF RSD **21.64** AVE RT **8.89**

2,4,5-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

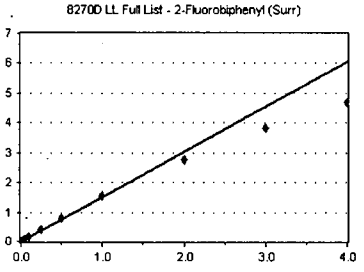


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~217~~	~~0.129~~	~~8.93~~
9L03048-CAL2	50	879	0.217	8.93
9L03048-CAL3	100	1904	0.238	8.93
9L03048-CAL4	200	4882	0.303	8.93
9L03048-CAL5	500	14398	0.370	8.93
9L03048-CAL6	1000	29228	0.393	8.93
9L03048-CAL7	2000	54610	0.399	8.93
9L03048-CAL8	4000	101134	0.396	8.93
9L03048-CAL9	6000	146612	0.385	8.93
9L03048-CALA	8000	175850	0.359	8.93

AVE RF **0.340** RF RSD **20.67** AVE RT **8.93**

2-Fluorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2573	1.534	8.97
9L03048-CAL2	50	6633	1.639	8.98
9L03048-CAL3	100	13259	1.657	8.98
9L03048-CAL4	200	27050	1.680	8.98
9L03048-CAL5	500	65387	1.678	8.98
9L03048-CAL6	1000	118351	1.592	8.98
9L03048-CAL7	2000	210035	1.535	8.97
9L03048-CAL8	4000	353301	1.382	8.98
9L03048-CAL9	6000	484354	1.272	8.98
9L03048-CALA	8000	576096	1.176	8.98

AVE RF **1.515** RF RSD **11.81** AVE RT **8.98**

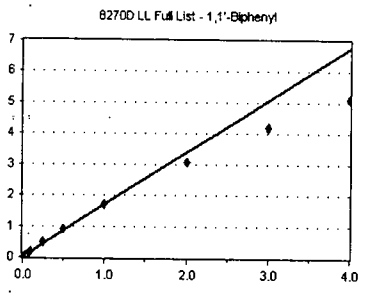
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

1,1'-Biphenyl

Curve Fit: **AVERAGE RF**

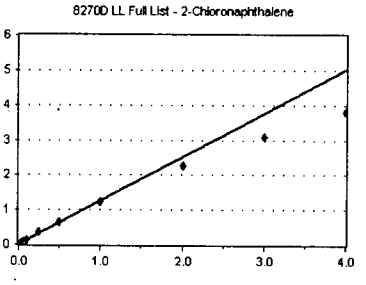


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2772	1.652	9.08
9L03048-CAL2	50	7529	1.861	9.08
9L03048-CAL3	100	15045	1.880	9.08
9L03048-CAL4	200	30824	1.915	9.08
9L03048-CAL5	500	74411	1.910	9.08
9L03048-CAL6	1000	134132	1.805	9.08
9L03048-CAL7	2000	234019	1.711	9.08
9L03048-CAL8	4000	393452	1.539	9.08
9L03048-CAL9	6000	533040	1.400	9.09
9L03048-CALA	8000	625310	1.277	9.09

AVE RF **1.695** RF RSD **13.29** AVE RT **9.08**

2-Chloronaphthalene

Curve Fit: **AVERAGE RF**

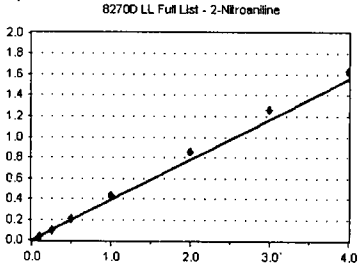


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2071	1.234	9.10
9L03048-CAL2	50	5582	1.380	9.10
9L03048-CAL3	100	11271	1.409	9.10
9L03048-CAL4	200	22623	1.405	9.10
9L03048-CAL5	500	55514	1.425	9.10
9L03048-CAL6	1000	98523	1.326	9.10
9L03048-CAL7	2000	170195	1.244	9.10
9L03048-CAL8	4000	288950	1.131	9.10
9L03048-CAL9	6000	393007	1.032	9.11
9L03048-CALA	8000	465897	0.951	9.11

AVE RF **1.254** RF RSD **13.39** AVE RT **9.10**

2-Nitroaniline

Curve Fit: **AVERAGE RF**

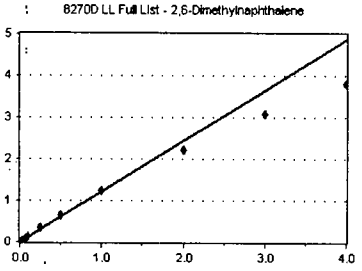


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~248~~	~~0.148~~	~~9.20~~
~~9L03048-CAL2~~	~~50~~	~~816~~	~~0.202~~	~~9.19~~
~~9L03048-CAL3~~	~~100~~	~~1702~~	~~0.213~~	~~9.19~~
9L03048-CAL4	200	4435	0.276	9.20
9L03048-CAL5	500	14324	0.368	9.19
9L03048-CAL6	1000	29886	0.402	9.20
9L03048-CAL7	2000	58736	0.429	9.20
9L03048-CAL8	4000	109829	0.430	9.21
9L03048-CAL9	6000	160094	0.421	9.21
9L03048-CALA	8000	200120	0.409	9.21

AVE RF **0.390** RF RSD **14.09** AVE RT **9.20**

2,6-Dimethylnaphthalene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2019	1.203	9.24
9L03048-CAL2	50	5091	1.258	9.24
9L03048-CAL3	100	10680	1.335	9.24
9L03048-CAL4	200	21960	1.364	9.24
9L03048-CAL5	500	53918	1.384	9.24
9L03048-CAL6	1000	96698	1.301	9.24
9L03048-CAL7	2000	170221	1.244	9.24
9L03048-CAL8	4000	284384	1.113	9.24
9L03048-CAL9	6000	389841	1.024	9.25
9L03048-CALA	8000	465388	0.950	9.25

AVE RF **1.218** RF RSD **12.01** AVE RT **9.24**

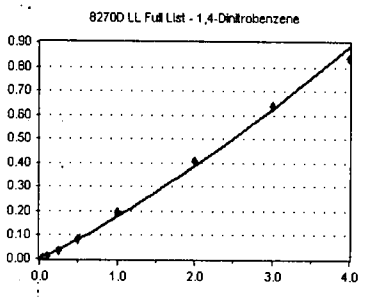
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

1,4-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

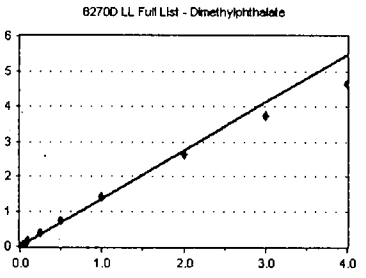


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~78~~	~~4.649~~	~~9.32~~
~~9L03048-CAL2~~	~~50~~	~~252~~	~~6.229~~	~~9.32~~
9L03048-CAL3	100	582	7.274	9.32
9L03048-CAL4	200	1578	9.803	9.32
9L03048-CAL5	500	5249	0.135	9.33
9L03048-CAL6	1000	12471	0.168	9.33
9L03048-CAL7	2000	26946	0.197	9.33
9L03048-CAL8	4000	52480	0.205	9.33
9L03048-CAL9	6000	81003	0.213	9.34
9L03048-CALA	8000	102409	0.209	9.34

AVE RF **0.162** RF RSD **33.56** AVE RT **9.33**

Dimethylphthalate

Curve Fit: **AVERAGE RF**

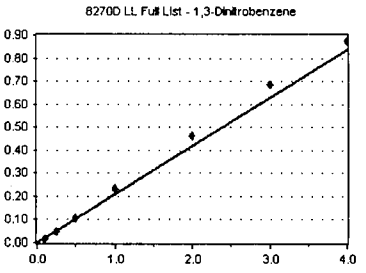


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2021	1.205	9.38
9L03048-CAL2	50	5537	1.369	9.38
9L03048-CAL3	100	11562	1.445	9.38
9L03048-CAL4	200	24457	1.519	9.38
9L03048-CAL5	500	60250	1.546	9.38
9L03048-CAL6	1000	109754	1.477	9.38
9L03048-CAL7	2000	195262	1.427	9.39
9L03048-CAL8	4000	337370	1.320	9.39
9L03048-CAL9	6000	473072	1.243	9.40
9L03048-CALA	8000	566278	1.156	9.40

AVE RF **1.371** RF RSD **9.89** AVE RT **9.38**

1,3-Dinitrobenzene

Curve Fit: **AVERAGE RF**

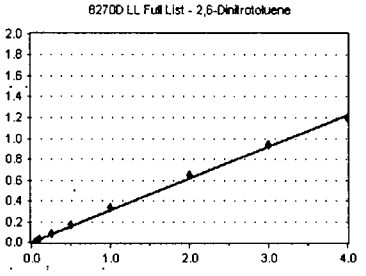


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~91~~	~~5.424~~	~~9.41~~
~~9L03048-CAL2~~	~~50~~	~~287~~	~~7.094~~	~~9.40~~
~~9L03048-CAL3~~	~~100~~	~~866~~	~~0.108~~	~~9.40~~
9L03048-CAL4	200	2388	0.148	9.41
9L03048-CAL5	500	7509	0.193	9.41
9L03048-CAL6	1000	16032	0.216	9.41
9L03048-CAL7	2000	31750	0.232	9.41
9L03048-CAL8	4000	58815	0.230	9.41
9L03048-CAL9	6000	86942	0.228	9.42
9L03048-CALA	8000	107208	0.219	9.42

AVE RF **0.209** RF RSD **14.37** AVE RT **9.41**

2,6-Dinitrotoluene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~222~~	~~0.132~~	~~9.43~~
~~9L03048-CAL2~~	~~50~~	~~670~~	~~0.166~~	~~9.44~~
9L03048-CAL3	100	1827	0.228	9.44
9L03048-CAL4	200	4524	0.281	9.44
9L03048-CAL5	500	13018	0.334	9.44
9L03048-CAL6	1000	24950	0.336	9.44
9L03048-CAL7	2000	45780	0.335	9.44
9L03048-CAL8	4000	82704	0.324	9.45
9L03048-CAL9	6000	118901	0.312	9.45
9L03048-CALA	8000	147404	0.301	9.46

AVE RF **0.306** RF RSD **12.04** AVE RT **9.44**

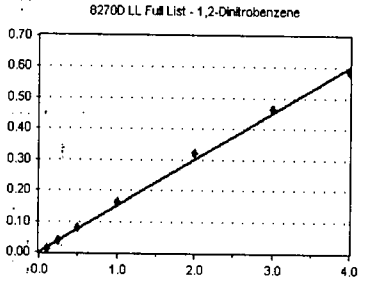
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

1,2-Dinitrobenzene

Curve Fit: **AVERAGE RF**

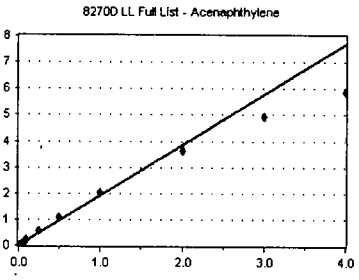


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~61~~	~~3.636~~	~~9.41~~
~~9L03048-CAL2~~	~~50~~	~~286~~	~~7.069~~	~~9.49~~
~~9L03048-CAL3~~	~~100~~	~~780~~	~~9.749~~	~~9.49~~
9L03048-CAL4	200	1939	0.120	9.49
9L03048-CAL5	500	5867	0.151	9.49
9L03048-CAL6	1000	11843	0.159	9.49
9L03048-CAL7	2000	22033	0.161	9.50
9L03048-CAL8	4000	41107	0.161	9.51
9L03048-CAL9	6000	59297	0.156	9.52
9L03048-CALA	8000	71730	0.146	9.52

AVE RF **0.151** RF RSD **9.56** AVE RT **9.50**

Acenaphthylene

Curve Fit: **AVERAGE RF**

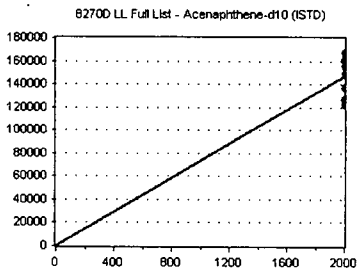


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2850	1.699	9.53
9L03048-CAL2	50	7740	1.913	9.53
9L03048-CAL3	100	16908	2.113	9.53
9L03048-CAL4	200	34979	2.173	9.53
9L03048-CAL5	500	87197	2.238	9.53
9L03048-CAL6	1000	158316	2.130	9.53
9L03048-CAL7	2000	276910	2.024	9.53
9L03048-CAL8	4000	464682	1.818	9.53
9L03048-CAL9	6000	624405	1.640	9.53
9L03048-CALA	8000	720035	1.470	9.53

AVE RF **1.922** RF RSD **13.41** AVE RT **9.53**

Acenaphthene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

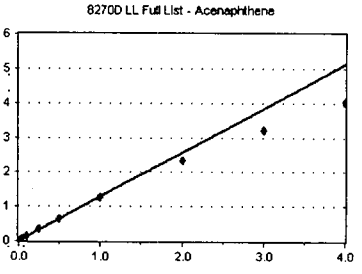


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	2000	167774	83.887	9.67
9L03048-CAL2	2000	161834	80.917	9.67
9L03048-CAL3	2000	160023	80.011	9.67
9L03048-CAL4	2000	160974	80.487	9.67
9L03048-CAL5	2000	155852	77.926	9.67
9L03048-CAL6	2000	148649	74.324	9.67
9L03048-CAL7	2000	136795	68.398	9.67
9L03048-CAL8	2000	127790	63.895	9.67
9L03048-CAL9	2000	126900	63.450	9.68
9L03048-CALA	2000	122459	61.229	9.68

AVE RF **73.453** RF RSD **11.52** AVE RT **9.67**

Acenaphthene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2357	1.405	9.70
9L03048-CAL2	50	5425	1.341	9.70
9L03048-CAL3	100	11107	1.388	9.70
9L03048-CAL4	200	22873	1.421	9.70
9L03048-CAL5	500	54943	1.410	9.70
9L03048-CAL6	1000	98670	1.328	9.70
9L03048-CAL7	2000	173177	1.266	9.70
9L03048-CAL8	4000	296440	1.160	9.71
9L03048-CAL9	6000	406943	1.069	9.71
9L03048-CALA	8000	490886	1.002	9.71

AVE RF **1.279** RF RSD **11.84** AVE RT **9.70**

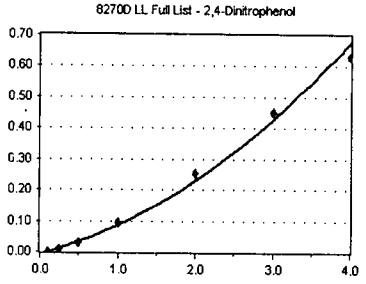
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

2,4-Dinitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

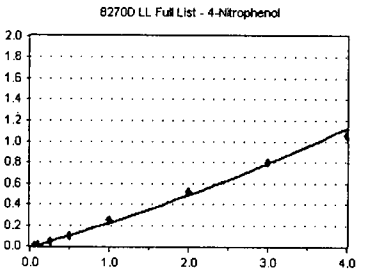


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9L03048-CAL2~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9L03048-CAL3~~	~~100~~	~~0~~	~~0.000~~	~~0.00~~
9L03048-CAL4	200	194	1.205	9.72
9L03048-CAL5	500	1322	3.393	9.72
9L03048-CAL6	1000	4261	5.733	9.72
9L03048-CAL7	2000	12862	0.094	9.72
9L03048-CAL8	4000	32374	0.127	9.72
9L03048-CAL9	6000	56948	0.150	9.73
9L03048-CALA	8000	77359	0.158	9.73

AVE RF **9.022** RF RSD **63.70** AVE RT **9.72**

4-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

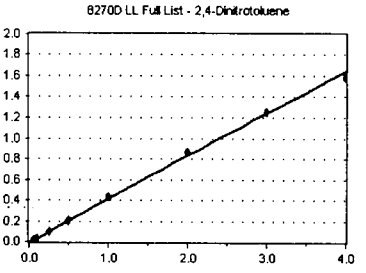


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9L03048-CAL2~~	~~50~~	~~136~~	~~3.361~~	~~9.77~~
9L03048-CAL3	100	479	5.987	9.77
9L03048-CAL4	200	1445	8.977	9.77
9L03048-CAL5	500	6508	0.167	9.77
9L03048-CAL6	1000	15067	0.203	9.77
9L03048-CAL7	2000	33445	0.244	9.78
9L03048-CAL8	4000	65917	0.258	9.78
9L03048-CAL9	6000	101931	0.268	9.79
9L03048-CALA	8000	129793	0.265	9.79

AVE RF **0.194** RF RSD **42.07** AVE RT **9.78**

2,4-Dinitrotoluene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

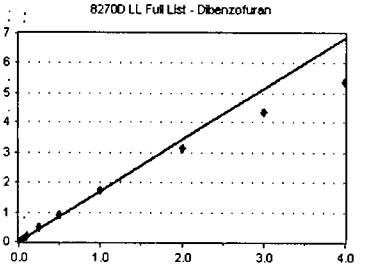


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~193~~	~~0.115~~	~~9.85~~
~~9L03048-CAL2~~	~~50~~	~~600~~	~~0.148~~	~~9.85~~
9L03048-CAL3	100	1539	0.192	9.85
9L03048-CAL4	200	4351	0.270	9.85
9L03048-CAL5	500	14643	0.376	9.85
9L03048-CAL6	1000	30105	0.405	9.85
9L03048-CAL7	2000	59132	0.432	9.85
9L03048-CAL8	4000	109996	0.430	9.86
9L03048-CAL9	6000	159707	0.420	9.86
9L03048-CALA	8000	194090	0.396	9.87

AVE RF **0.365** RF RSD **23.88** AVE RT **9.85**

Dibenzofuran

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2936	1.750	9.87
9L03048-CAL2	50	7253	1.793	9.87
9L03048-CAL3	100	14840	1.855	9.87
9L03048-CAL4	200	30987	1.925	9.87
9L03048-CAL5	500	74125	1.902	9.87
9L03048-CAL6	1000	135577	1.824	9.87
9L03048-CAL7	2000	238007	1.740	9.88
9L03048-CAL8	4000	402377	1.574	9.88
9L03048-CAL9	6000	553828	1.455	9.88
9L03048-CALA	8000	656214	1.340	9.88

AVE RF **1.716** RF RSD **11.44** AVE RT **9.88**

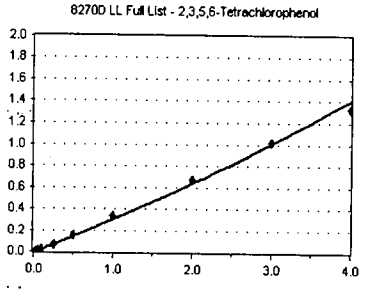
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

2,3,5,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

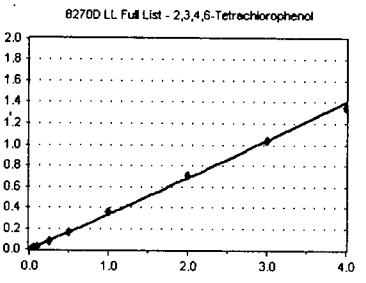


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~90~~	~~5.364~~	~~9.96~~
9L03048-CAL2	50	389	0.096	9.95
9L03048-CAL3	100	963	0.120	9.96
9L03048-CAL4	200	3190	0.198	9.96
9L03048-CAL5	500	10526	0.270	9.96
9L03048-CAL6	1000	22504	0.303	9.96
9L03048-CAL7	2000	45542	0.333	9.96
9L03048-CAL8	4000	85335	0.334	9.96
9L03048-CAL9	6000	128655	0.338	9.96
9L03048-CALA	8000	162823	0.332	9.96

AVE RF **0.258** RF RSD **37.28** AVE RT **9.96**

2,3,4,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

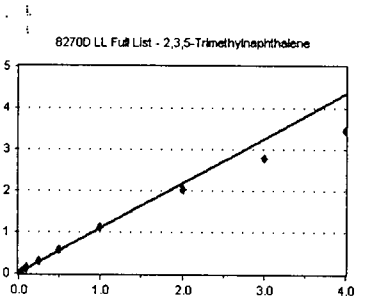


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~148~~	~~8.821~~	~~10.00~~
9L03048-CAL2	50	490	0.121	10.00
9L03048-CAL3	100	1304	0.163	10.00
9L03048-CAL4	200	3973	0.247	10.00
9L03048-CAL5	500	12612	0.324	10.00
9L03048-CAL6	1000	24817	0.334	10.00
9L03048-CAL7	2000	49283	0.360	10.00
9L03048-CAL8	4000	89845	0.352	10.01
9L03048-CAL9	6000	131822	0.346	10.01
9L03048-CALA	8000	165998	0.339	10.01

AVE RF **0.287** RF RSD **31.09** AVE RT **10.00**

2,3,5-Trimethylnaphthalene

Curve Fit: **AVERAGE RF**

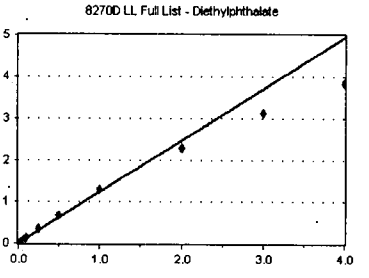


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1727	1.029	10.09
9L03048-CAL2	50	4530	1.120	10.09
9L03048-CAL3	100	9475	1.184	10.09
9L03048-CAL4	200	19994	1.242	10.09
9L03048-CAL5	500	48060	1.233	10.09
9L03048-CAL6	1000	86205	1.160	10.09
9L03048-CAL7	2000	153262	1.120	10.09
9L03048-CAL8	4000	258901	1.013	10.09
9L03048-CAL9	6000	353106	0.928	10.09
9L03048-CALA	8000	422363	0.862	10.10

AVE RF **1.089** RF RSD **11.74** AVE RT **10.09**

Diethylphthalate

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1942	1.158	10.09
9L03048-CAL2	50	4900	1.211	10.09
9L03048-CAL3	100	10642	1.330	10.09
9L03048-CAL4	200	23152	1.438	10.09
9L03048-CAL5	500	56335	1.446	10.09
9L03048-CAL6	1000	101129	1.361	10.10
9L03048-CAL7	2000	177170	1.295	10.10
9L03048-CAL8	4000	293319	1.148	10.10
9L03048-CAL9	6000	398303	1.046	10.11
9L03048-CALA	8000	470201	0.960	10.11

AVE RF **1.239** RF RSD **13.16** AVE RT **10.10**

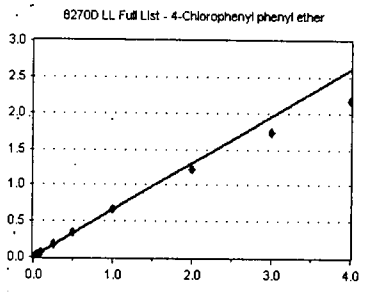
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

4-Chlorophenyl phenyl ether

Curve Fit: **AVERAGE RF**

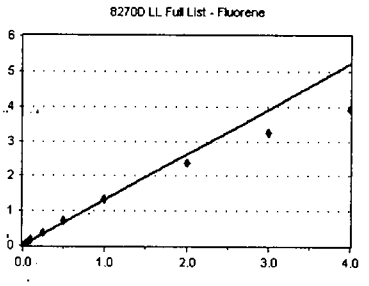


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1156	0.689	10.22
9L03048-CAL2	50	2650	0.655	10.22
9L03048-CAL3	100	5534	0.692	10.22
9L03048-CAL4	200	11318	0.703	10.22
9L03048-CAL5	500	27746	0.712	10.22
9L03048-CAL6	1000	49966	0.672	10.22
9L03048-CAL7	2000	90397	0.661	10.22
9L03048-CAL8	4000	154914	0.606	10.22
9L03048-CAL9	6000	220999	0.581	10.23
9L03048-CALA	8000	266759	0.545	10.23

AVE RF **0.652** RF RSD **8.62** AVE RT **10.22**

Fluorene

Curve Fit: **AVERAGE RF**

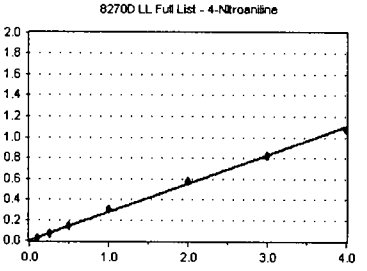


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2103	1.253	10.22
9L03048-CAL2	50	5658	1.398	10.23
9L03048-CAL3	100	11451	1.431	10.23
9L03048-CAL4	200	24375	1.514	10.23
9L03048-CAL5	500	57878	1.485	10.23
9L03048-CAL6	1000	104671	1.408	10.23
9L03048-CAL7	2000	181772	1.329	10.23
9L03048-CAL8	4000	300618	1.176	10.23
9L03048-CAL9	6000	410765	1.079	10.23
9L03048-CALA	8000	481267	0.983	10.24

AVE RF **1.306** RF RSD **13.67** AVE RT **10.23**

4-Nitroaniline

Curve Fit: **AVERAGE RF**

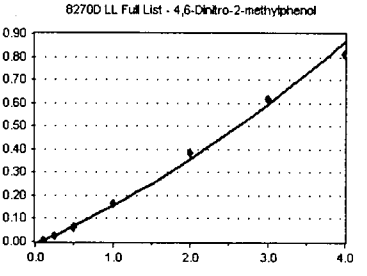


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~154~~	~~9.179~~	~~10.23~~
~~9L03048-CAL2~~	~~50~~	~~552~~	~~0.136~~	~~10.23~~
~~9L03048-CAL3~~	~~100~~	~~1311~~	~~0.164~~	~~10.23~~
9L03048-CAL4	200	3715	0.231	10.23
9L03048-CAL5	500	10822	0.278	10.23
9L03048-CAL6	1000	21162	0.285	10.23
9L03048-CAL7	2000	40971	0.300	10.24
9L03048-CAL8	4000	72956	0.285	10.25
9L03048-CAL9	6000	104811	0.275	10.25
9L03048-CALA	8000	130990	0.267	10.26

AVE RF **0.274** RF RSD **7.90** AVE RT **10.24**

4,6-Dinitro-2-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9L03048-CAL2~~	~~50~~	~~52~~	~~1.285~~	~~10.26~~
~~9L03048-CAL3~~	~~100~~	~~201~~	~~2.512~~	~~10.26~~
9L03048-CAL4	200	779	4.839	10.26
9L03048-CAL5	500	3544	9.096	10.26
9L03048-CAL6	1000	9285	0.125	10.26
9L03048-CAL7	2000	22787	0.167	10.27
9L03048-CAL8	4000	48951	0.192	10.27
9L03048-CAL9	6000	78166	0.205	10.29
9L03048-CALA	8000	99419	0.203	10.29

AVE RF **0.147** RF RSD **41.36** AVE RT **10.27**

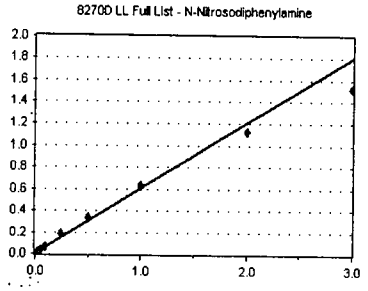
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

N-Nitrosodiphenylamine

Curve Fit: **AVERAGE RF**

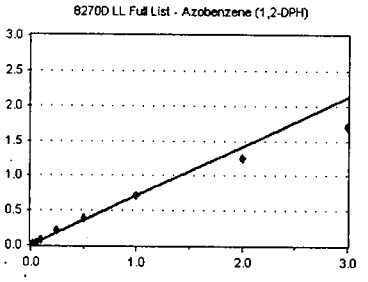


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1283	0.455	10.33
9L03048-CAL2	50	3867	0.565	10.33
9L03048-CAL3	100	8677	0.640	10.33
9L03048-CAL4	200	19213	0.686	10.33
9L03048-CAL5	500	48634	0.715	10.33
9L03048-CAL6	1000	89163	0.670	10.34
9L03048-CAL7	2000	158972	0.625	10.34
9L03048-CAL8	4000	272217	0.561	10.34
9L03048-CAL9	6000	374468	0.510	10.35
~~9L03048-CALA~~	~~8000~~	~~449608~~	~~0.473~~	~~10.35~~

AVE RF **0.603** RF RSD **14.31** AVE RT **10.34**

Azobenzene (1,2-DPH)

Curve Fit: **AVERAGE RF**

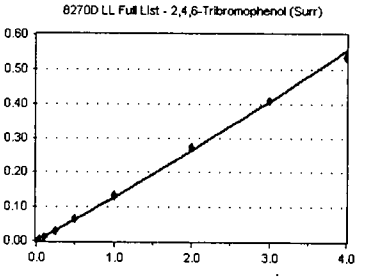


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1643	0.583	10.38
9L03048-CAL2	50	4633	0.676	10.38
9L03048-CAL3	100	10213	0.753	10.38
9L03048-CAL4	200	22527	0.804	10.38
9L03048-CAL5	500	57570	0.846	10.38
9L03048-CAL6	1000	102869	0.773	10.38
9L03048-CAL7	2000	183471	0.722	10.38
9L03048-CAL8	4000	304430	0.628	10.39
9L03048-CAL9	6000	418126	0.569	10.39
~~9L03048-CALA~~	~~8000~~	~~492851~~	~~0.518~~	~~10.39~~

AVE RF **0.706** RF RSD **13.92** AVE RT **10.38**

2,4,6-Tribromophenol (Surr)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

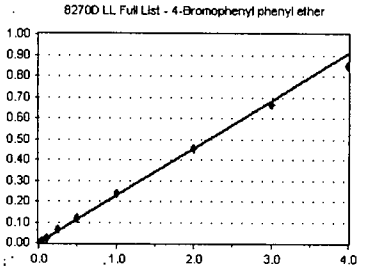


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~146~~	~~5.180~~	~~10.47~~
9L03048-CAL2	50	423	6.175	10.47
9L03048-CAL3	100	1050	7.744	10.47
9L03048-CAL4	200	2806	0.100	10.47
9L03048-CAL5	500	8367	0.123	10.47
9L03048-CAL6	1000	17115	0.129	10.47
9L03048-CAL7	2000	34168	0.134	10.47
9L03048-CAL8	4000	65706	0.136	10.47
9L03048-CAL9	6000	100016	0.136	10.48
9L03048-CALA	8000	127228	0.134	10.48

AVE RF **0.115** RF RSD **24.52** AVE RT **10.47**

4-Bromophenyl phenyl ether

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	579	0.205	10.72
9L03048-CAL2	50	1474	0.215	10.72
9L03048-CAL3	100	3017	0.223	10.72
9L03048-CAL4	200	6693	0.239	10.72
9L03048-CAL5	500	16943	0.249	10.72
9L03048-CAL6	1000	31952	0.240	10.72
9L03048-CAL7	2000	59875	0.235	10.72
9L03048-CAL8	4000	110191	0.227	10.72
9L03048-CAL9	6000	163449	0.222	10.72
9L03048-CALA	8000	202383	0.213	10.72

AVE RF **0.227** RF RSD **6.10** AVE RT **10.72**

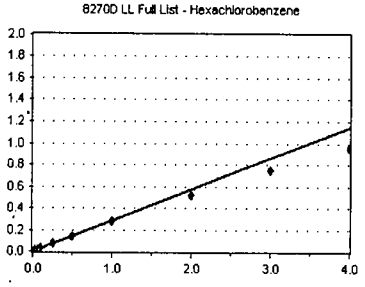
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Hexachlorobenzene

Curve Fit: **AVERAGE RF**

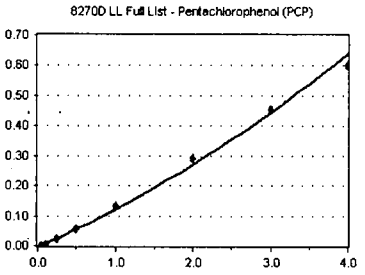


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	821	0.291	10.79
9L03048-CAL2	50	2122	0.310	10.79
9L03048-CAL3	100	4275	0.315	10.79
9L03048-CAL4	200	8826	0.315	10.79
9L03048-CAL5	500	21011	0.309	10.79
9L03048-CAL6	1000	38787	0.292	10.79
9L03048-CAL7	2000	71021	0.279	10.80
9L03048-CAL8	4000	126260	0.260	10.80
9L03048-CAL9	6000	183555	0.250	10.80
9L03048-CALA	8000	226619	0.238	10.80

AVE RF **0.286** RF RSD **9.85** AVE RT **10.80**

Pentachlorophenol (PCP)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

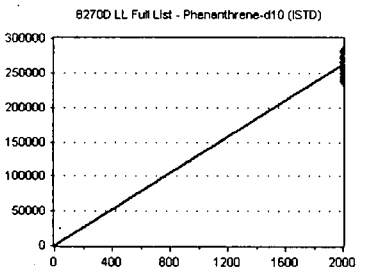


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~110~~	~~3.903~~	~~10.99~~
~~9L03048-CAL2~~	~~50~~	~~205~~	~~2.993~~	~~10.99~~
9L03048-CAL3	100	438	3.231	11.00
9L03048-CAL4	200	1488	5.312	10.99
9L03048-CAL5	500	6056	8.904	10.99
9L03048-CAL6	1000	14978	0.113	10.99
9L03048-CAL7	2000	33560	0.132	10.99
9L03048-CAL8	4000	70387	0.145	10.99
9L03048-CAL9	6000	111309	0.151	11.00
9L03048-CALA	8000	143057	0.150	11.00

AVE RF **0.108** RF RSD **42.43** AVE RT **10.99**

Phenanthrene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

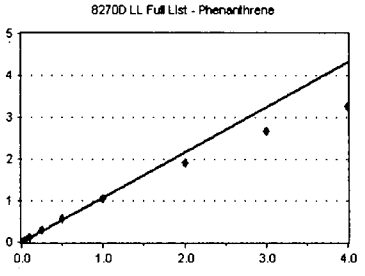


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	2000	281845	140.923	11.18
9L03048-CAL2	2000	274003	137.001	11.18
9L03048-CAL3	2000	271162	135.581	11.18
9L03048-CAL4	2000	280138	140.069	11.18
9L03048-CAL5	2000	272050	136.025	11.18
9L03048-CAL6	2000	266040	133.020	11.18
9L03048-CAL7	2000	254271	127.135	11.18
9L03048-CAL8	2000	242431	121.215	11.18
9L03048-CAL9	2000	244923	122.461	11.19
9L03048-CALA	2000	237781	118.890	11.19

AVE RF **131.232** RF RSD **6.20** AVE RT **11.18**

Phenanthrene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	3456	1.226	11.21
9L03048-CAL2	50	8173	1.193	11.21
9L03048-CAL3	100	16108	1.188	11.21
9L03048-CAL4	200	33616	1.200	11.21
9L03048-CAL5	500	80755	1.187	11.21
9L03048-CAL6	1000	149146	1.121	11.21
9L03048-CAL7	2000	269481	1.060	11.21
9L03048-CAL8	4000	462405	0.954	11.21
9L03048-CAL9	6000	653492	0.889	11.22
9L03048-CALA	8000	779684	0.820	11.22

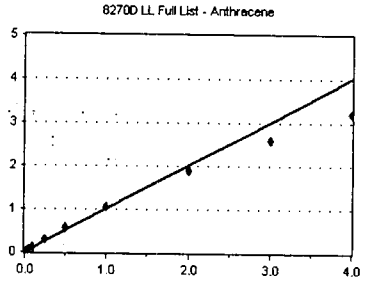
AVE RF **1.084** RF RSD **13.54** AVE RT **11.21**

Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Anthracene

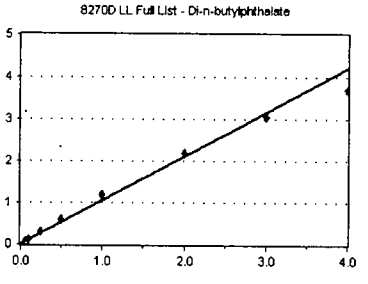


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2551	0.905	11.26
9L03048-CAL2	50	6645	0.970	11.26
9L03048-CAL3	100	14351	1.058	11.26
9L03048-CAL4	200	32114	1.146	11.26
9L03048-CAL5	500	79918	1.175	11.26
9L03048-CAL6	1000	148998	1.120	11.26
9L03048-CAL7	2000	270521	1.064	11.26
9L03048-CAL8	4000	459537	0.948	11.26
9L03048-CAL9	6000	632566	0.861	11.26
9L03048-CALA	8000	762087	0.801	11.27

AVE RF **1.005** RF RSD **12.64** AVE RT **11.26**

Di-n-butylphthalate

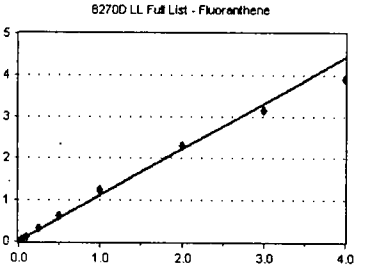


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~1716~~	~~0.609~~	~~11.76~~
~~9L03048-CAL2~~	~~50~~	~~4715~~	~~0.688~~	~~11.76~~
9L03048-CAL3	100	10998	0.811	11.76
9L03048-CAL4	200	28038	1.001	11.76
9L03048-CAL5	500	78970	1.161	11.76
9L03048-CAL6	1000	159941	1.202	11.76
9L03048-CAL7	2000	304858	1.199	11.76
9L03048-CAL8	4000	533571	1.100	11.77
9L03048-CAL9	6000	747267	1.017	11.77
9L03048-CALA	8000	881700	0.927	11.77

AVE RF **1.052** RF RSD **13.24** AVE RT **11.76**

Fluoranthene

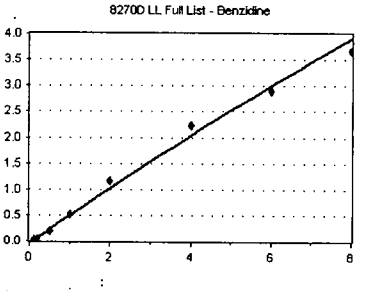


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2450	0.869	12.48
9L03048-CAL2	50	6606	0.964	12.48
9L03048-CAL3	100	14475	1.068	12.48
9L03048-CAL4	200	33612	1.200	12.48
9L03048-CAL5	500	87684	1.289	12.48
9L03048-CAL6	1000	167410	1.259	12.48
9L03048-CAL7	2000	314125	1.235	12.48
9L03048-CAL8	4000	553812	1.142	12.48
9L03048-CAL9	6000	774023	1.053	12.49
9L03048-CALA	8000	930387	0.978	12.49

AVE RF **1.106** RF RSD **12.80** AVE RT **12.48**

Benzidine



Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~40~~	~~926~~	~~0.164~~	~~12.63~~
~~9L03048-CAL2~~	~~100~~	~~1166~~	~~8.511~~	~~12.63~~
9L03048-CAL3	200	4188	0.154	12.63
9L03048-CAL4	400	10893	0.194	12.63
9L03048-CAL5	1000	54874	0.403	12.63
9L03048-CAL6	2000	138388	0.520	12.63
9L03048-CAL7	4000	297903	0.586	12.64
9L03048-CAL8	8000	540514	0.557	12.64
9L03048-CAL9	12000	707393	0.481	12.65
9L03048-CALA	16000	875986	0.461	12.66

AVE RF **0.420** RF RSD **38.58** AVE RT **12.64**

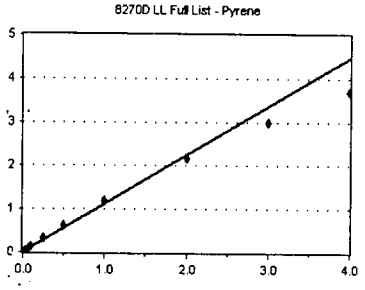
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Pyrene

Curve Fit: **AVERAGE RF**

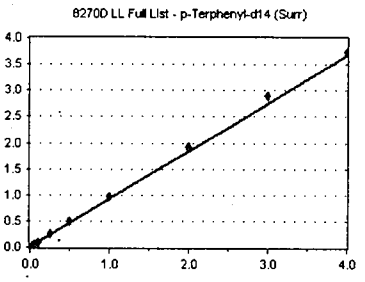


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2612	0.927	12.77
9L03048-CAL2	50	7061	1.031	12.77
9L03048-CAL3	100	15621	1.152	12.77
9L03048-CAL4	200	35949	1.283	12.77
9L03048-CAL5	500	91011	1.338	12.77
9L03048-CAL6	1000	168737	1.269	12.77
9L03048-CAL7	2000	304683	1.198	12.77
9L03048-CAL8	4000	526068	1.085	12.78
9L03048-CAL9	6000	736750	1.003	12.78
9L03048-CALA	8000	882836	0.928	12.79

AVE RF **1.121** RF RSD **13.31** AVE RT **12.78**

p-Terphenyl-d14 (Surr)

Curve Fit: **AVERAGE RF**

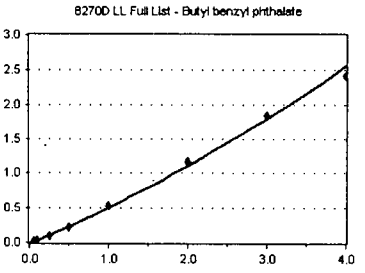


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1858	0.692	12.98
9L03048-CAL2	50	5357	0.821	12.98
9L03048-CAL3	100	11527	0.884	12.98
9L03048-CAL4	200	26772	0.956	12.98
9L03048-CAL5	500	67248	0.997	12.98
9L03048-CAL6	1000	127869	0.981	12.98
9L03048-CAL7	2000	237910	0.974	12.98
9L03048-CAL8	4000	420934	0.964	12.99
9L03048-CAL9	6000	600621	0.968	12.99
9L03048-CALA	8000	723275	0.936	12.99

AVE RF **0.917** RF RSD **10.37** AVE RT **12.98**

Butyl benzyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

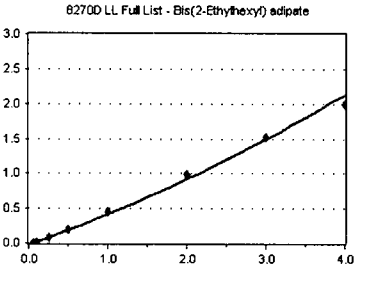


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~391~~	~~0.146~~	~~13.79~~
~~9L03048-CAL2~~	~~50~~	~~1049~~	~~0.161~~	~~13.80~~
9L03048-CAL3	100	2495	0.191	13.80
9L03048-CAL4	200	7795	0.278	13.80
9L03048-CAL5	500	26971	0.400	13.80
9L03048-CAL6	1000	60095	0.461	13.80
9L03048-CAL7	2000	131363	0.538	13.80
9L03048-CAL8	4000	256309	0.587	13.80
9L03048-CAL9	6000	380099	0.613	13.81
9L03048-CALA	8000	466464	0.603	13.81

AVE RF **0.459** RF RSD **34.43** AVE RT **13.80**

Bis(2-Ethylhexyl) adipate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~358~~	~~0.133~~	~~13.97~~
~~9L03048-CAL2~~	~~50~~	~~777~~	~~0.119~~	~~13.97~~
9L03048-CAL3	100	1789	0.137	13.97
9L03048-CAL4	200	5653	0.202	13.98
9L03048-CAL5	500	21591	0.320	13.97
9L03048-CAL6	1000	49833	0.382	13.97
9L03048-CAL7	2000	110181	0.451	13.98
9L03048-CAL8	4000	217064	0.497	13.98
9L03048-CAL9	6000	315678	0.509	13.98
9L03048-CALA	8000	385486	0.499	13.99

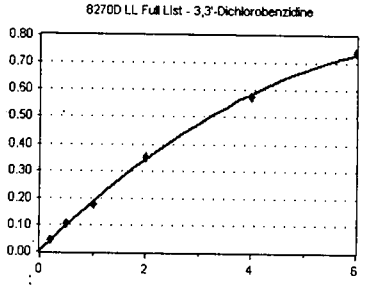
AVE RF **0.375** RF RSD **38.21** AVE RT **13.98**

Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

3,3'-Dichlorobenzidine

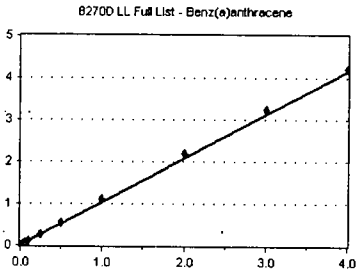


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~40~~	~~740~~	~~0.138~~	~~0.00~~
~~9L03048-CAL2~~	~~100~~	~~1996~~	~~0.153~~	~~0.00~~
~~9L03048-CAL3~~	~~200~~	~~4805~~	~~0.184~~	~~14.93~~
9L03048-CAL4	400	12293	0.220	14.93
9L03048-CAL5	1000	27812	0.206	14.93
9L03048-CAL6	2000	46667	0.179	14.93
9L03048-CAL7	4000	85387	0.175	14.93
9L03048-CAL8	8000	126011	0.144	14.94
9L03048-CAL9	12000	152911	0.123	14.95
~~9L03048-CALA~~	~~16000~~	~~189164~~	~~0.122~~	~~14.95~~

AVE RF **0.175** RF RSD **20.83** AVE RT **14.94**

Benz(a)anthracene

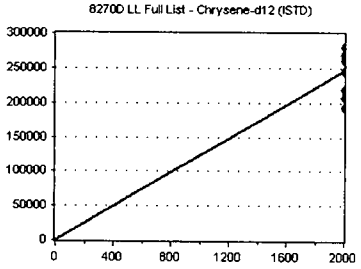


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2620	0.976	14.97
9L03048-CAL2	50	5742	0.880	14.97
9L03048-CAL3	100	12136	0.930	14.97
9L03048-CAL4	200	29244	1.044	14.97
9L03048-CAL5	500	76462	1.134	14.97
9L03048-CAL6	1000	143013	1.097	14.97
9L03048-CAL7	2000	270284	1.107	14.97
9L03048-CAL8	4000	477652	1.093	14.98
9L03048-CAL9	6000	671286	1.082	14.98
9L03048-CALA	8000	816781	1.056	14.99

AVE RF **1.040** RF RSD **8.07** AVE RT **14.97**

Chrysene-d12 (ISTD)

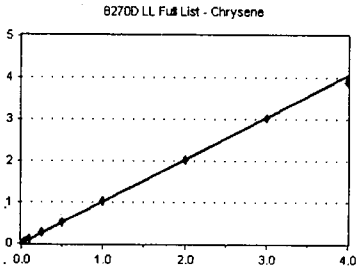


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	2000	268423	134.211	14.99
9L03048-CAL2	2000	261138	130.569	14.99
9L03048-CAL3	2000	260933	130.466	14.99
9L03048-CAL4	2000	279994	139.997	14.99
9L03048-CAL5	2000	269671	134.835	14.99
9L03048-CAL6	2000	260632	130.316	14.99
9L03048-CAL7	2000	244262	122.131	14.99
9L03048-CAL8	2000	218440	109.220	15.00
9L03048-CAL9	2000	206845	103.423	15.01
9L03048-CALA	2000	193280	96.640	15.01

AVE RF **123.181** RF RSD **12.07** AVE RT **14.99**

Chrysene



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2548	0.949	15.04
9L03048-CAL2	50	6638	1.017	15.04
9L03048-CAL3	100	13394	1.027	15.04
9L03048-CAL4	200	29363	1.049	15.05
9L03048-CAL5	500	72081	1.069	15.05
9L03048-CAL6	1000	135043	1.036	15.05
9L03048-CAL7	2000	249591	1.022	15.05
9L03048-CAL8	4000	442427	1.013	15.06
9L03048-CAL9	6000	625029	1.007	15.07
9L03048-CALA	8000	751720	0.972	15.08

AVE RF **1.016** RF RSD **3.43** AVE RT **15.05**

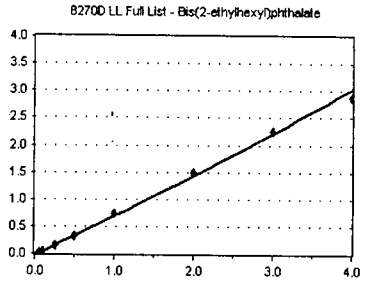
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Bis(2-ethylhexyl)phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

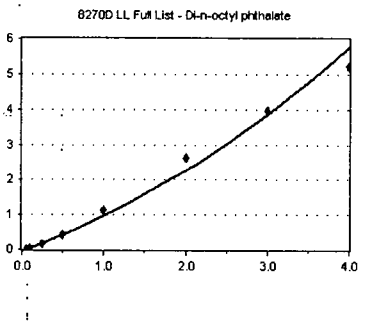


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~563~~	~~0.210~~	~~15.14~~
~~9L03048-CAL2~~	~~50~~	~~1339~~	~~0.205~~	~~15.14~~
9L03048-CAL3	100	3319	0.254	15.15
9L03048-CAL4	200	10701	0.382	15.14
9L03048-CAL5	500	39213	0.582	15.14
9L03048-CAL6	1000	86095	0.661	15.14
9L03048-CAL7	2000	176928	0.724	15.14
9L03048-CAL8	4000	328020	0.751	15.15
9L03048-CAL9	6000	466925	0.752	15.15
9L03048-CALA	8000	556986	0.720	15.16

AVE RF **0.603** RF RSD **31.12** AVE RT **15.15**

Di-n-octyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

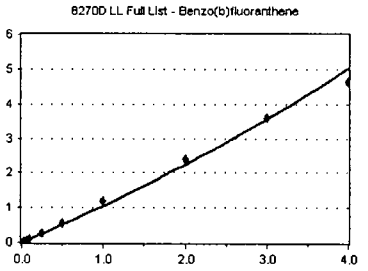


Standard	Concentration	Response	Response Factor	RT
~~9L03048-CAL1~~	~~20~~	~~707~~	~~0.273~~	~~16.81~~
~~9L03048-CAL2~~	~~50~~	~~1487~~	~~0.243~~	~~16.81~~
9L03048-CAL3	100	3108	0.252	16.81
9L03048-CAL4	200	8951	0.332	16.82
9L03048-CAL5	500	38790	0.603	16.82
9L03048-CAL6	1000	106646	0.844	16.82
9L03048-CAL7	2000	266541	1.122	16.82
9L03048-CAL8	4000	575101	1.310	16.82
9L03048-CAL9	6000	848830	1.317	16.83
9L03048-CALA	8000	1053413	1.304	16.84

AVE RF **0.886** RF RSD **50.24** AVE RT **16.82**

Benzo(b)fluoranthene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

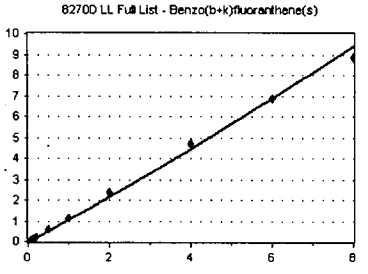


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1911	0.739	17.55
9L03048-CAL2	50	3980	0.650	17.56
9L03048-CAL3	100	9057	0.735	17.56
9L03048-CAL4	200	24272	0.901	17.56
9L03048-CAL5	500	69749	1.085	17.56
9L03048-CAL6	1000	141587	1.121	17.56
9L03048-CAL7	2000	282074	1.188	17.57
9L03048-CAL8	4000	529474	1.206	17.58
9L03048-CAL9	6000	771504	1.197	17.60
9L03048-CALA	8000	934117	1.156	17.60

AVE RF **0.998** RF RSD **21.99** AVE RT **17.57**

Benzo(b+k)fluoranthene(s)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	40	3928	0.759	17.55
9L03048-CAL2	100	8721	0.713	17.62
9L03048-CAL3	200	20058	0.814	17.63
9L03048-CAL4	400	52531	0.975	17.63
9L03048-CAL5	1000	147166	1.145	17.63
9L03048-CAL6	2000	291935	1.156	17.63
9L03048-CAL7	4000	565512	1.191	17.63
9L03048-CAL8	8000	1027057	1.170	17.65
9L03048-CAL9	12000	1472100	1.142	17.67
9L03048-CALA	16000	1795348	1.111	17.67

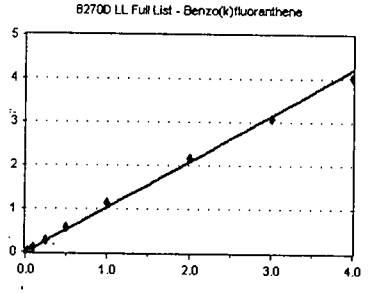
AVE RF **1.018** RF RSD **18.41** AVE RT **17.63**

Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Benzo(k)fluoranthene

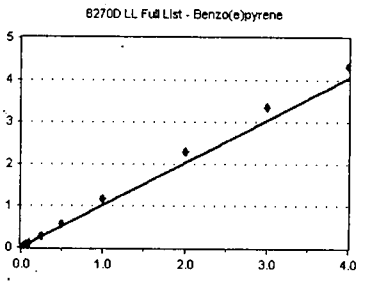


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2017	0.780	17.62
9L03048-CAL2	50	4087	0.668	17.62
9L03048-CAL3	100	9950	0.807	17.63
9L03048-CAL4	200	26053	0.968	17.63
9L03048-CAL5	500	72041	1.121	17.63
9L03048-CAL6	1000	141965	1.124	17.63
9L03048-CAL7	2000	269127	1.133	17.63
9L03048-CAL8	4000	471682	1.074	17.65
9L03048-CAL9	6000	662984	1.029	17.67
9L03048-CALA	8000	815308	1.009	17.67

AVE RF **0.971** RF RSD **16.92** AVE RT **17.64**

Benzo(e)pyrene

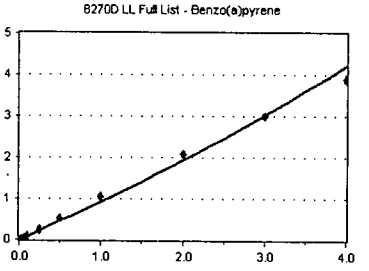


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2091	0.808	18.21
9L03048-CAL2	50	4620	0.755	18.22
9L03048-CAL3	100	10805	0.877	18.22
9L03048-CAL4	200	26664	0.990	18.22
9L03048-CAL5	500	71817	1.117	18.22
9L03048-CAL6	1000	141399	1.120	18.22
9L03048-CAL7	2000	275483	1.160	18.22
9L03048-CAL8	4000	501602	1.142	18.24
9L03048-CAL9	6000	717478	1.113	18.25
9L03048-CALA	8000	874278	1.082	18.27

AVE RF **1.017** RF RSD **14.77** AVE RT **18.23**

Benzo(a)pyrene

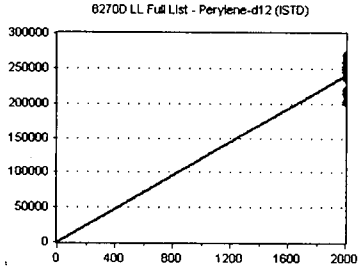


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1587	0.613	18.34
9L03048-CAL2	50	3268	0.534	18.34
9L03048-CAL3	100	7465	0.606	18.34
9L03048-CAL4	200	21101	0.784	18.34
9L03048-CAL5	500	63972	0.995	18.34
9L03048-CAL6	1000	127496	1.010	18.34
9L03048-CAL7	2000	250773	1.056	18.35
9L03048-CAL8	4000	454160	1.034	18.36
9L03048-CAL9	6000	645759	1.002	18.38
9L03048-CALA	8000	786876	0.974	18.38

AVE RF **0.861** RF RSD **23.88** AVE RT **18.35**

Perylene-d12 (ISTD)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	2000	258693	129.346	18.48
9L03048-CAL2	2000	244791	122.395	18.48
9L03048-CAL3	2000	246501	123.250	18.48
9L03048-CAL4	2000	269268	134.634	18.48
9L03048-CAL5	2000	257148	128.574	18.49
9L03048-CAL6	2000	252576	126.288	18.48
9L03048-CAL7	2000	237473	118.736	18.48
9L03048-CAL8	2000	219521	109.760	18.49
9L03048-CAL9	2000	214795	107.398	18.51
9L03048-CALA	2000	201932	100.966	18.51

AVE RF **120.135** RF RSD **9.03** AVE RT **18.49**

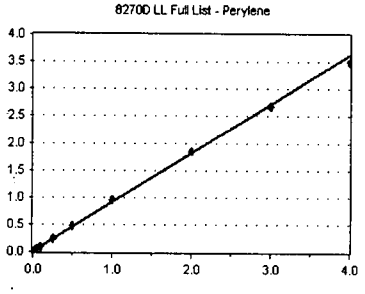
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Perylene

Curve Fit: **AVERAGE RF**

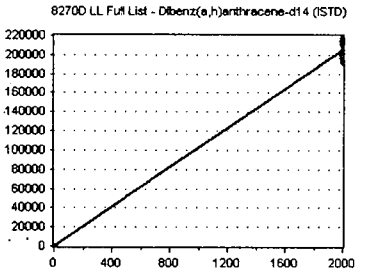


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2263	0.875	18.53
9L03048-CAL2	50	5321	0.869	18.53
9L03048-CAL3	100	10830	0.879	18.54
9L03048-CAL4	200	24848	0.923	18.54
9L03048-CAL5	500	62255	0.968	18.54
9L03048-CAL6	1000	118069	0.935	18.54
9L03048-CAL7	2000	224877	0.947	18.55
9L03048-CAL8	4000	402426	0.917	18.56
9L03048-CAL9	6000	577170	0.896	18.58
9L03048-CALA	8000	707152	0.875	18.59

AVE RF **0.908** RF RSD **3.82** AVE RT **18.55**

Dibenz(a,h)anthracene-d14 (ISTD)

Curve Fit: **AVERAGE RF**

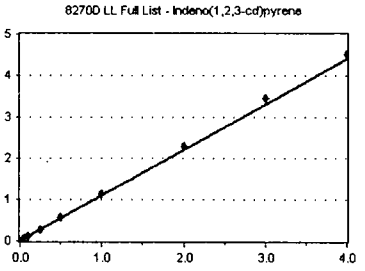


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	2000	204569	102.285	20.88
9L03048-CAL2	2000	196186	98.093	20.88
9L03048-CAL3	2000	197498	98.749	20.88
9L03048-CAL4	2000	217430	108.715	20.88
9L03048-CAL5	2000	213969	106.985	20.88
9L03048-CAL6	2000	215522	107.761	20.88
9L03048-CAL7	2000	212089	106.045	20.88
9L03048-CAL8	2000	202306	101.153	20.90
9L03048-CAL9	2000	201906	100.953	20.92
9L03048-CALA	2000	193681	96.840	20.92

AVE RF **102.758** RF RSD **4.21** AVE RT **20.89**

Indeno(1,2,3-cd)pyrene

Curve Fit: **AVERAGE RF**

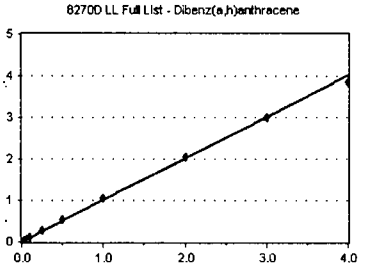


Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	2118	1.035	20.88
9L03048-CAL2	50	4903	1.000	20.88
9L03048-CAL3	100	10373	1.050	20.88
9L03048-CAL4	200	24305	1.118	20.88
9L03048-CAL5	500	60260	1.127	20.88
9L03048-CAL6	1000	120357	1.117	20.88
9L03048-CAL7	2000	238903	1.126	20.89
9L03048-CAL8	4000	465463	1.150	20.90
9L03048-CAL9	6000	698647	1.153	20.92
9L03048-CALA	8000	876084	1.131	20.93

AVE RF **1.101** RF RSD **4.79** AVE RT **20.89**

Dibenz(a,h)anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1905	0.931	20.94
9L03048-CAL2	50	4756	0.970	20.95
9L03048-CAL3	100	9692	0.981	20.95
9L03048-CAL4	200	22210	1.021	20.95
9L03048-CAL5	500	57867	1.082	20.95
9L03048-CAL6	1000	113808	1.056	20.95
9L03048-CAL7	2000	222804	1.051	20.96
9L03048-CAL8	4000	412814	1.020	20.97
9L03048-CAL9	6000	604383	0.998	20.99
9L03048-CALA	8000	747087	0.964	21.00

AVE RF **1.007** RF RSD **4.68** AVE RT **20.96**

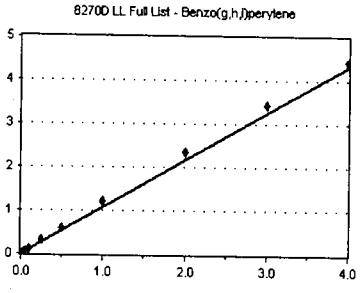
Element Calibration Review Sheet

Calibration ID: **A9L0505** Instrument: **SV-GCMS9** Calibration Date: **12/05/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9L0505**

Benzo(g,h,i)perylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9L03048-CAL1	20	1656	0.810	21.41
9L03048-CAL2	50	4102	0.836	21.40
9L03048-CAL3	100	9583	0.970	21.41
9L03048-CAL4	200	24173	1.112	21.42
9L03048-CAL5	500	66868	1.250	21.42
9L03048-CAL6	1000	130758	1.213	21.42
9L03048-CAL7	2000	257095	1.212	21.42
9L03048-CAL8	4000	476116	1.177	21.44
9L03048-CAL9	6000	694573	1.147	21.47
9L03048-CALA	8000	856246	1.105	21.48

AVE RF **1.083** RF RSD **14.57** AVE RT **21.43**

Response Factor Report SV-GCMS9

Method Path : T:\methods\
Method File : SV9_120319.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Wed Dec 04 10:57:36 2019
Response Via : Initial Calibration

JH 12/5/19

Calibration Files
20 =I12031912.D 50 =I12031913.D 100 =I12031914.D 200 =I12031915.D 500 =I12031916.D 1000=I12031917.D 2000=I12031918.D
4000=I12031919.D 6000=I12031920.D 8000=I12031921.D

		Compound	20	50	100	200	500	1000	2000	4000	6000	8000	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------	ISTD	----------									8.21
2)	T	N-Nitrosodimet...	0.765	0.927	1.003	0.989	1.039	1.041	1.062	1.126	1.180	1.158	1.029	11.80
3)	T	Pyridine	1.397	1.391	1.526	1.360	1.668	1.765	1.834	1.856	1.916	1.848	1.656	13.21
4)	S	2-Fluorophenol...		1.022	1.167	1.211	1.331	1.314	1.433	1.464	1.536	1.496	1.331	12.88
5)	S	Phenol-d6 (Surr)	1.322	1.456	1.587	1.652	1.846	1.857	1.887	1.962	1.901	1.816	1.729	12.39
6)	T	Phenol	1.601	1.750	1.838	1.961	2.145	2.116	2.087	2.049	1.910	1.765	1.922	9.45
7)	T	Aniline	1.548	1.797	2.026	2.110	2.292	2.241	2.165	2.023	1.935	1.815	1.995	11.44
8)	T	Bis(2-chloroet...	1.630	1.705	1.687	1.638	1.656	1.633	1.553	1.614	1.471	1.377	1.596	6.39
9)	T	2-Chlorophenol	1.192	1.236	1.379	1.431	1.529	1.521	1.485	1.469	1.403	1.332	1.398	8.24
10)	T	1,3-Dichlorobe...	1.422	1.589	1.589	1.646	1.655	1.589	1.551	1.511	1.467	1.398	1.541	5.81
11)	T	1,4-Dichlorobe...	1.434	1.630	1.620	1.616	1.623	1.550	1.494	1.440	1.376	1.301	1.509	7.80
12)	T	Benzyl alcohol		0.493	0.452	0.607	0.769	0.831	0.894	0.924	0.871	0.828	0.741	24.03
13)	T	1,2-Dichlorobe...	1.567	1.606	1.567	1.646	1.603	1.537	1.452	1.386	1.304	1.226	1.489	9.52
14)	T	2-Methylphenol	0.895	1.040	1.098	1.144	1.190	1.167	1.130	1.088	1.001	0.943	1.070	9.15
15)	T	2,2'-Oxybis(1-...	2.098	2.274	2.252	2.245	2.093	1.978	1.792	1.709	1.541		1.998	13.18
16)	T	N-Nitrosodi-n-...	0.984	1.034	1.084	1.083	1.163	1.097	1.038	0.975	0.888	0.832	1.018	9.88
17)	T	3+4-Methylphenol	1.019	1.257	1.392	1.408	1.547	1.477	1.436	1.361	1.231	1.139	1.327	12.29
18)	T	Hexachloroethane	0.372	0.410	0.427	0.462	0.469	0.448	0.457	0.450	0.460	0.447	0.440	6.72
19)	S	Nitrobenzene-d...	1.194	1.286	1.382	1.401	1.493	1.479	1.428	1.407	1.326	1.254	1.365	7.17
20)	T	Nitrobenzene	1.269	1.348	1.463	1.540	1.577	1.508	1.412	1.361	1.256	1.164	1.390	9.69
21)	I	Naphthalene-d8 (ISTD)	----------	ISTD	----------									12.66
22)	T	Isophorone	0.601	0.656	0.686	0.743	0.794	0.760	0.756	0.724	0.715	0.693	0.713	7.89
23)	T	2-Nitrophenol		0.091	0.110	0.133	0.178	0.199	0.192	0.198	0.202	0.193	0.166	25.84
24)	T	2,4-Dimethylph...		0.242	0.261	0.285	0.315	0.309	0.312	0.297	0.286	0.273	0.287	8.70
25)	T	Bis(2-chloroet...	0.389	0.412	0.435	0.450	0.469	0.449	0.435	0.410	0.388	0.364	0.420	7.87
26)	T	Benzoic acid					0.032	0.076	0.133	0.181	0.216	0.221	0.143	53.96
27)	T	2,4-Dichloroph...	0.130	0.174	0.195	0.236	0.276	0.282	0.292	0.282	0.275	0.256	0.240	23.12
28)	T	1,2,4-Trichlor...	0.316	0.350	0.343	0.351	0.355	0.341	0.330	0.309	0.297	0.283	0.327	7.61
29)	T	Naphthalene	1.076	1.123	1.131	1.137	1.139	1.061	1.023	0.926	0.862	0.793	1.027	12.16
30)	T	4-Chloroaniline	0.278	0.315	0.350	0.355	0.401	0.384	0.372	0.338	0.301	0.313	0.341	11.44
31)	T	Hexachlorobuta...	0.150	0.159	0.174	0.183	0.177	0.175	0.171	0.167	0.166	0.162	0.168	5.81
32)	T	4-Chloro-3-met...		0.151	0.190	0.224	0.279	0.291	0.304	0.308	0.306	0.298	0.261	22.28
33)	T	2-Methylnaphth...	0.709	0.752	0.759	0.777	0.804	0.769	0.760	0.705	0.663	0.614	0.731	7.94
34)	T	1-Methylnaphth...	0.679	0.731	0.753	0.740	0.775	0.718	0.697	0.643	0.600	0.570	0.691	9.78
35)	I	Acenaphthene-d10 (...	----------	ISTD	----------									11.52
36)	T	Hexachlorocycl...	0.236	0.256	0.283	0.316	0.356	0.380	0.394	0.398	0.394	0.385	0.340	18.27
37)	T	2,4,6-Trichlor...		0.212	0.247	0.302	0.380	0.395	0.415	0.406	0.394	0.391	0.349	21.64
38)	T	2,4,5-Trichlor...		0.217	0.238	0.303	0.370	0.393	0.399	0.396	0.385	0.359	0.340	20.67
39)	T	1,1'-Biphenyl	1.652	1.861	1.880	1.915	1.910	1.805	1.711	1.539	1.400	1.277	1.695	13.29

Method Path : T:\methods\
Method File : SV9_120319.M
Title : EPA 8270D: Semivolatile Organics

40)	S	2-Fluorobiphen...	1.534	1.639	1.657	1.680	1.678	1.592	1.535	1.382	1.272	1.176	1.515	11.81
41)	T	2-Chloronaphth...	1.234	1.380	1.409	1.405	1.425	1.326	1.244	1.131	1.032	0.951	1.254	13.39
42)	T	2-Nitroaniline				0.276	0.368	0.402	0.429	0.430	0.421	0.409	0.390	14.09
43)	T	2,6-Dimethylna...	1.203	1.258	1.335	1.364	1.384	1.301	1.244	1.113	1.024	0.950	1.218	12.01
44)	T	1,4-Dinitroben...			0.073	0.098	0.135	0.168	0.197	0.205	0.213	0.209	0.162	33.56
45)	T	Dimethyl phtha...	1.205	1.369	1.445	1.519	1.546	1.477	1.427	1.320	1.243	1.156	1.371	9.89
46)	T	1,3-Dinitroben...				0.148	0.193	0.216	0.232	0.230	0.228	0.219	0.209	14.37
47)	T	2,6-Dinitrotol...			0.228	0.281	0.334	0.336	0.335	0.324	0.312	0.301	0.306	12.04
48)	T	1,2-Dinitroben...				0.120	0.151	0.159	0.161	0.161	0.156	0.146	0.151	9.56
49)	T	Acenaphthylene	1.699	1.913	2.113	2.173	2.238	2.130	2.024	1.818	1.640	1.470	1.922	13.41
50)	T	3-Nitroaniline			0.213	0.269	0.318	0.331	0.341	0.305	0.270	0.263	0.289	14.85
51)	T	Acenaphthene	1.405	1.341	1.388	1.421	1.410	1.328	1.266	1.160	1.069	1.002	1.279	11.84
52)	T	2,4-Dinitrophenol				0.012	0.034	0.057	0.094	0.127	0.150	0.158	0.090	63.70
53)	T	4-Nitrophenol			0.060	0.090	0.167	0.203	0.244	0.258	0.268	0.265	0.194	42.07
54)	T	2,4-Dinitrotol...			0.192	0.270	0.376	0.405	0.432	0.430	0.420	0.396	0.365	23.88
55)	T	Dibenzofuran	1.750	1.793	1.855	1.925	1.902	1.824	1.740	1.574	1.455	1.340	1.716	11.44
56)	T	2,3,5,6-Tetrac...		0.096	0.120	0.198	0.270	0.303	0.333	0.334	0.338	0.332	0.258	37.28
57)	T	2,3,4,6-Tetrac...		0.121	0.163	0.247	0.324	0.334	0.360	0.352	0.346	0.339	0.287	31.09
58)	T	Diethyl phthalate	1.158	1.211	1.330	1.438	1.446	1.361	1.295	1.148	1.046	0.960	1.239	13.16
59)	T	2,3,5-Trimethy...	1.029	1.120	1.184	1.242	1.233	1.160	1.120	1.013	0.928	0.862	1.089	11.74
60)	T	Fluorene	1.253	1.398	1.431	1.514	1.485	1.408	1.329	1.176	1.079	0.983	1.306	13.67
61)	T	4-Chlorophenyl...	0.689	0.655	0.692	0.703	0.712	0.672	0.661	0.606	0.581	0.545	0.652	8.62
62)	T	4-Nitroaniline				0.231	0.278	0.285	0.300	0.285	0.275	0.267	0.274	7.90
63)	T	4,6-Dinitro-2-...				0.048	0.091	0.125	0.167	0.192	0.205	0.203	0.147	41.36
64)	I	Phenanthrene-d10 (...	----------ISTD----------											6.20
65)	T	N-Nitrosodiphe...	0.455	0.565	0.640	0.686	0.715	0.670	0.625	0.561	0.510		0.603	14.31
66)	T	Azobenzene (1,...	0.583	0.676	0.753	0.804	0.846	0.773	0.722	0.628	0.569		0.706	13.92
67)	S	2,4,6-Tribromo...		0.062	0.077	0.100	0.123	0.129	0.134	0.136	0.136	0.134	0.115	24.52
68)	T	4-Bromophenyl ...	0.205	0.215	0.223	0.239	0.249	0.240	0.235	0.227	0.222	0.213	0.227	6.10
69)	T	Hexachlorobenzene	0.291	0.310	0.315	0.315	0.309	0.292	0.279	0.260	0.250	0.238	0.286	9.85
70)	T	Pentachlorophe...			0.032	0.053	0.089	0.113	0.132	0.145	0.151	0.150	0.108	42.43
71)	T	Phenanthrene	1.226	1.193	1.188	1.200	1.187	1.121	1.060	0.954	0.889	0.820	1.084	13.54
72)	T	Anthracene	0.905	0.970	1.058	1.146	1.175	1.120	1.064	0.948	0.861	0.801	1.005	12.64
73)	T	Carbazole	0.633	0.736	0.854	0.956	1.039	0.973	0.931	0.802	0.682	0.605	0.821	18.65
74)	T	Di-n-butyl pht...			0.811	1.001	1.161	1.202	1.199	1.100	1.017	0.927	1.052	13.24
75)	T	Fluoranthene	0.869	0.964	1.068	1.200	1.289	1.259	1.235	1.142	1.053	0.978	1.106	12.80
76)	T	Benzidine			0.154	0.194	0.403	0.520	0.586	0.557	0.481	0.461	0.420	38.58
77)	T	Pyrene	0.927	1.031	1.152	1.283	1.338	1.269	1.198	1.085	1.003	0.928	1.121	13.31
78)	I	Chrysene-d12 (ISTD)	----------ISTD----------											12.07
79)	S	Terphenyl-d14 ...	0.692	0.821	0.884	0.956	0.997	0.981	0.974	0.964	0.968	0.936	0.917	10.37
80)	T	Butyl benzyl p...			0.191	0.278	0.400	0.461	0.538	0.587	0.613	0.603	0.459	34.43
81)	T	Bis(2-ethylhex...			0.137	0.202	0.320	0.382	0.451	0.497	0.509	0.499	0.375	38.21
82)	T	3,3-Dichlorobe...				0.220	0.206	0.179	0.175	0.144	0.123		0.175	20.83
83)	T	Benz(a)anthracene	0.976	0.880	0.930	1.044	1.134	1.097	1.107	1.093	1.082	1.056	1.040	8.07
84)	T	Chrysene	0.949	1.017	1.027	1.049	1.069	1.036	1.022	1.013	1.007	0.972	1.016	3.43
85)	T	Bis(2-ethylhex...			0.254	0.382	0.582	0.661	0.724	0.751	0.752	0.720	0.603	31.12
86)	I	Perylene-d12 (ISTD)	----------ISTD----------											9.03
87)	T	Di-n-octyl pht...			0.252	0.332	0.603	0.844	1.122	1.310	1.317	1.304	0.886	50.24

Method Path : T:\methods\
Method File : SV9_120319.M
Title : EPA 8270D: Semivolatile Organics

88)	T	Benzo(b)fluora...	0.739	0.650	0.735	0.901	1.085	1.121	1.188	1.206	1.197	1.156	0.998	21.99
89)	T	Benzo(k)fluora...	0.780	0.668	0.807	0.968	1.121	1.124	1.133	1.074	1.029	1.009	0.971	16.92
90)	T	Benzo(b+k)fluo...	0.759	0.713	0.814	0.975	1.145	1.156	1.191	1.170	1.142	1.111	1.018	18.41
91)	T	Benzo(e)pyrene	0.808	0.755	0.877	0.990	1.117	1.120	1.160	1.142	1.113	1.082	1.017	14.77
92)	T	Benzo(a)pyrene	0.613	0.534	0.606	0.784	0.995	1.010	1.056	1.034	1.002	0.974	0.861	23.88
93)	T	Perylene	0.875	0.869	0.879	0.923	0.968	0.935	0.947	0.917	0.896	0.875	0.908	3.82
94)	I	Dibenz(a,h)Anthrce...	----------ISTD----------											4.21
95)	T	Indeno(1,2,3-c...	1.035	1.000	1.050	1.118	1.127	1.117	1.126	1.150	1.153	1.131	1.101	4.79
96)	T	Dibenz(a,h)ant...	0.931	0.970	0.981	1.021	1.082	1.056	1.051	1.020	0.998	0.964	1.007	4.68
97)	T	Benzo(g,h,i)pe...	0.810	0.836	0.970	1.112	1.250	1.213	1.212	1.177	1.147	1.105	1.083	14.57

(#) = Out of Range

Compound List Report SV-GCMS9

Method Path : T:\methods\
Method File : SV9_120319.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Wed Dec 04 10:57:36 2019
Response Via : Initial Calibration

JK 12/4/19

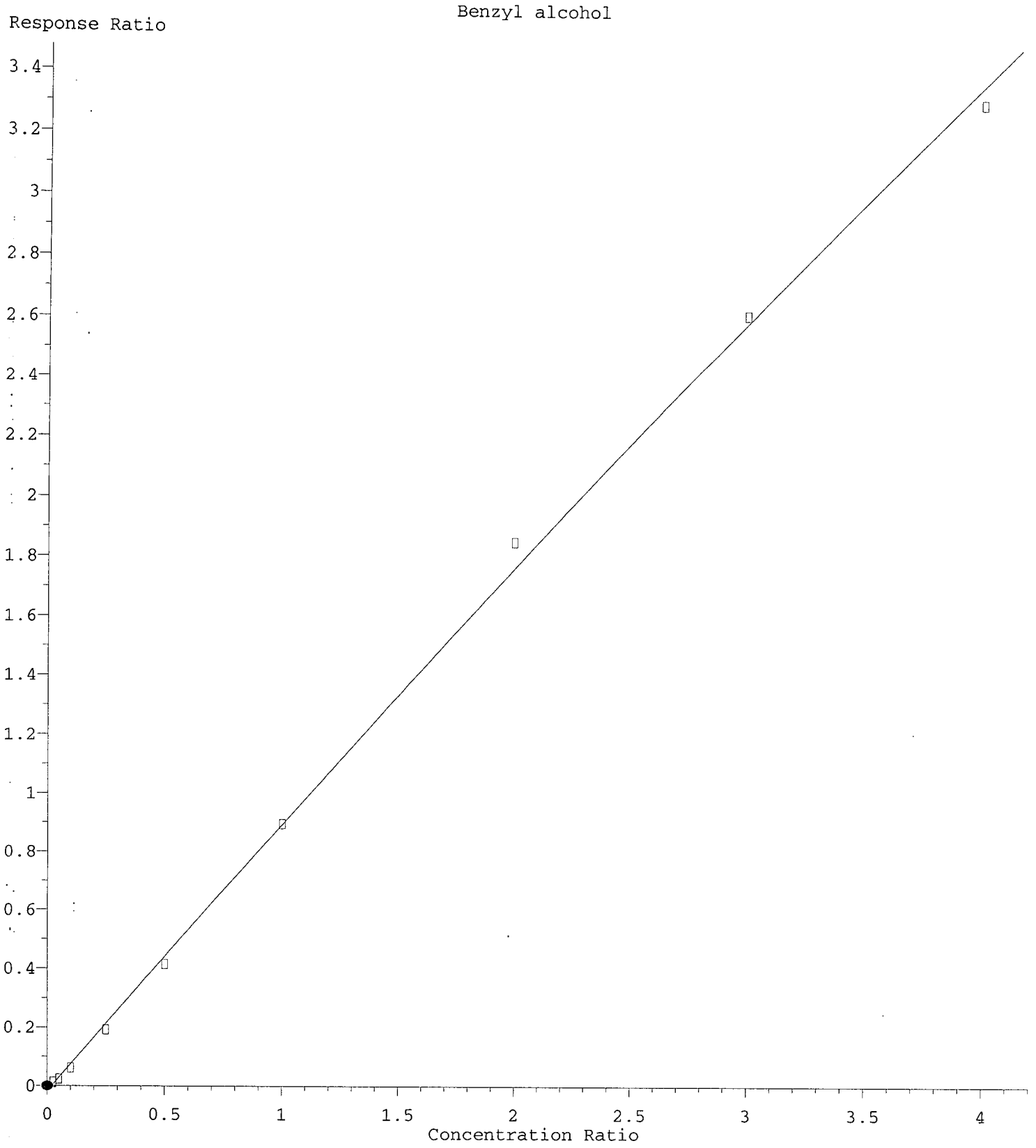
Total Cpnds : 97

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal		#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4 (ISTD)	152	6.626	1.000	A		2	A	R
2	T	N-Nitrosodimethylamine	74	3.947	0.596	A		2	A	R
3	T	Pyridine	79	3.984	0.601	A		2	A	R
4	S	2-Fluorophenol (Surr)	112	5.358	0.809	A		1	A	R
5	S	Phenol-d6 (Surr)	99	6.257	0.944	A		2	A	R
6	T	Phenol	94	6.273	0.947	A		2	A	R
7	T	Aniline	93	6.300	0.951	A		2	A	R
8	T	Bis(2-chloroethyl) ether	93	6.359	0.960	A		2	A	R
9	T	2-Chlorophenol	128	6.423	0.969	A		2	A	R
10	T	1,3-Dichlorobenzene	146	6.573	0.992	A		2	A	R
11	T	1,4-Dichlorobenzene	146	6.643	1.002	A		2	A	R
12	T	Benzyl alcohol	108	6.754	1.019	Q	1/a	2	A	R
13	T	1,2-Dichlorobenzene	146	6.798	1.026	A		2	A	R
14	T	2-Methylphenol	107	6.862	1.036	A		2	A	R
15	T	2,2'-Oxybis(1-Chloropropane)	45	6.888	1.040	A		2	A	R
16	T	N-Nitrosodi-n-propylamine	70	7.017	1.059	A		2	A	R
17	T	3+4-Methylphenol	107	7.011	1.058	A		3	A	R
18	T	Hexachloroethane	201	7.135	1.077	A		2	A	R
19	S	Nitrobenzene-d5 (Surr)	82	7.167	1.082	A		2	A	R
20	T	Nitrobenzene	77	7.188	1.085	A		2	A	R
21	I	Naphthalene-d8 (ISTD)	136	7.889	1.000	A		1	A	R
22	T	Isophorone	82	7.418	0.940	A	1/a2	2	A	R
23	T	2-Nitrophenol	139	7.503	0.951	Q		2	A	R
24	T	2,4-Dimethylphenol	122	7.541	0.956	A		2	A	R
25	T	Bis(2-chloroethoxy) methane	93	7.632	0.967	A	1/a2	2	A	R
26	T	Benzoic acid	105	7.621	0.966	Q	1/a2	2	A	R
27	T	2,4-Dichlorophenol	162	7.744	0.982	Q		2	A	R
28	T	1,2,4-Trichlorobenzene	180	7.835	0.993	A		2	A	R
29	T	Naphthalene	128	7.910	1.003	A		1	A	R
30	T	4-Chloroaniline	127	7.958	1.009	A		2	A	R
31	T	Hexachlorobutadiene	225	8.044	1.020	A	1/a2	2	A	R
32	T	4-Chloro-3-methylphenol	107	8.439	1.070	Q		2	A	R
33	T	2-Methylnaphthalene	142	8.605	1.091	A		2	A	R
34	T	1-Methylnaphthalene	142	8.707	1.104	A		2	A	R
35	I	Acenaphthene-d10 (ISTD)	162	9.670	1.000	A	1/a2	2	A	R
36	T	Hexachlorocyclopentadiene	237	8.777	0.908	Q	1/a2	2	A	R
37	T	2,4,6-Trichlorophenol	196	8.888	0.919	Q	1/a2	2	A	R
38	T	2,4,5-Trichlorophenol	198	8.926	0.923	Q		2	A	R
39	T	1,1'-Biphenyl	154	9.076	0.939	A		2	A	R
40	S	2-Fluorobiphenyl (Surr)	172	8.975	0.928	A		2	A	R
41	T	2-Chloronaphthalene	162	9.103	0.941	A		2	A	R
42	T	2-Nitroaniline	138	9.199	0.951	A		2	A	R
43	T	2,6-Dimethylnaphthalene	156	9.237	0.955	A	1/a2	2	A	R
44	T	1,4-Dinitrobenzene	168	9.327	0.965	Q		2	A	R
45	T	Dimethyl phthalate	163	9.381	0.970	A		2	A	R
46	T	1,3-Dinitrobenzene	168	9.407	0.973	A		2	A	R
47	T	2,6-Dinitrotoluene	165	9.439	0.976	A		2	A	R
48	T	1,2-Dinitrobenzene	168	9.493	0.982	A		2	A	R
49	T	Acenaphthylene	152	9.525	0.985	A		2	A	R
50	T	3-Nitroaniline	138	9.611	0.994	A		2	A	R
51	T	Acenaphthene	153	9.702	1.003	A		2	A	R
52	T	2,4-Dinitrophenol	184	9.718	1.005	Q	1/a2	2	A	R
53	T	4-Nitrophenol	139	9.771	1.010	Q	1/a2	2	A	R
54	T	2,4-Dinitrotoluene	165	9.851	1.019	Q	1/a2	2	A	R

55	T	Dibenzofuran	168	9.873	1.021	A		2	A	R
56	T	2,3,5,6-Tetrachlorophenol	232	9.958	1.030	Q		2	A	R
57	T	2,3,4,6-Tetrachlorophenol	232	10.001	1.034	Q		2	A	R
58	T	Diethyl phthalate	149	10.098	1.044	A		2	A	R
59	T	2,3,5-Trimethylnaphthalene	170	10.087	1.043	A		2	A	R
60	T	Fluorene	166	10.226	1.058	A		2	A	R
61	T	4-Chlorophenyl phenyl ether	204	10.221	1.057	A		2	A	R
62	T	4-Nitroaniline	138	10.231	1.058	A		2	A	R
63	T	4,6-Dinitro-2-methylphenol	198	10.263	1.061	Q		2	A	R
64	I	Phenanthrene-d10 (ISTD)	188	11.184	1.000	A		2	A	R
65	T	N-Nitrosodiphenylamine	169	10.338	0.924	A		2	A	R
66	T	Azobenzene (1,2-DPH)	77	10.381	0.928	A		2	A	R
67	S	2,4,6-Tribromophenol (Surr)	330	10.472	0.936	Q		2	A	R
68	T	4-Bromophenyl phenyl ether	248	10.718	0.958	A		2	A	R
69	T	Hexachlorobenzene	284	10.793	0.965	A		2	A	R
70	T	Pentachlorophenol (PCP)	266	10.990	0.983	Q		2	A	R
71	T	Phenanthrene	178	11.205	1.002	A		2	A	R
72	T	Anthracene	178	11.258	1.007	A		2	A	R
73	T	Carbazole	167	11.414	1.021	Q		2	A	R
74	T	Di-n-butyl phthalate	149	11.761	1.052	A		2	A	R
75	T	Fluoranthene	202	12.478	1.116	A		2	A	R
76	T	Benzidine	184	12.633	1.130	Q		2	A	R
77	T	Pyrene	202	12.772	1.142	A		2	A	R
78	I	Chrysene-d12 (ISTD)	240	14.986	1.000	A		2	A	R
79	S	Terphenyl-d14 (Surr)	244	12.981	0.866	A		2	A	R
80	T	Butyl benzyl phthalate	149	13.799	0.921	Q		2	A	R
81	T	Bis(2-ethylhexyl) adipate	129	13.970	0.932	Q		2	A	R
82	T	3,3-Dichlorobenzidine	252	14.927	0.996	Q		2	A	R
83	T	Benz(a)anthracene	228	14.965	0.999	A		2	A	R
84	T	Chrysene	228	15.045	1.004	A		2	A	R
85	T	Bis(2-ethylhexyl) phthalate	149	15.141	1.010	Q		2	A	R
86	I	Perylene-d12 (ISTD)	264	18.484	1.000	A		2	A	R
87	T	Di-n-octyl phthalate	149	16.815	0.910	Q		2	A	R
88	T	Benzo(b)fluoranthene	252	17.564	0.950	Q		2	A	R
89	T	Benzo(k)fluoranthene	252	17.628	0.954	Q		2	A	R
90	T	Benzo(b+k)fluoranthene	252	17.628	0.954	Q		2	A	R
91	T	Benzo(e)pyrene	252	18.217	0.986	A		2	A	R
92	T	Benzo(a)pyrene	252	18.334	0.992	Q		2	A	R
93	T	Perylene	252	18.543	1.003	A		2	A	B
94	I	Dibenz(a,h)Anthrcene-d14 (I...	292	20.881	1.000	A		1	A	B
95	T	Indeno(1,2,3-cd)pyrene	276	20.881	1.000	A		1	A	R
96	T	Dibenz(a,h)anthracene	278	20.950	1.003	A		2	A	R
97	T	Benzo(g,h,i)perylene	276	21.415	1.026	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

SV9_120319.M Wed Dec 04 12:37:07 2019

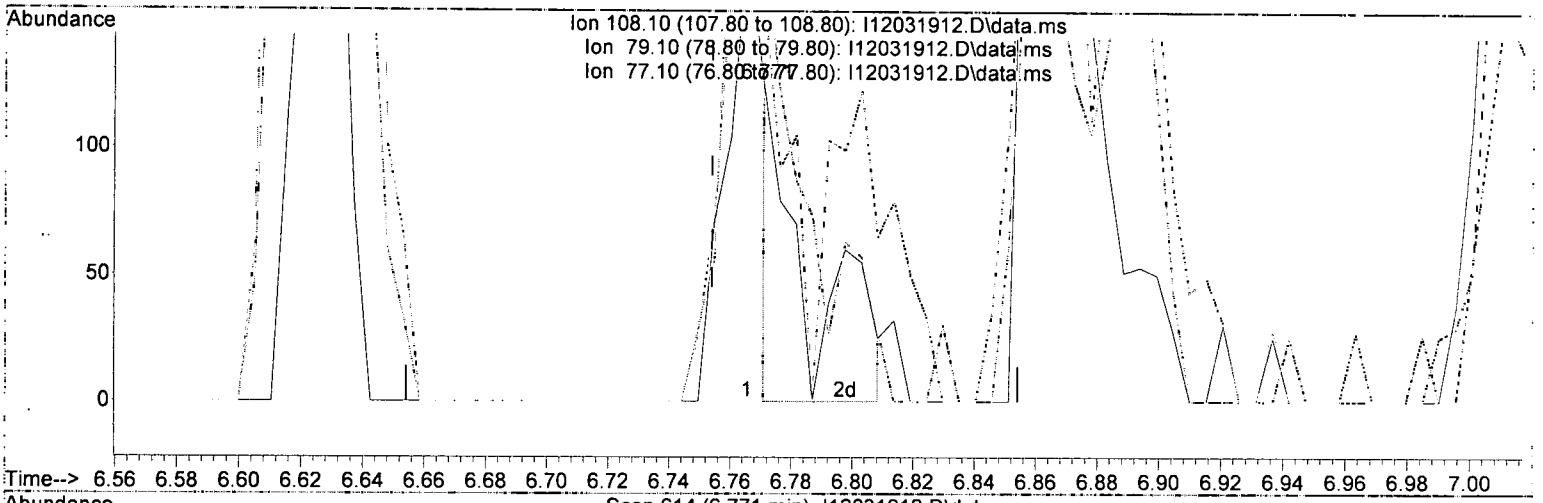


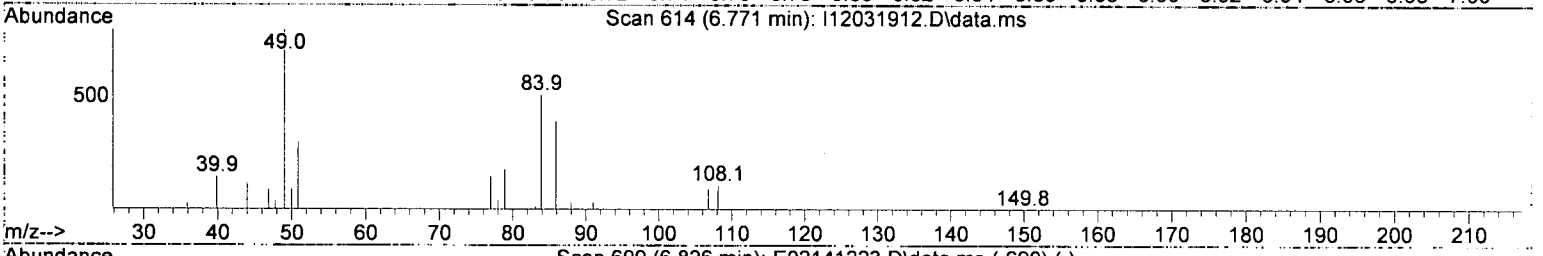
R = -2.13e-002 A*A + 9.33e-001 A - 1.91e-002
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w/ 1/a
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2010

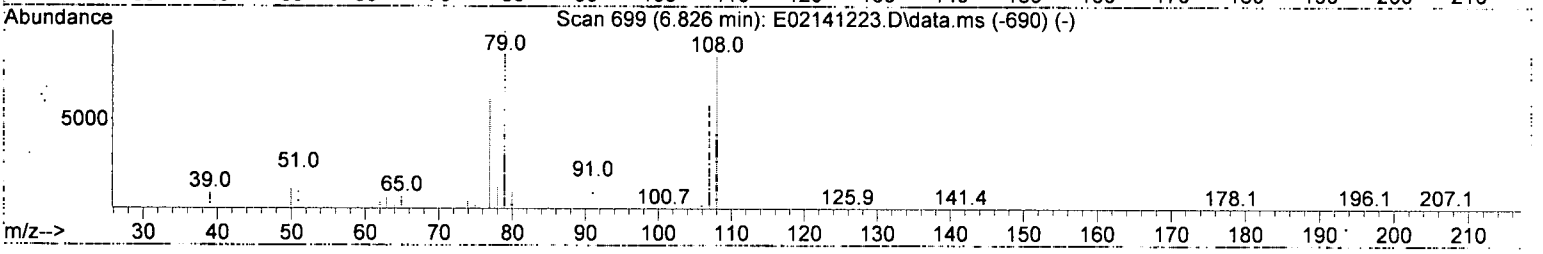
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







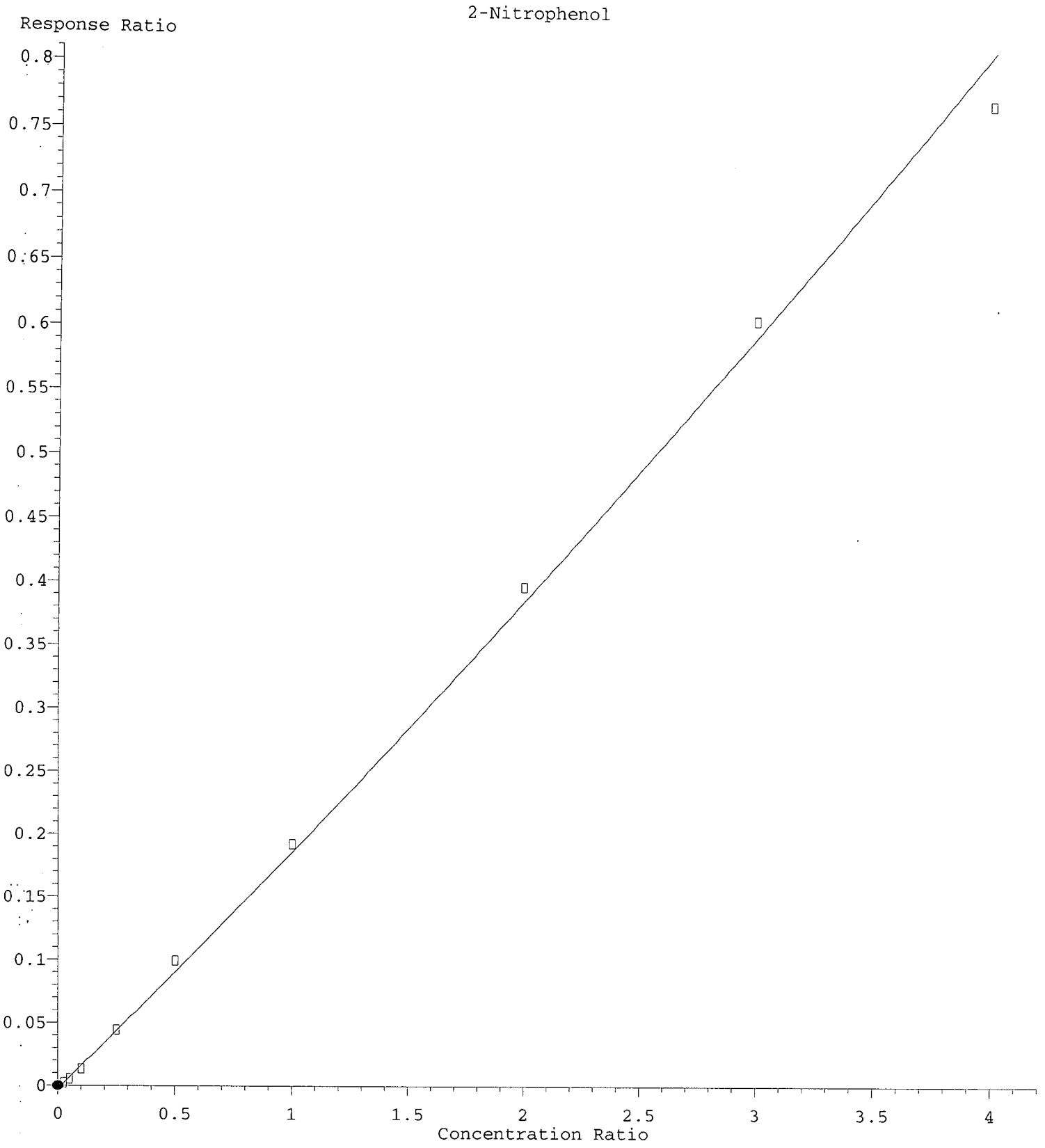
TIC: I12031912.D\data.ms

(12) Benzyl alcohol (T)

6.771min (+ 0.017) 43.77 ng/ml m

response 105

Ion	Exp%	Act%
108.10	100.00	100.00
79.10	129.70	152.80
77.10	80.30	128.80#
0.00	0.00	0.00

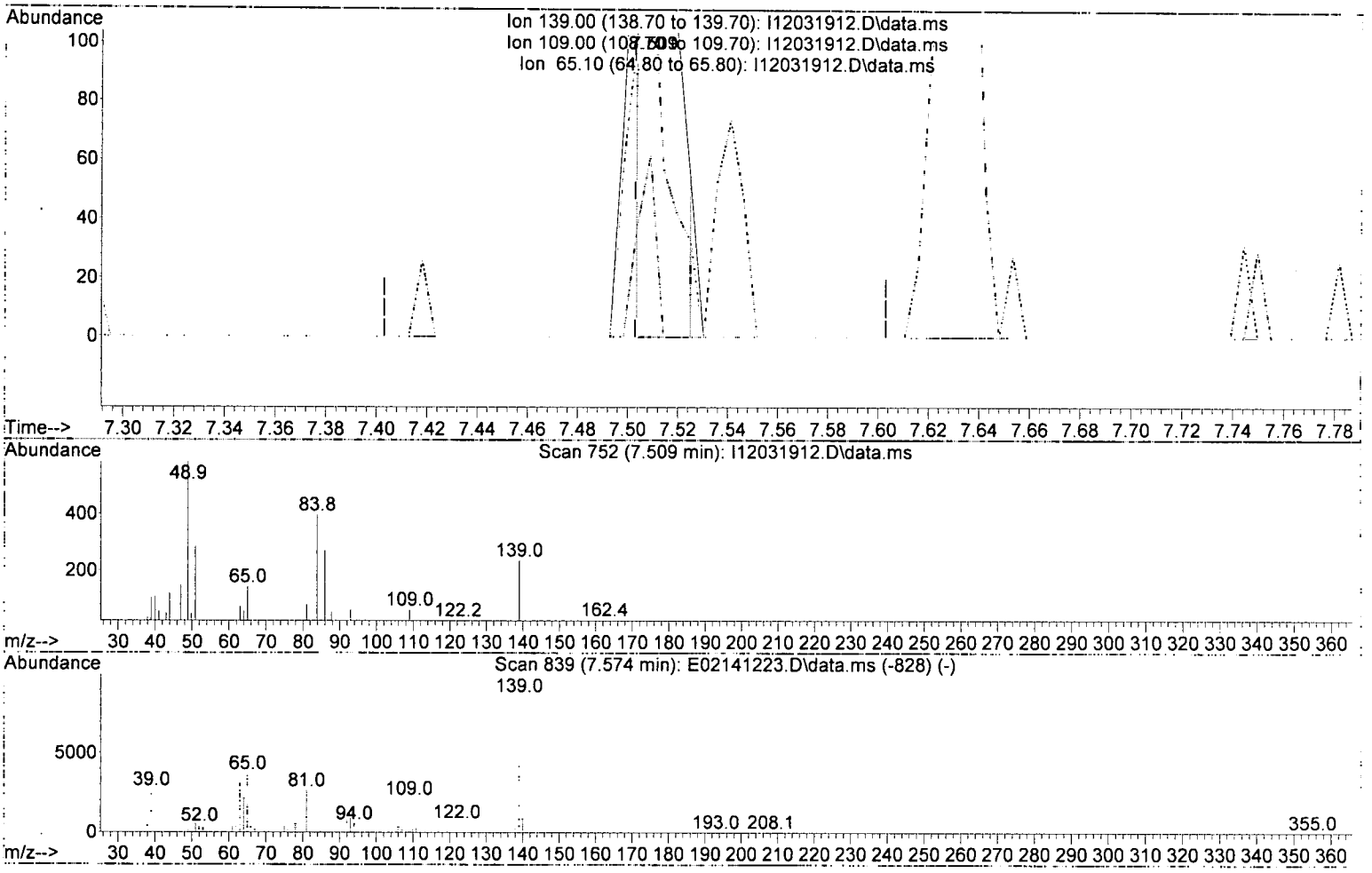


R = 4.97e-003 A*A + 1.83e-001 A - 2.68e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9



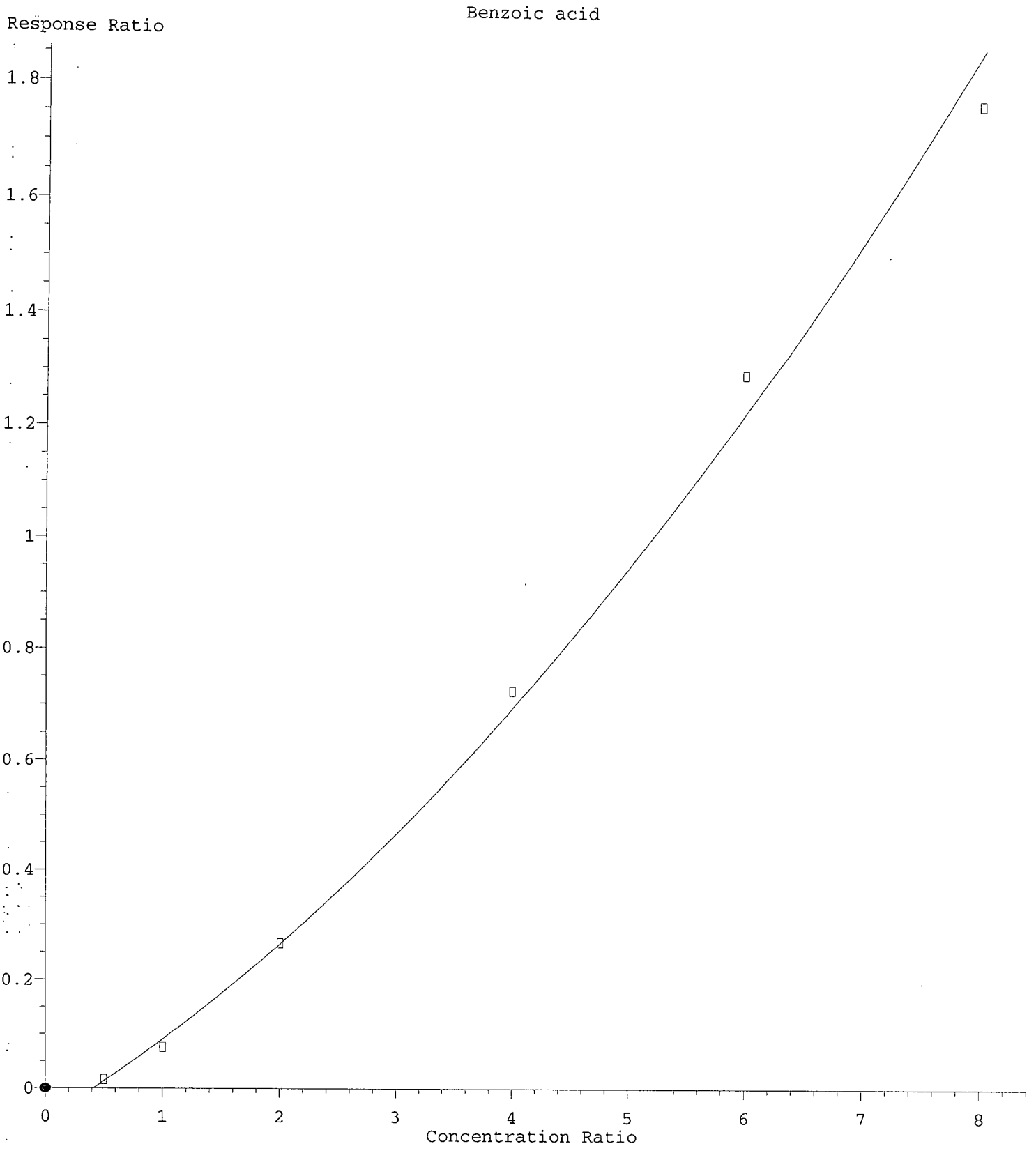
TIC: I12031912.D\data.ms

(23) 2-Nitrophenol (T)

7.509min (+ 0.006) 34.54 ng/ml m

response 168

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	23.30	26.38
65.10	47.80	60.43
0.00	0.00	0.00

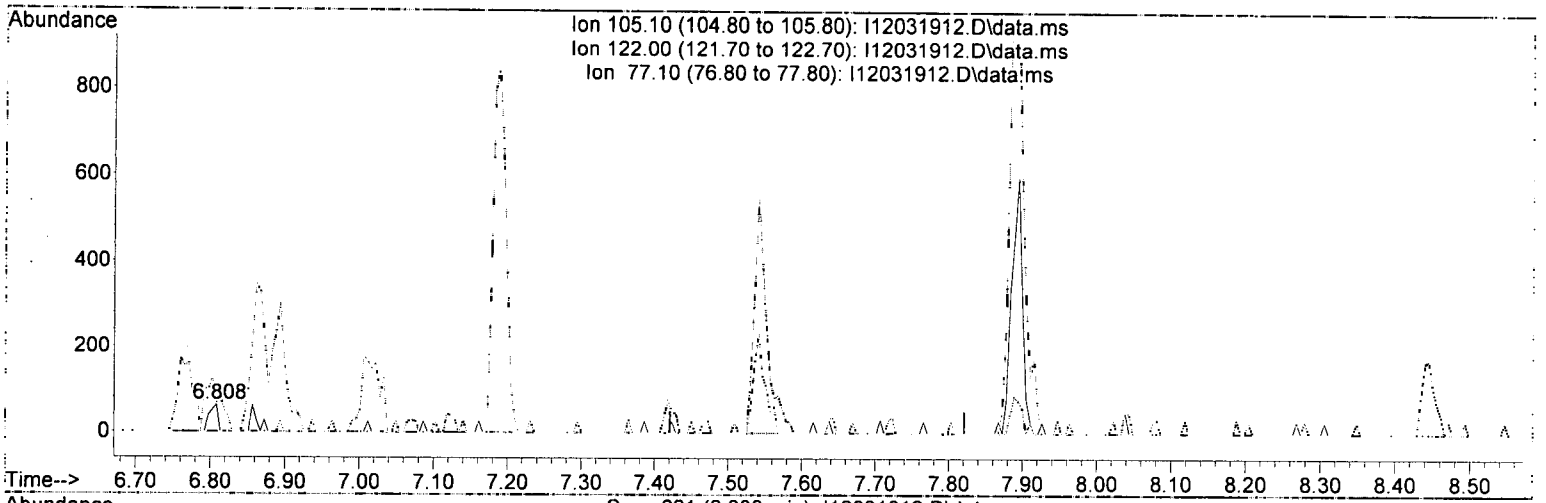


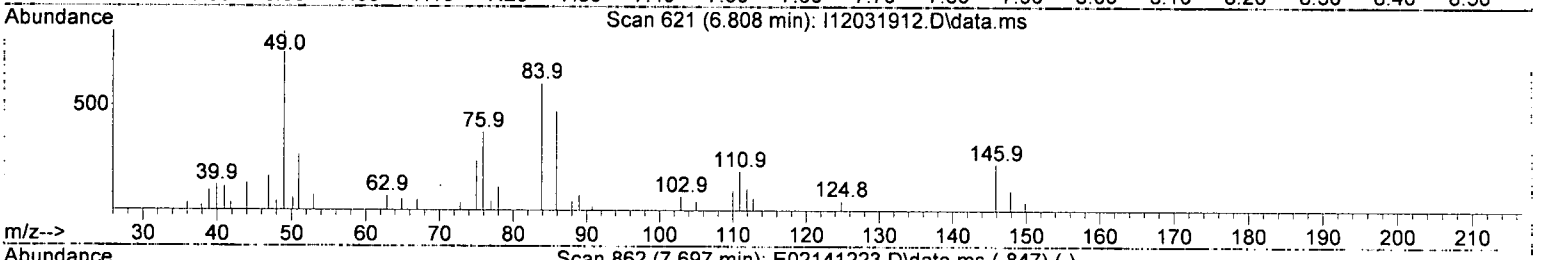
R = 1.30e-002 A*A + 1.36e-001 A - 5.82e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w/1/(a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

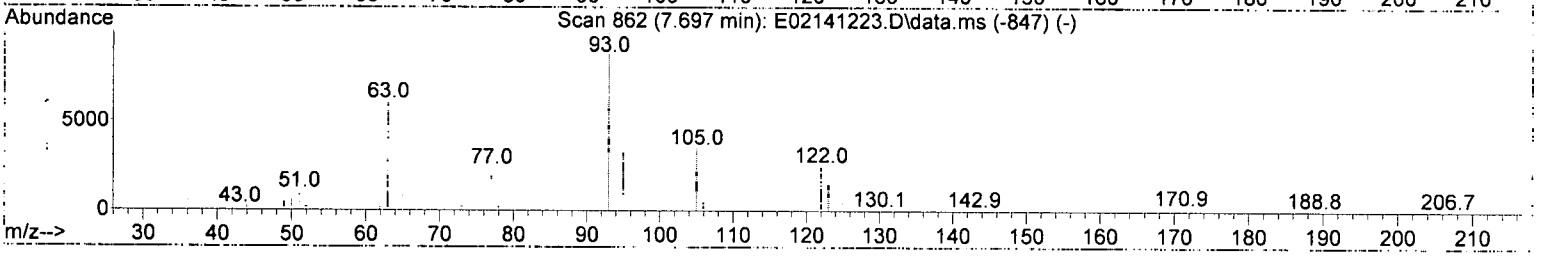
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I12031912.D\data.ms

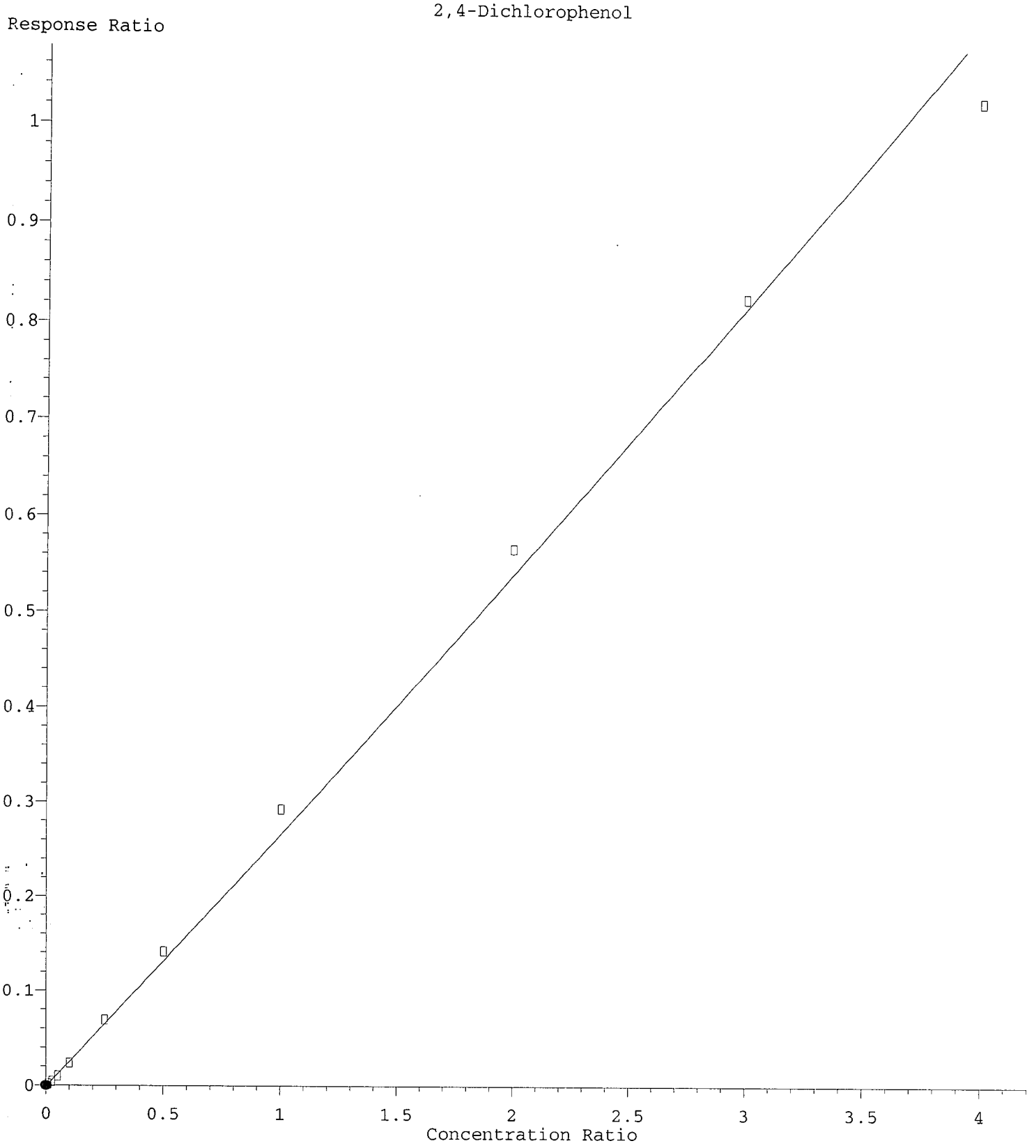
(26) Benzoic acid (T)

6.808min (-0.813) 831.31 ng/ml m

response 163

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	0.00#
77.10	77.80	103.17
0.00	0.00	0.00

2,4-Dichlorophenol

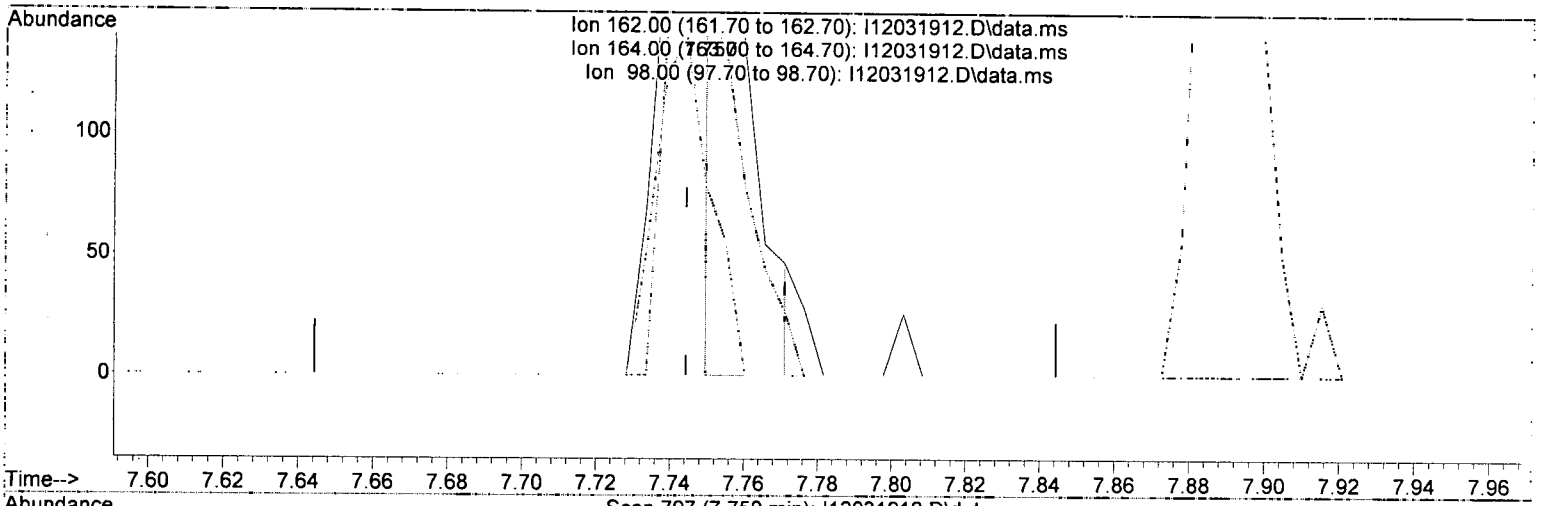


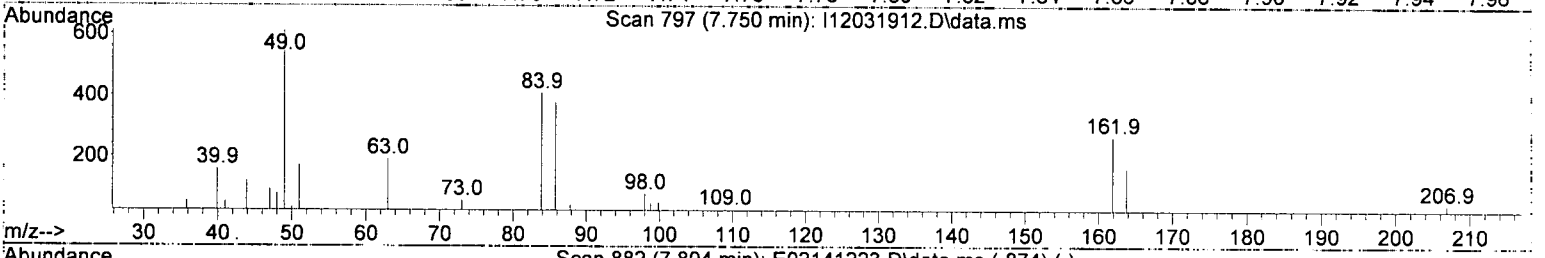
R = 2.59e-003 A*A + 2.65e-001 A - 1.54e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

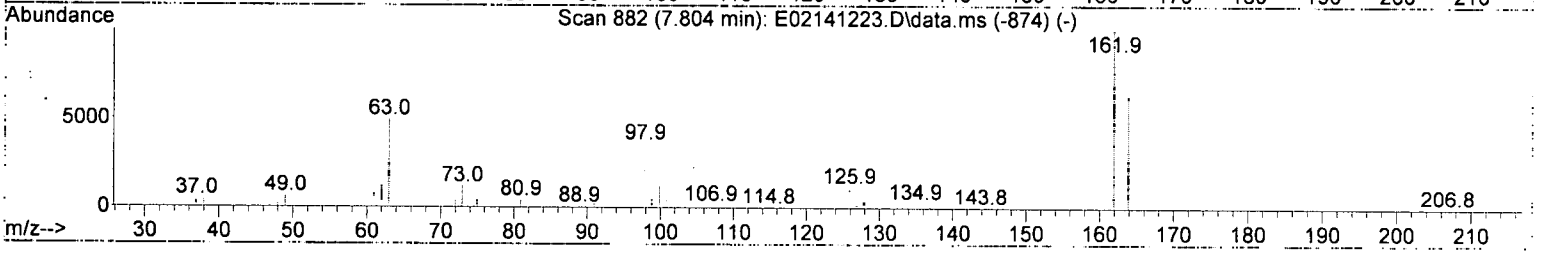
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







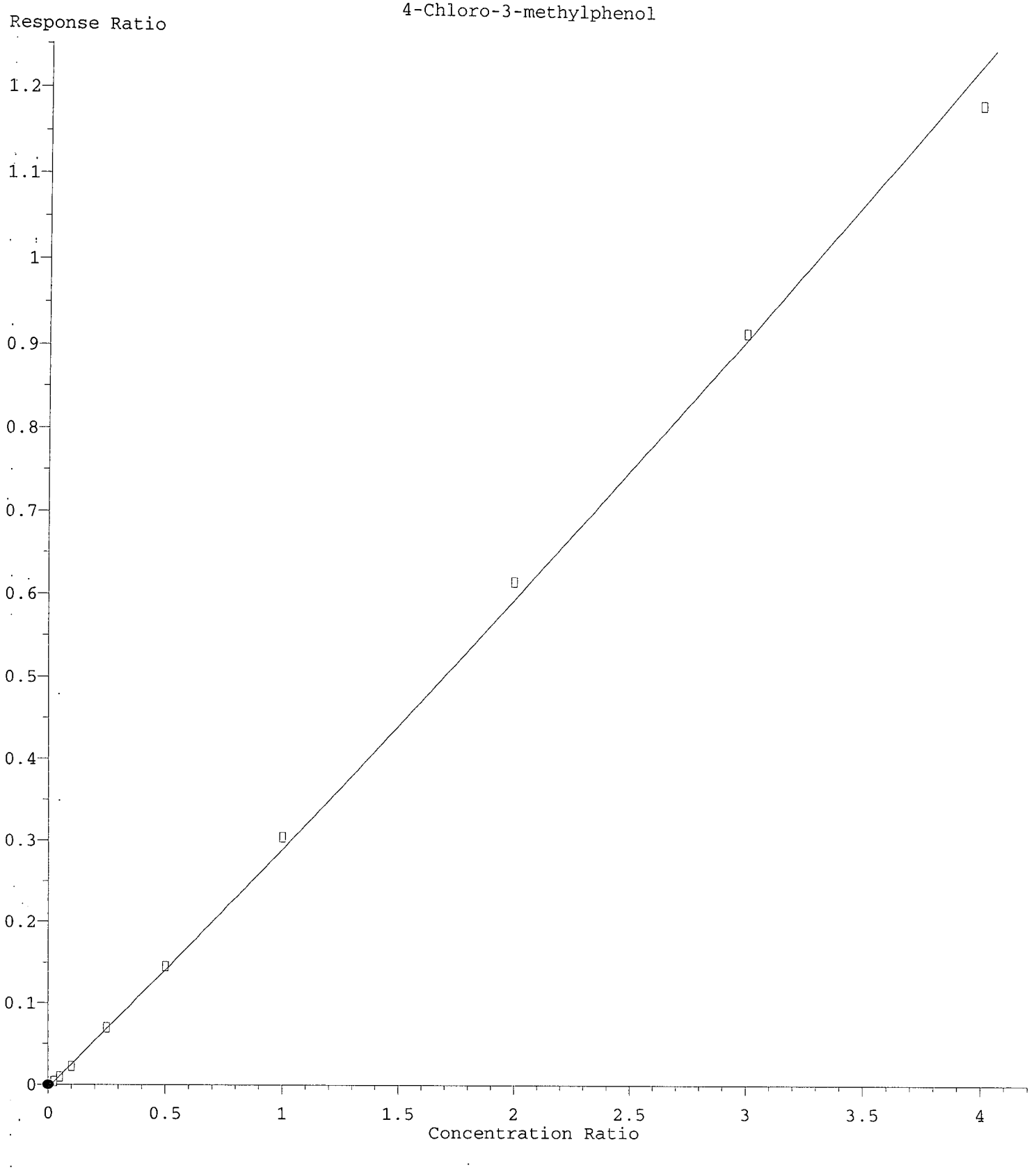
TIC: I12031912.D\data.ms

(27) 2,4-Dichlorophenol (T)

7.750min (+ 0.005) 15.03 ng/ml m

response 153

Ion	Exp%	Act%
162.00	100.00	100.00
164.00	63.40	61.05
98.00	39.00	29.59
0.00	0.00	0.00

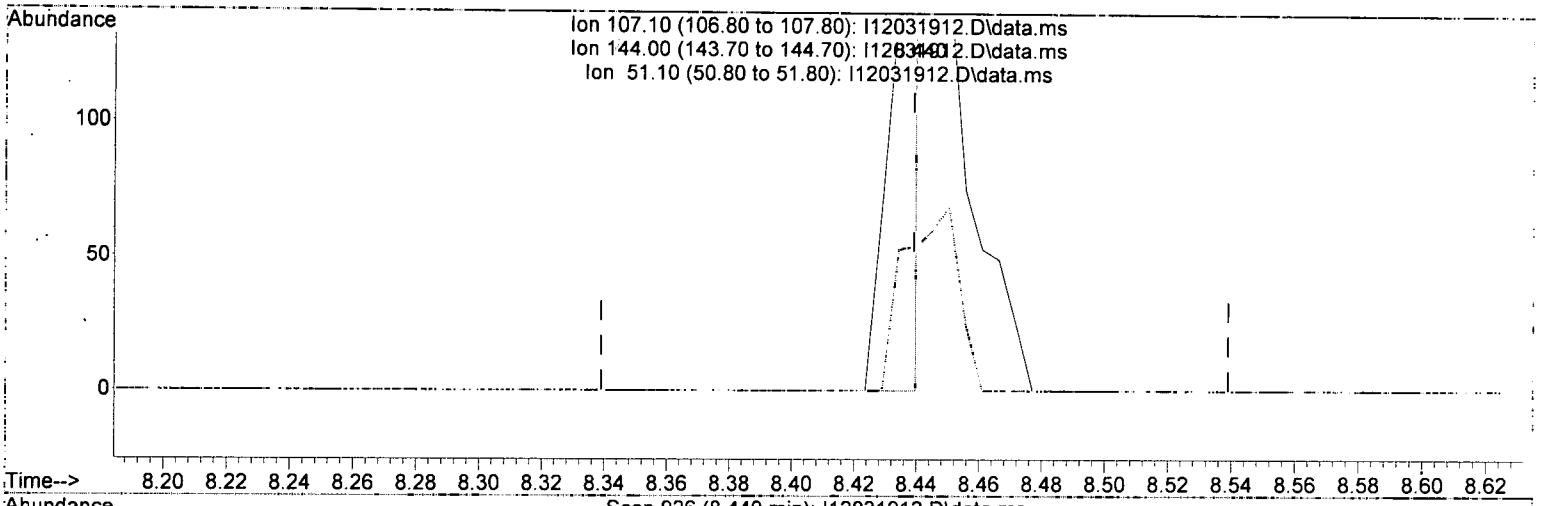


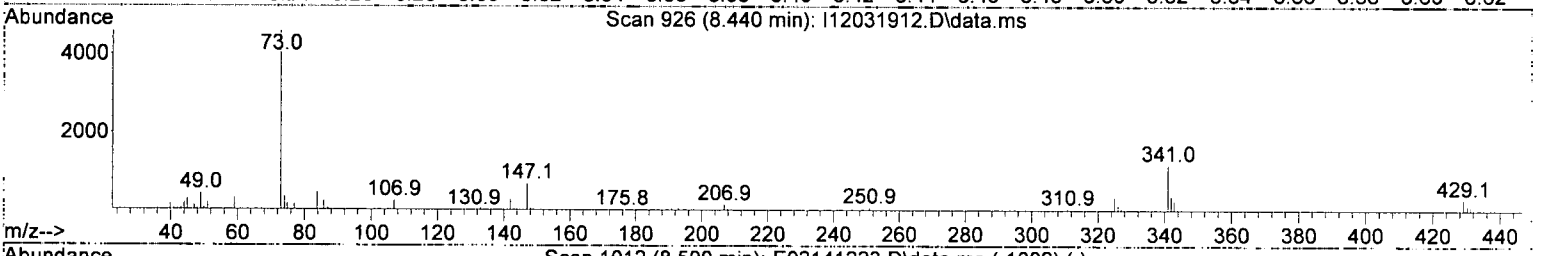
R = 5.97e-003 A*A + 2.87e-001 A - 3.78e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

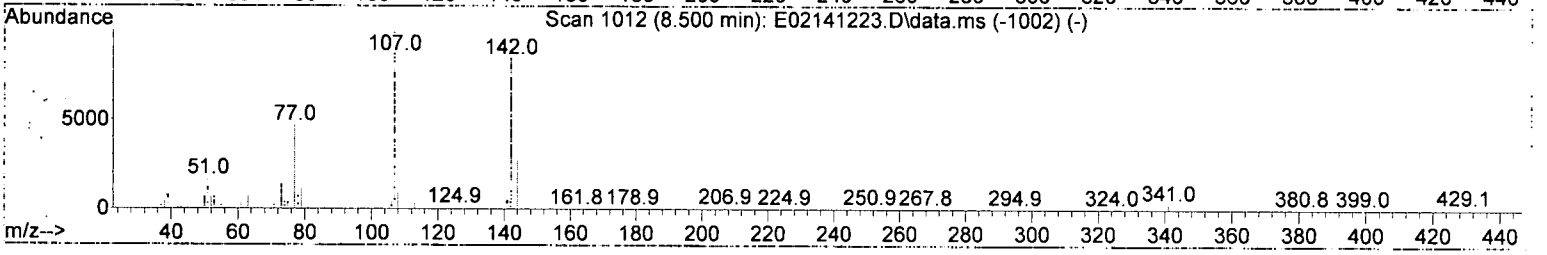
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







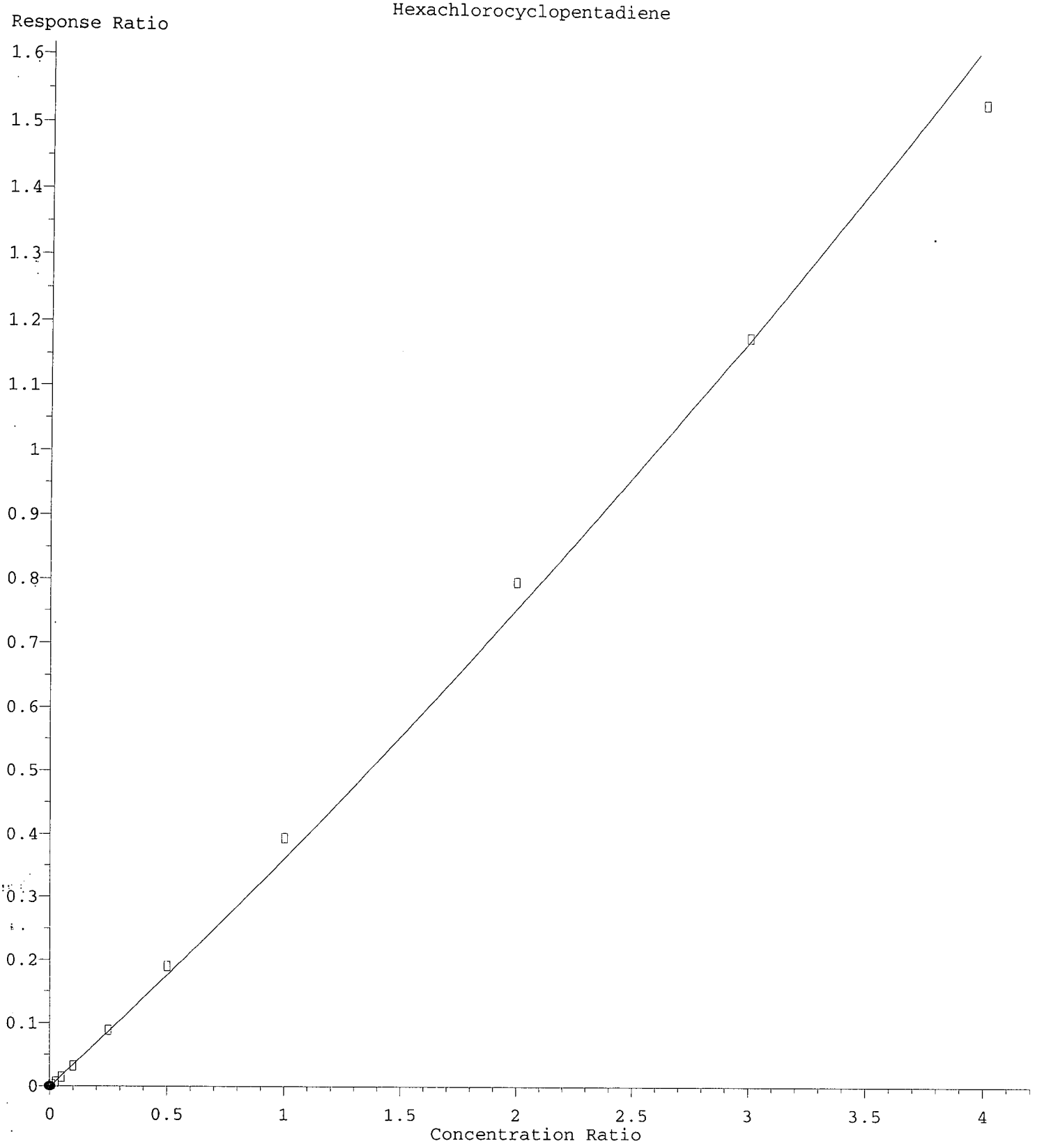
TIC: I12031912.D\data.ms

(32) 4-Chloro-3-methylphenol (T)

8.440min (+ 0.001) 29.46 ng/ml m

response 153

Ion	Exp%	Act%
107.10	100.00	100.00
144.00	26.80	20.85
51.10	22.20	79.15#
0.00	0.00	0.00

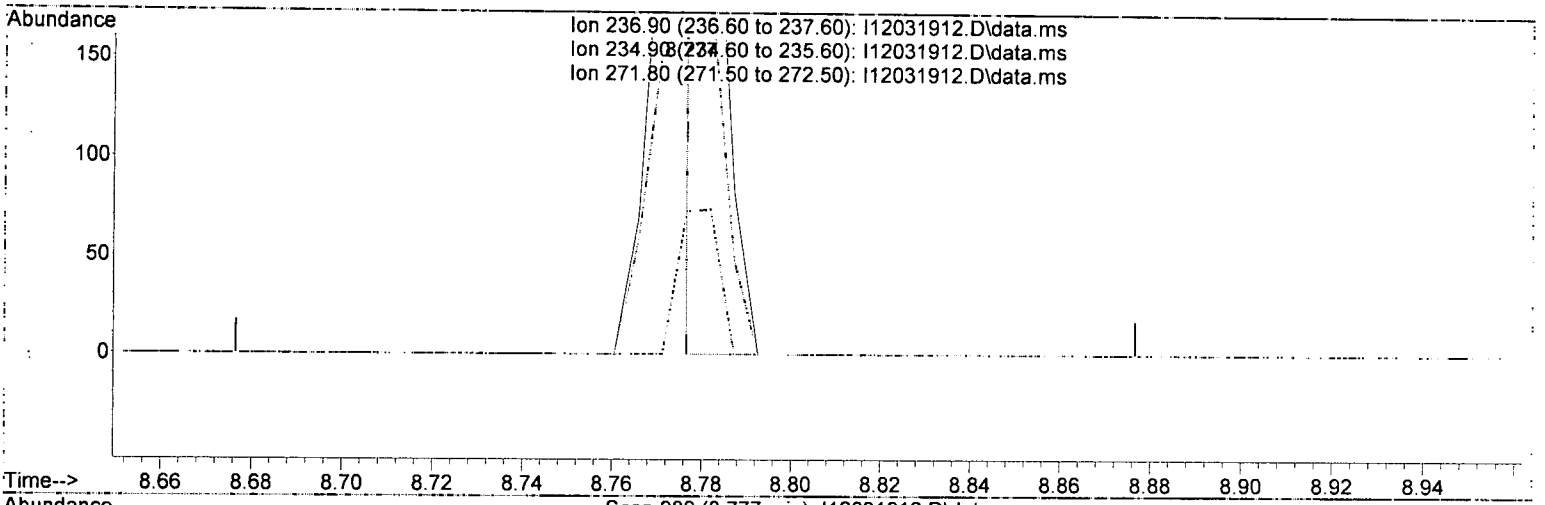


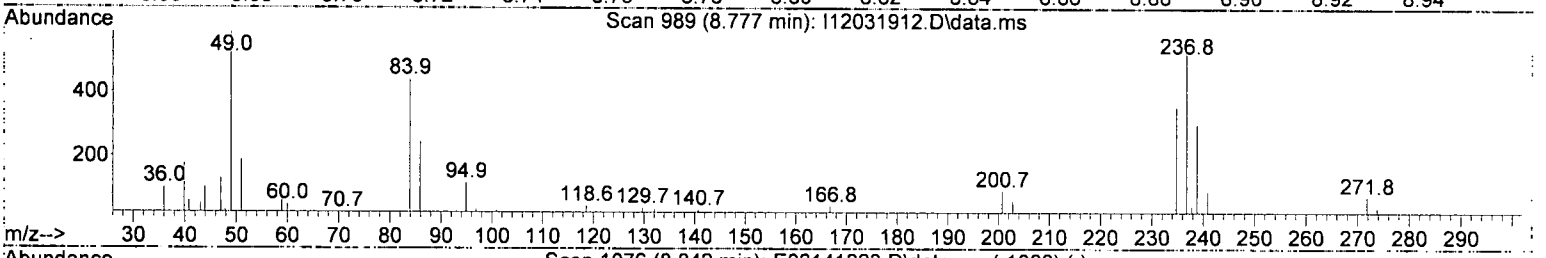
R = 1.53e-002 A*A + 3.47e-001 A - 1.34e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_120319.M

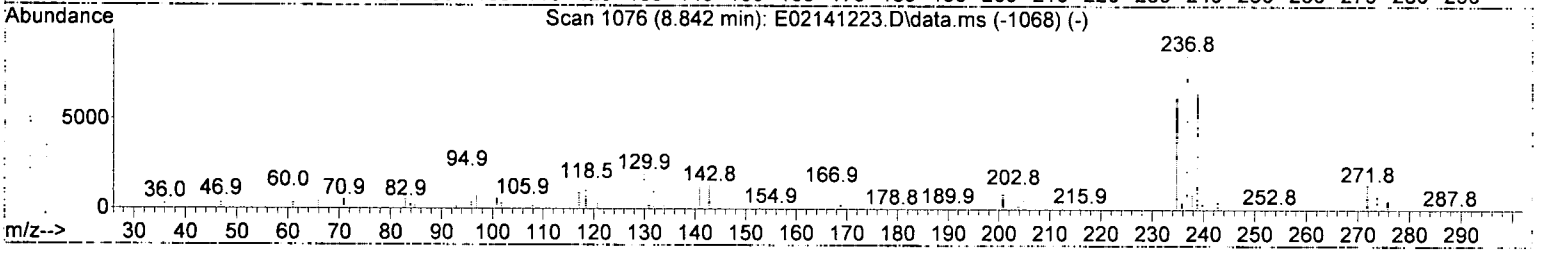
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







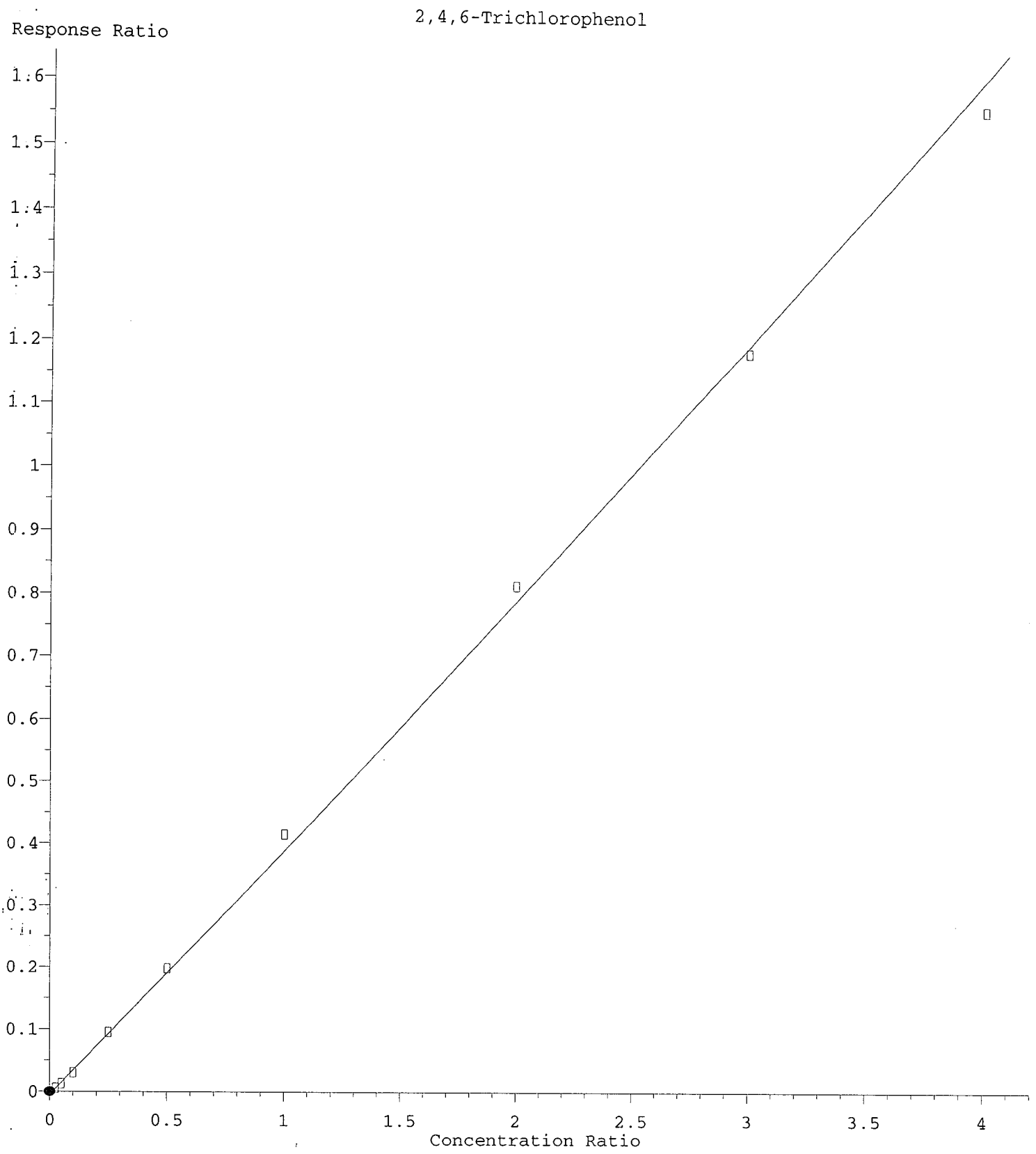
TIC: I12031912.D\data.ms

(36) Hexachlorocyclopentadiene (T)

8.777min (-0.000) 11.75 ng/ml m ✓

response 117

Ion	Exp%	Act%
236.90	100.00	100.00
234.90	64.60	65.50
271.80	14.70	13.47
0.00	0.00	0.00

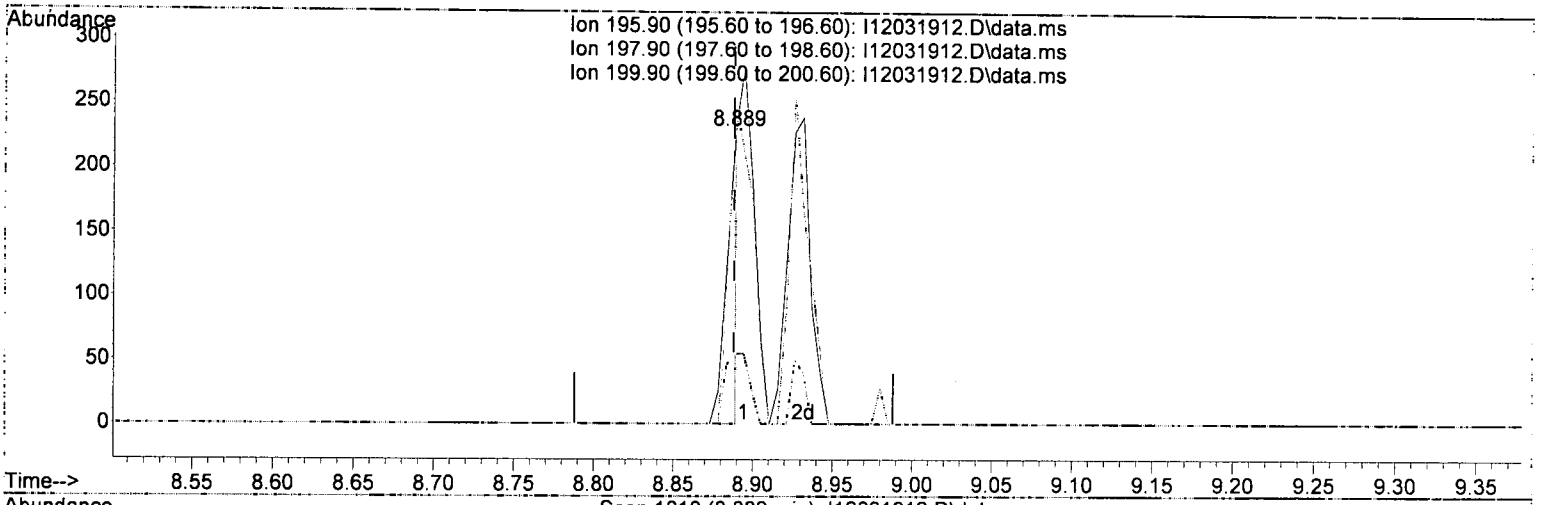


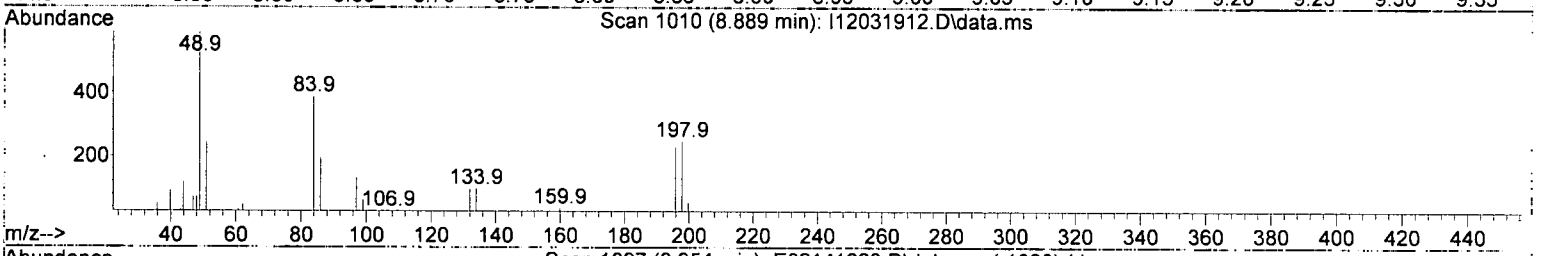
R = 3.68e-003 A*A + 3.89e-001 A - 5.08e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic, 1/(a^2)
Method Name: T:\methods\SV9_120319.M

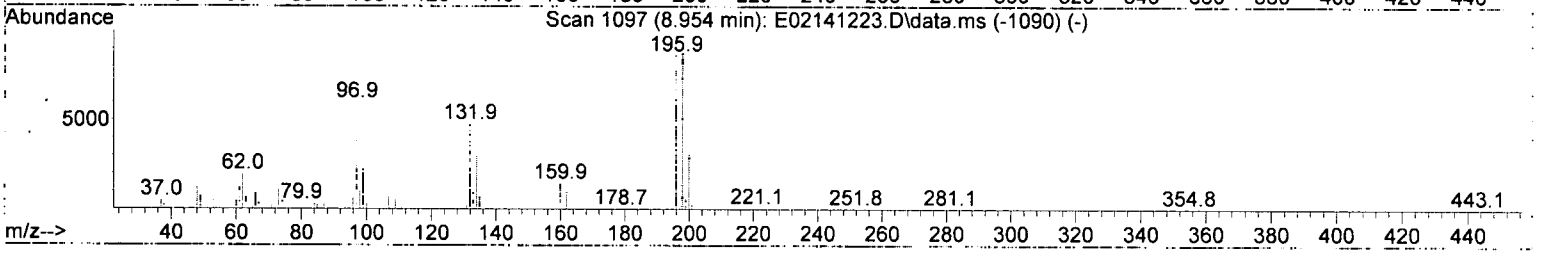
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







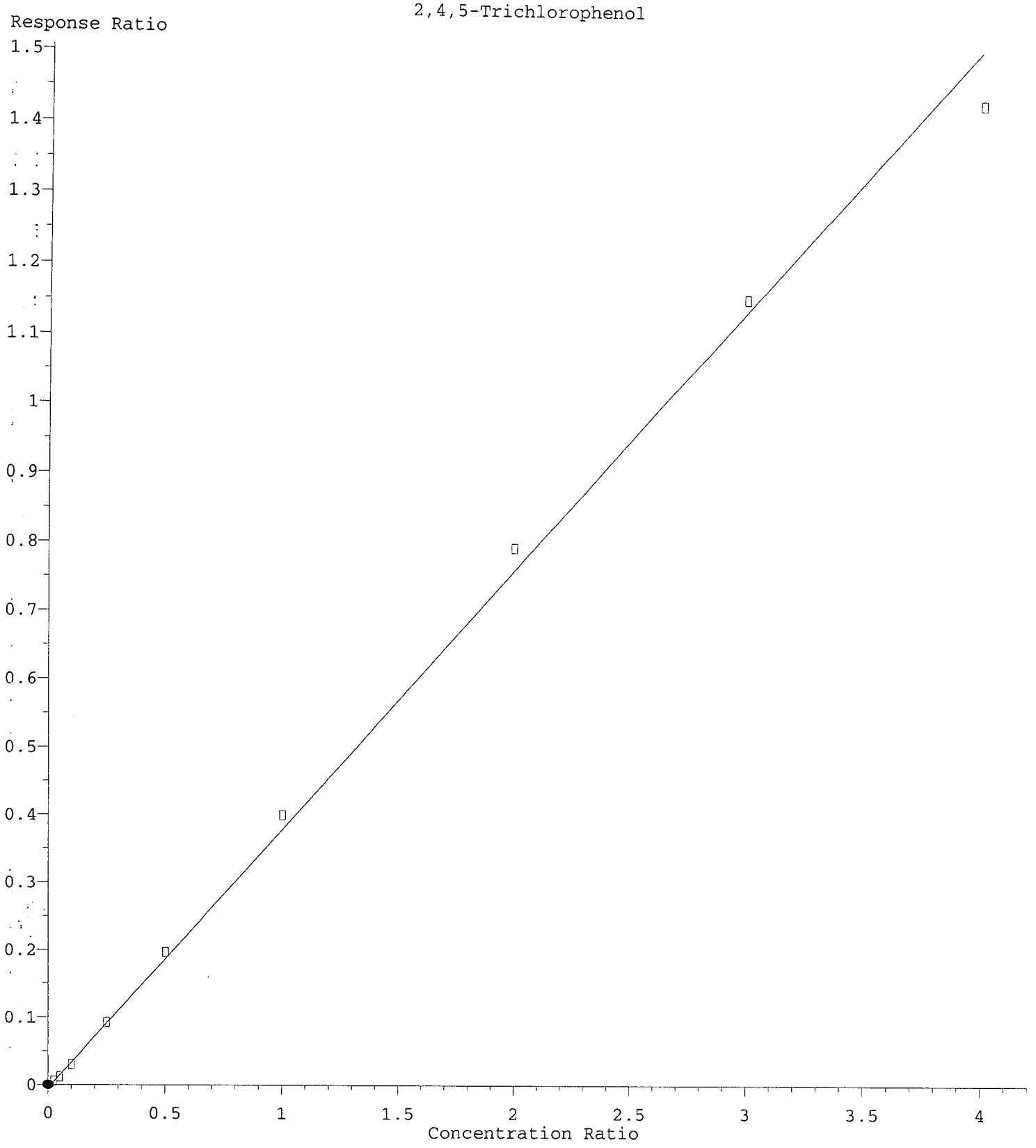
TIC: I12031912.D\data.ms

(37) 2,4,6-Trichlorophenol (T)

8.889min (+ 0.001) 29.83 ng/ml m

response 121

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	98.10	108.30
199.90	32.40	24.02
0.00	0.00	0.00

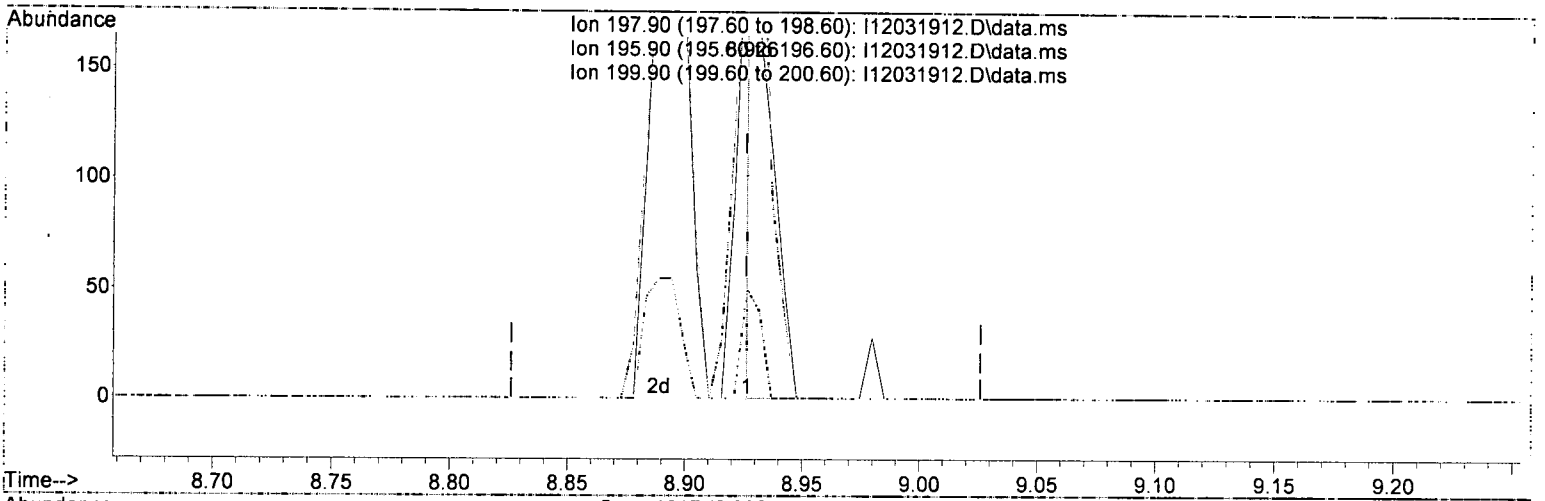


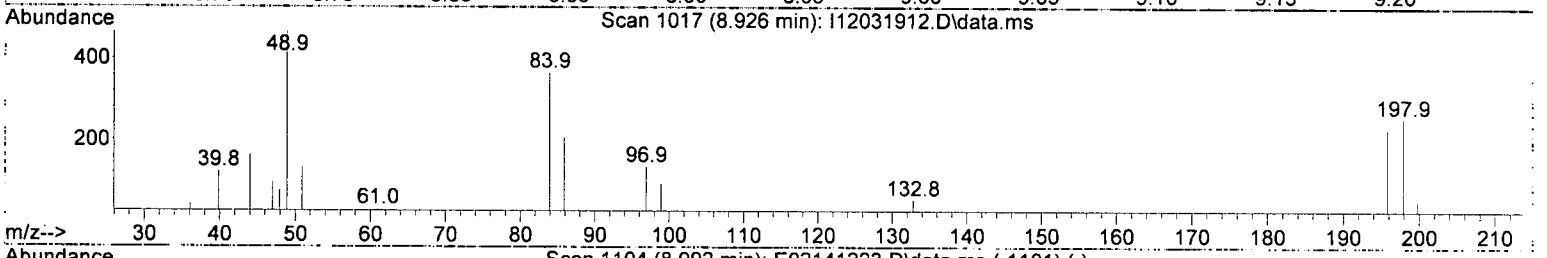
R = -9.57e-004 A*A + 3.84e-001 A - 4.90e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

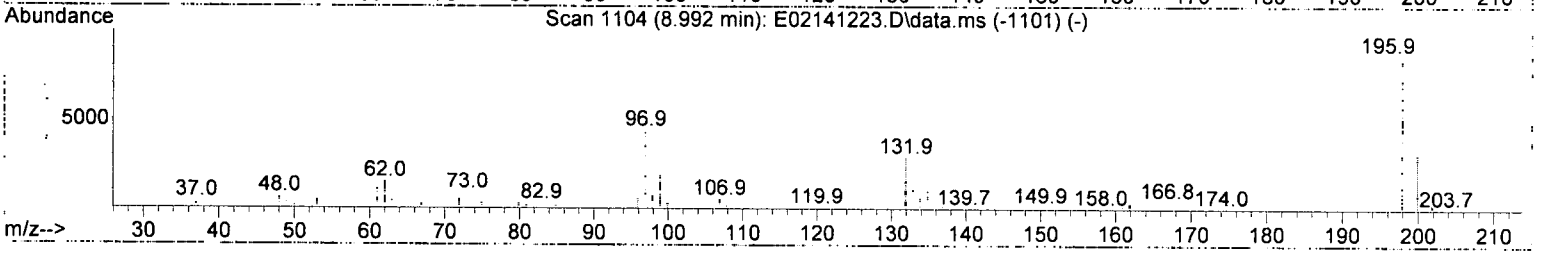
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







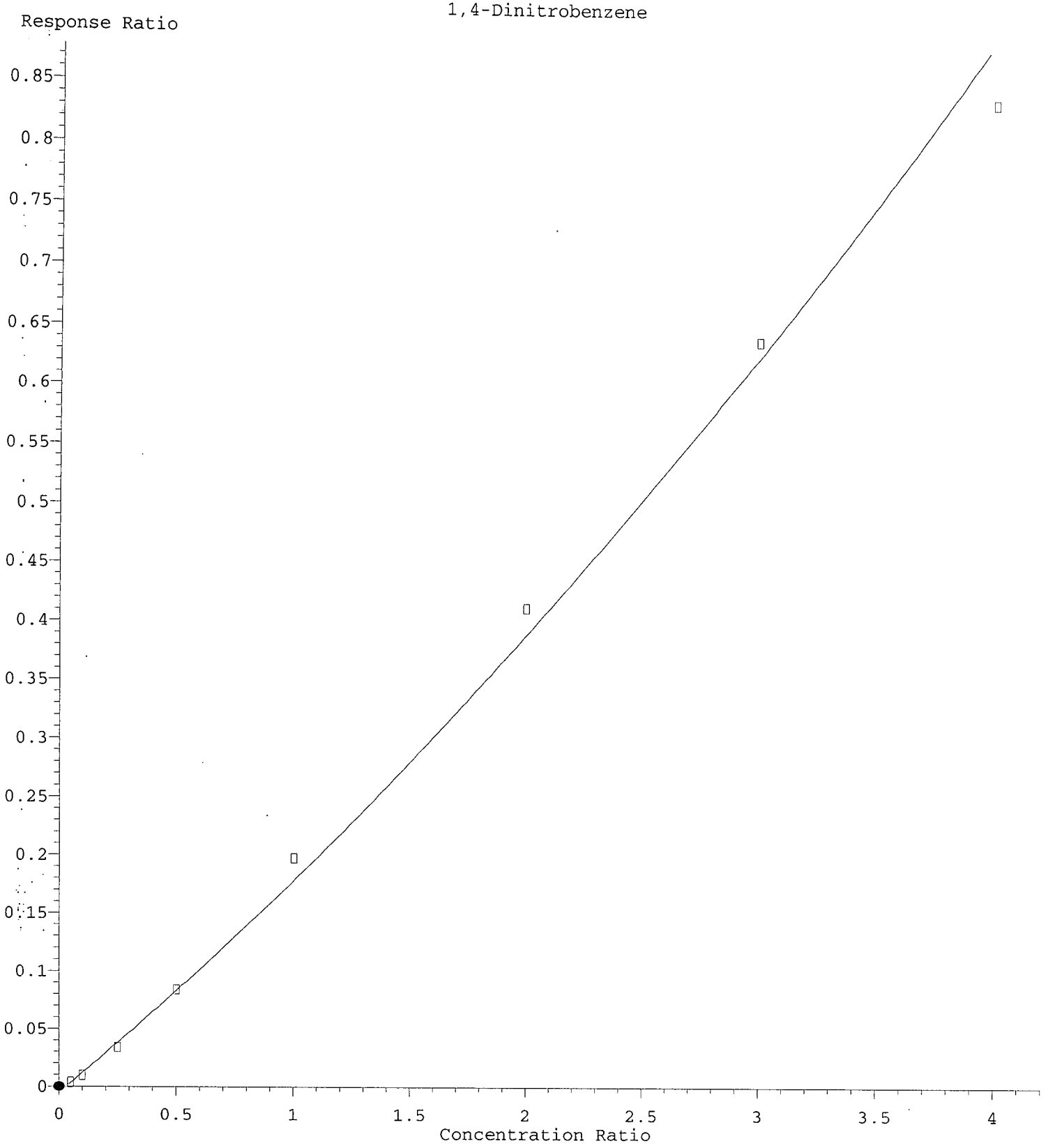
TIC: I12031912.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.926min (+ 0.000) 28.82 ng/ml m

response 106

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	103.70	89.76
199.90	30.90	19.69
0.00	0.00	0.00

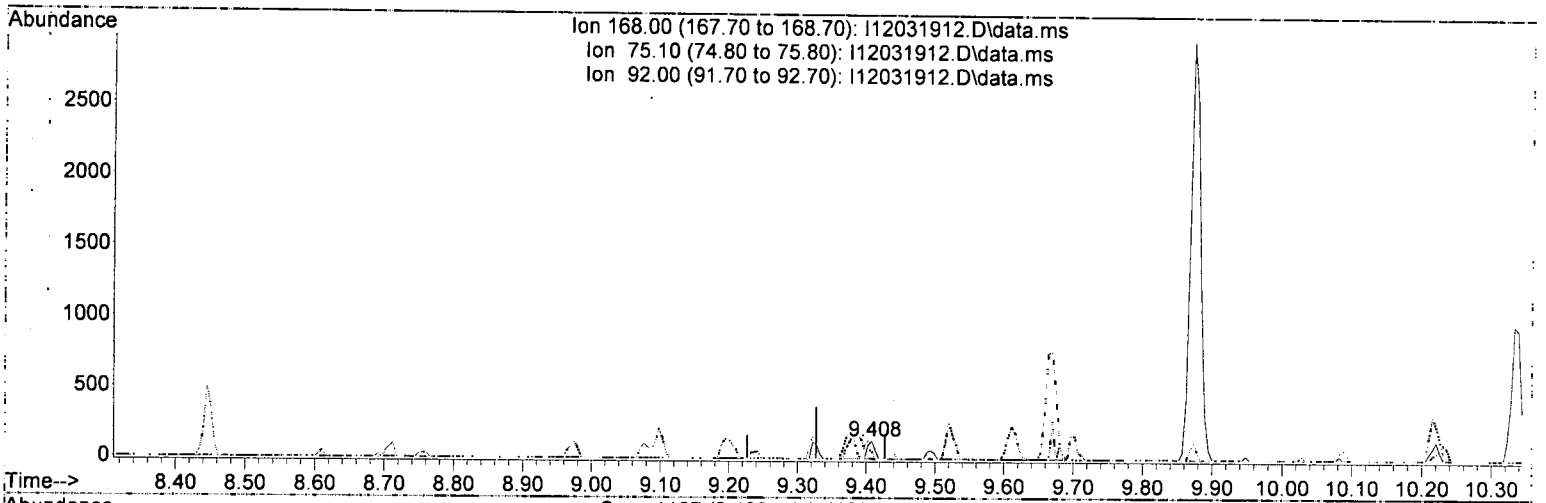


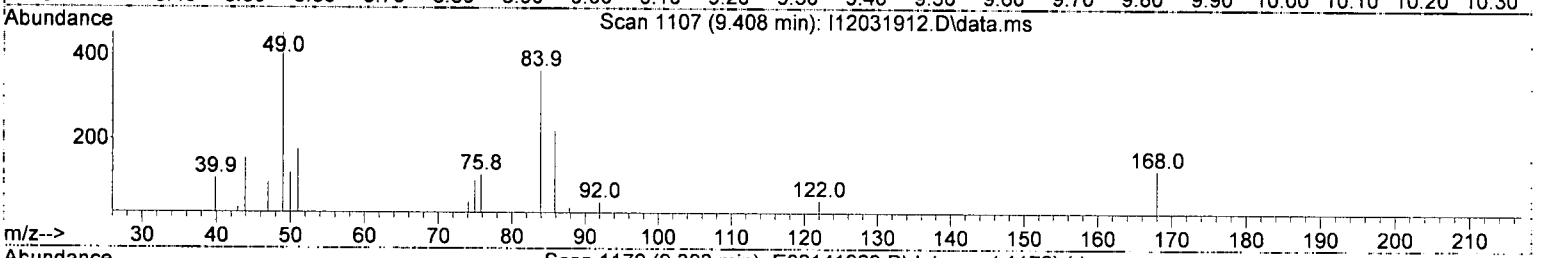
R = 1.33e-002 A*A + 1.70e-001 A - 5.47e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

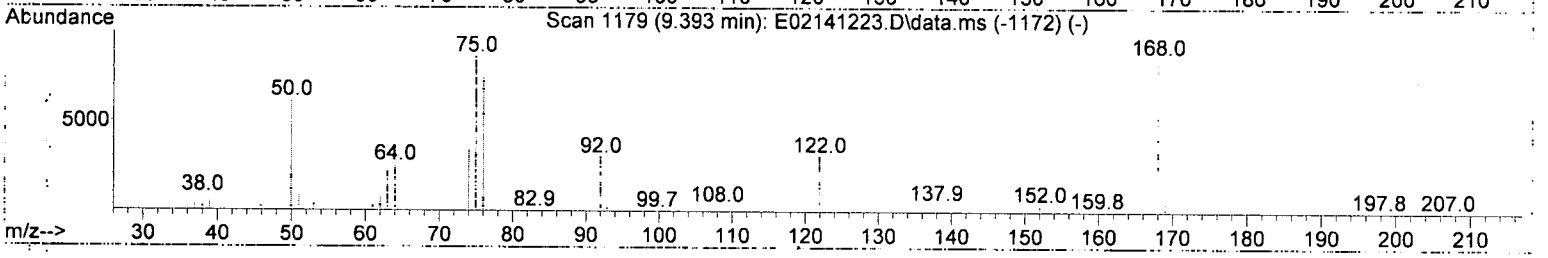
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







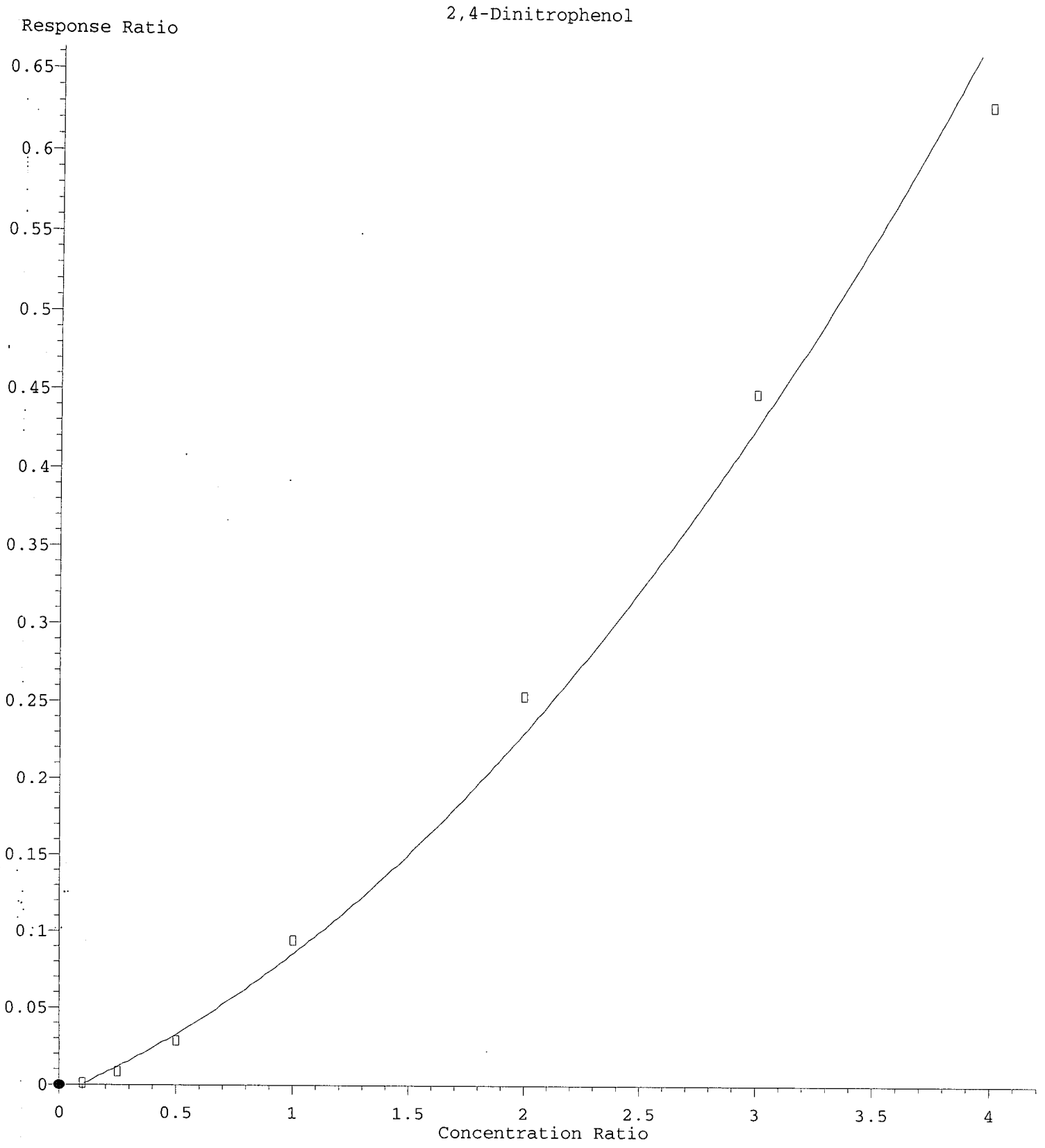
TIC: I12031912.D\data.ms

(44) 1,4-Dinitrobenzene (T)

9.408min (+ 0.081) 75.95 ng/ml m √

response 169

Ion	Exp%	Act%
168.00	100.00	100.00
75.10	130.80	91.34#
92.00	42.80	40.16
0.00	0.00	0.00

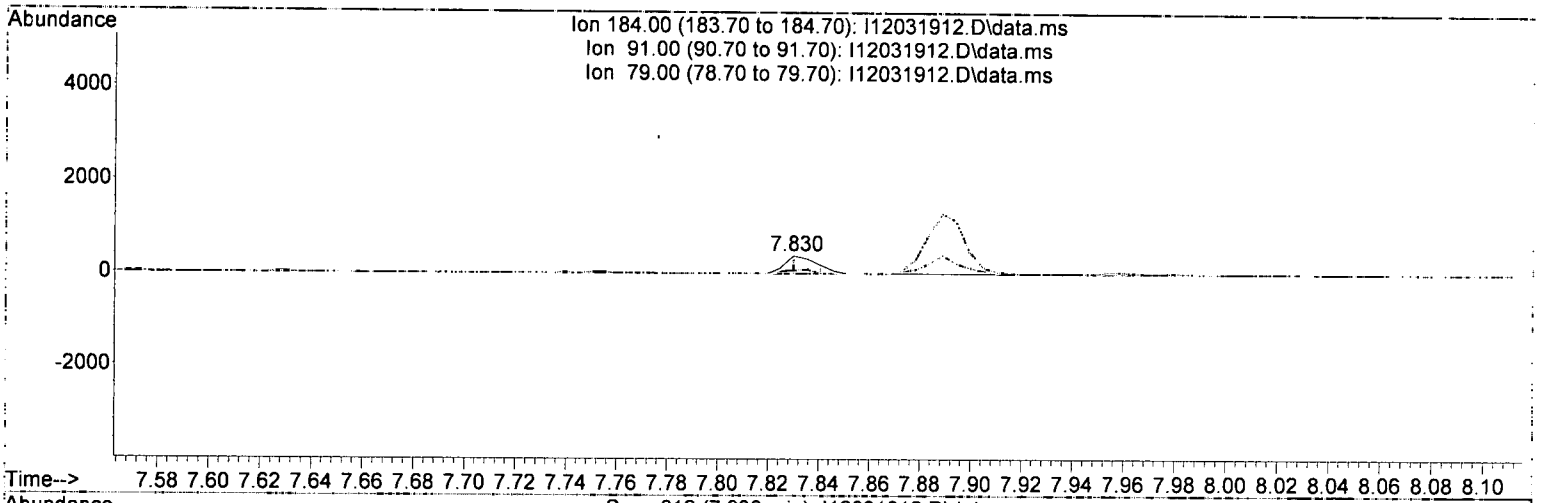


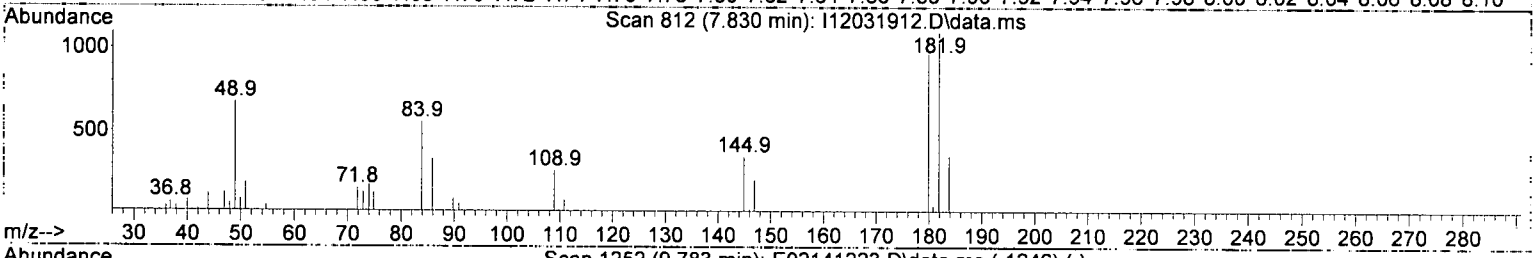
R = 2.66e-002 A*A + 6.46e-002 A - 6.08e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w/1/(a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

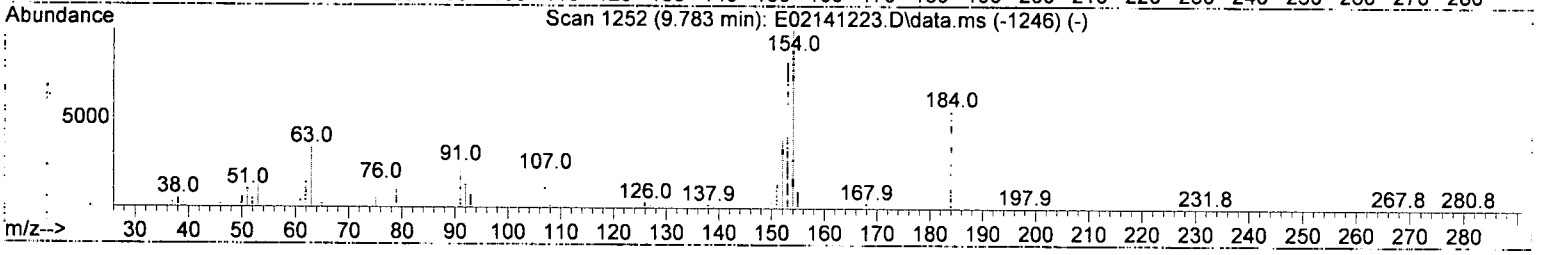
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







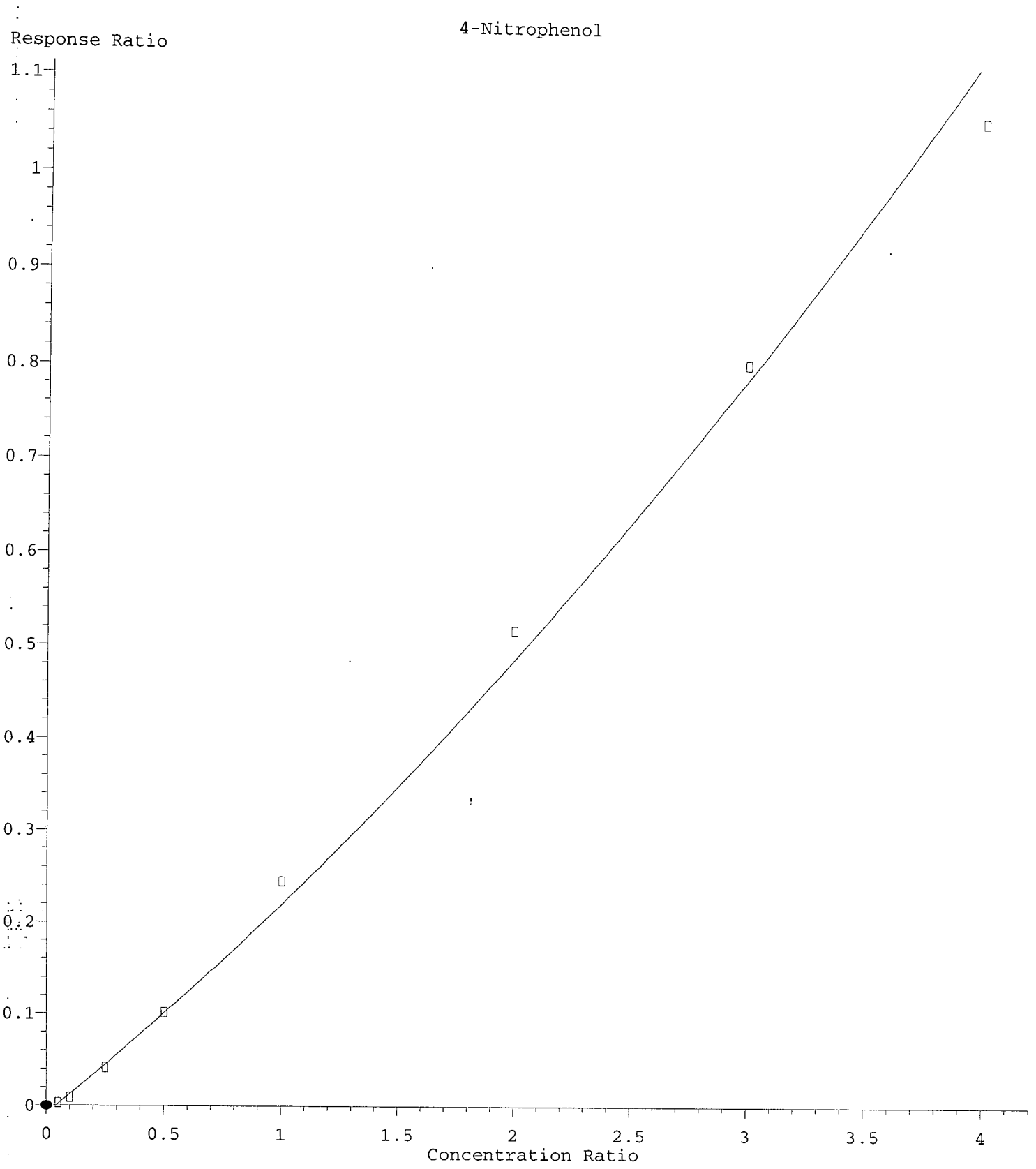
TIC: I12031912.D\data.ms

(52) 2,4-Dinitrophenol (T)

7.830min (-1.888) 207.68 ng/ml m

response 155

Ion	Exp%	Act%
184.00	100.00	100.00
91.00	48.80	18.99
79.00	36.60	0.00#
0.00	0.00	0.00

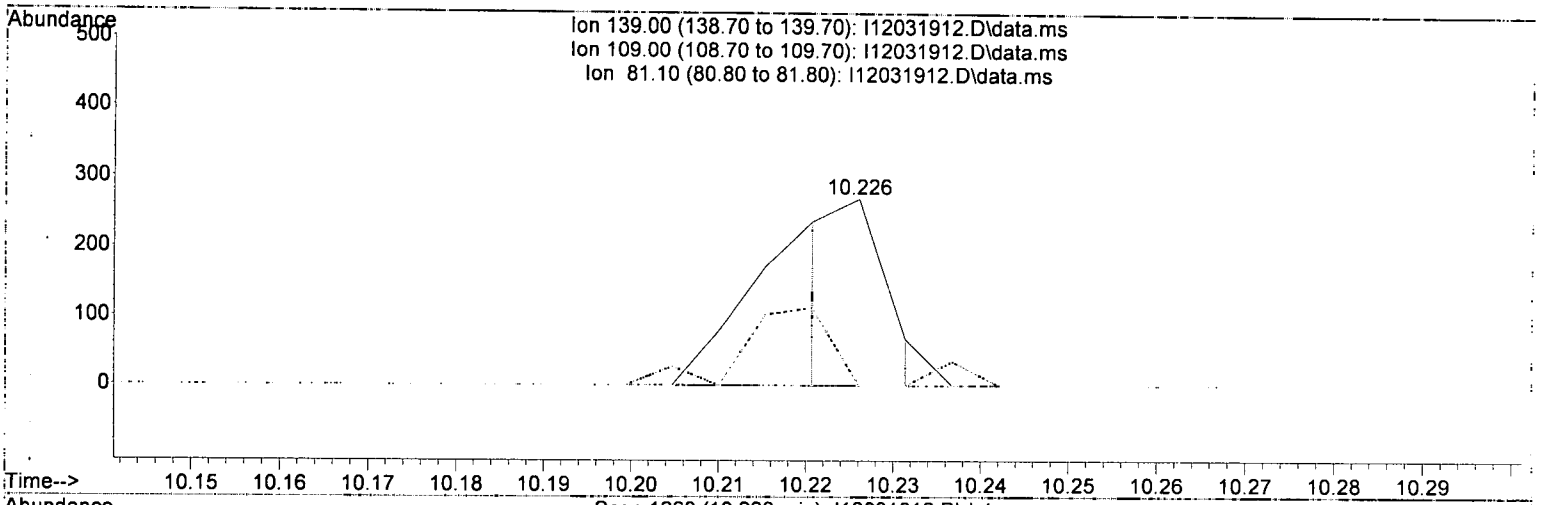


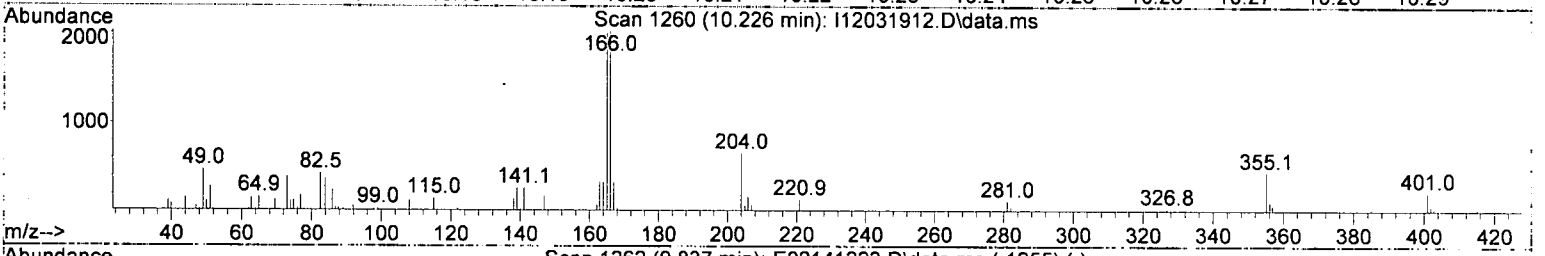
R = 1.86e-002 A*A + 2.09e-001 A - 8.48e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic 1/(x^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:27:26 2019

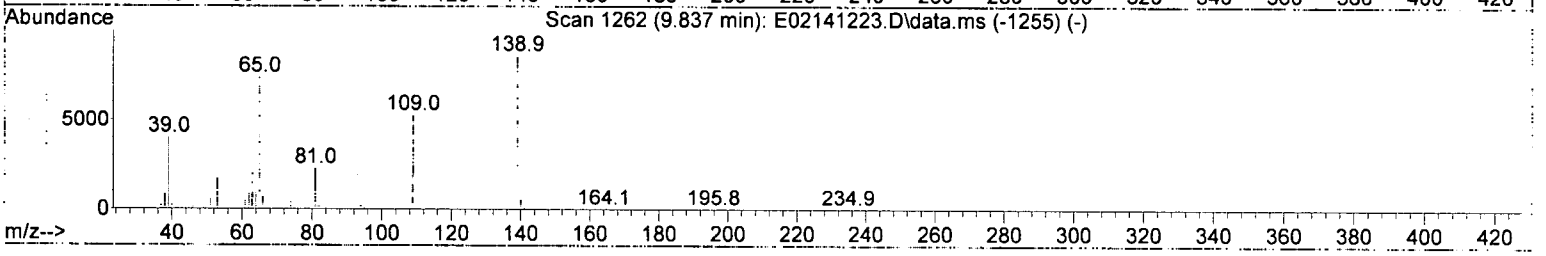
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







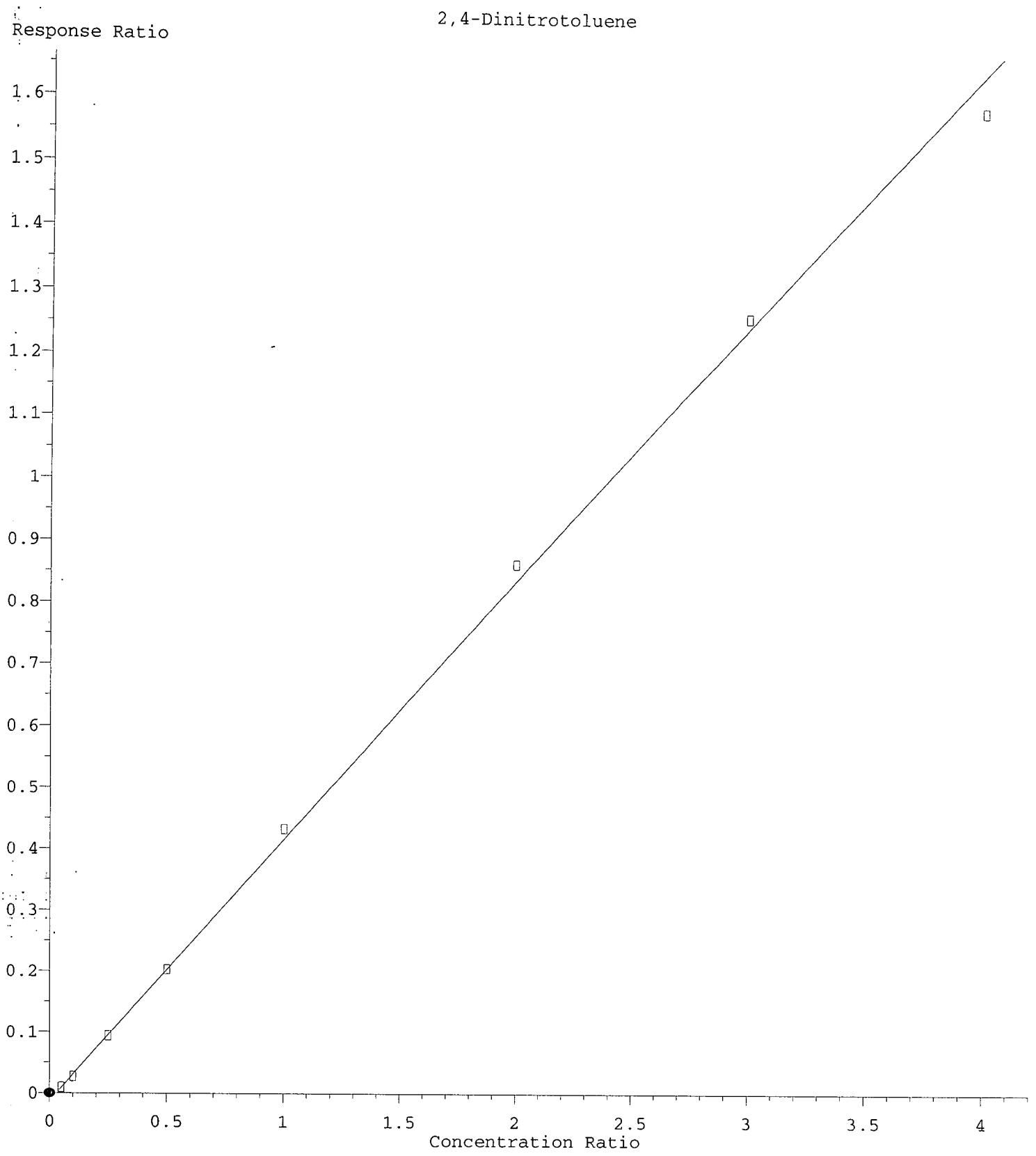
TIC: I12031912.D\data.ms

(53) 4-Nitrophenol (T)

10.226min (+ 0.455) 86.86 ng/ml m

response 108

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	61.50	0.00#
81.10	31.00	0.00#
0.00	0.00	0.00

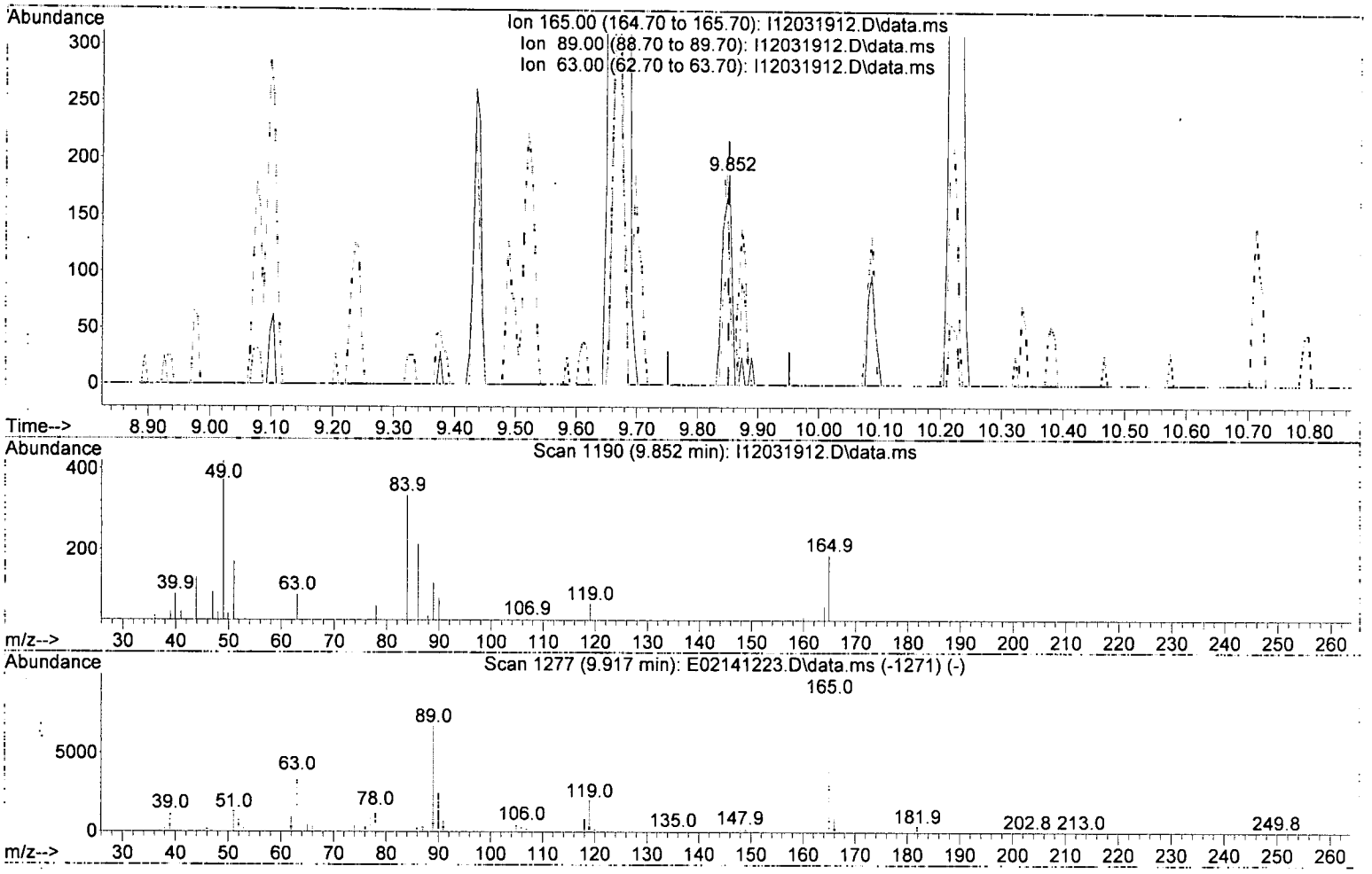


R = -4.92e-003 A*A + 4.33e-001 A - 1.29e-002
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic, 1/(x^2)
Method Name: T:\methods\SV9_120319.M

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:45:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9



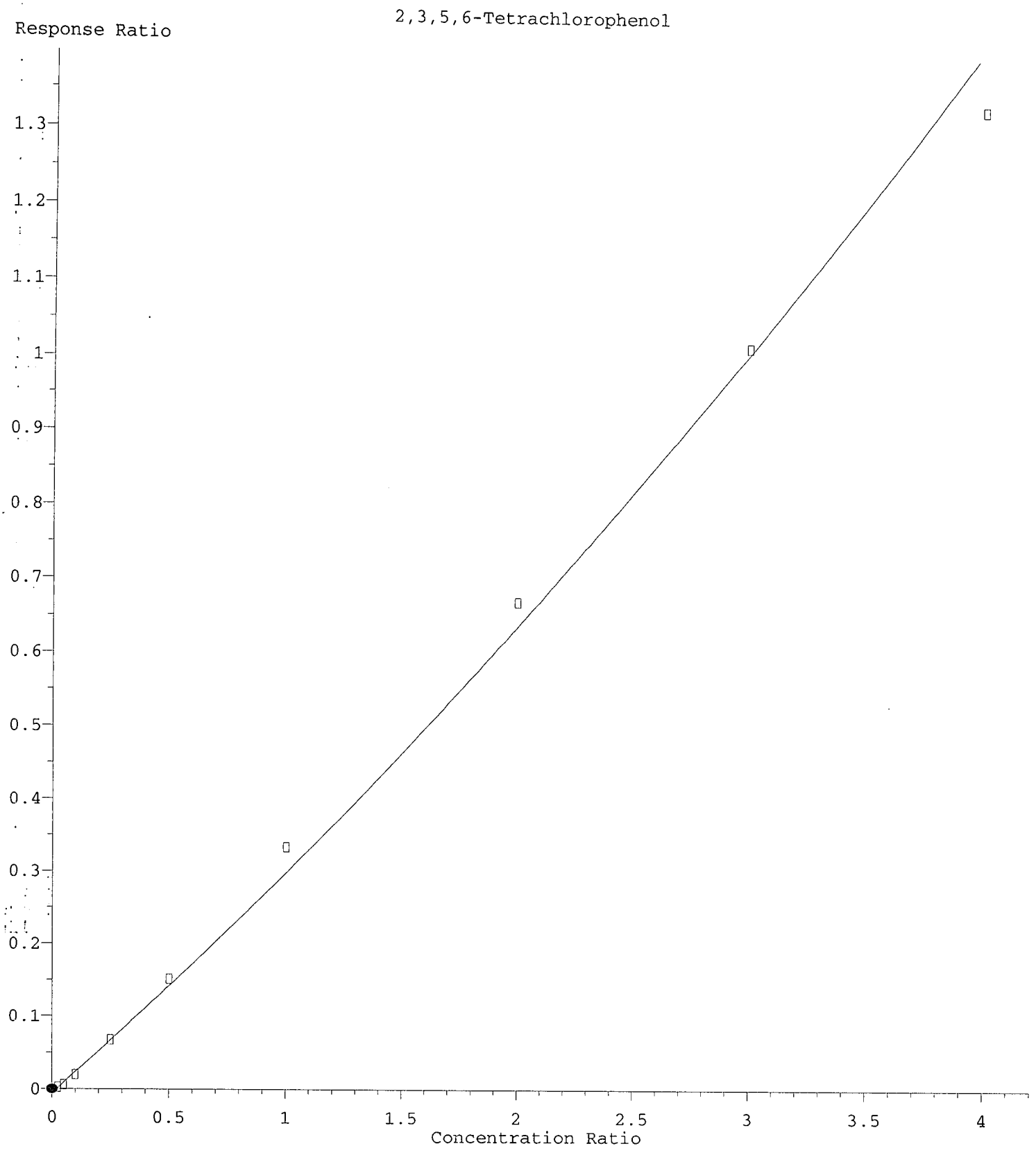
TIC: I12031912.D\data.ms

(54) 2,4-Dinitrotoluene (T)

9.852min (+ 0.001) 64.73 ng/ml ✓

response 193

Ion	Exp%	Act%
165.00	100.00	100.00
89.00	72.30	63.10
63.00	45.90	47.06
0.00	0.00	0.00

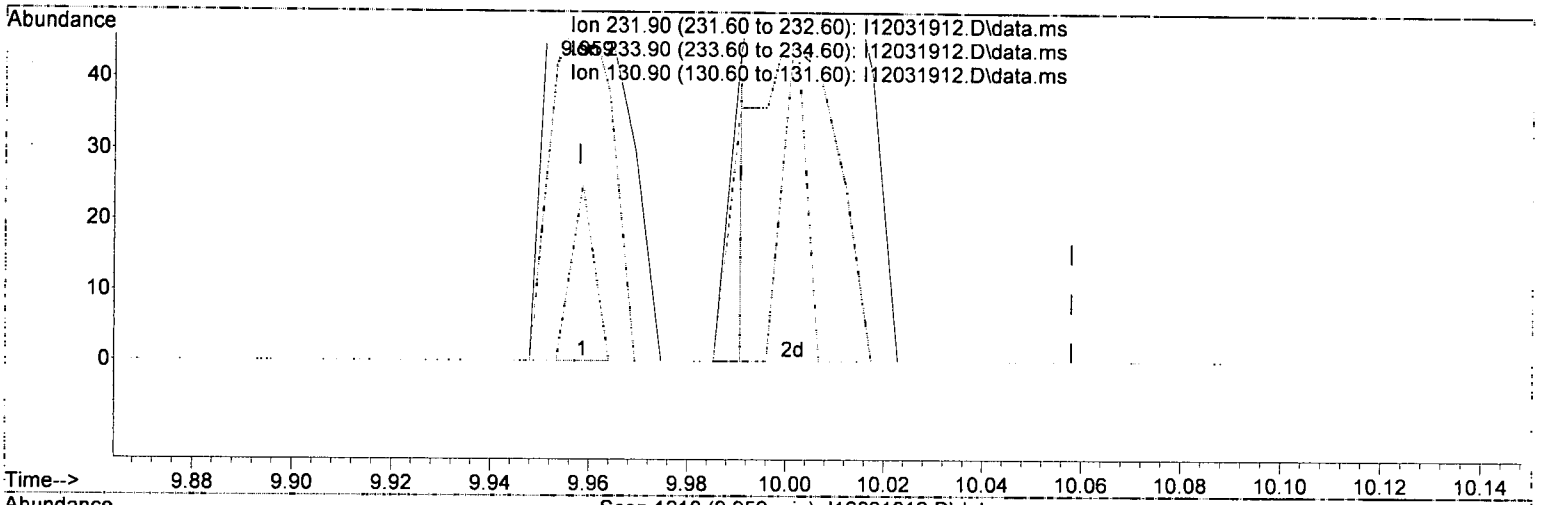


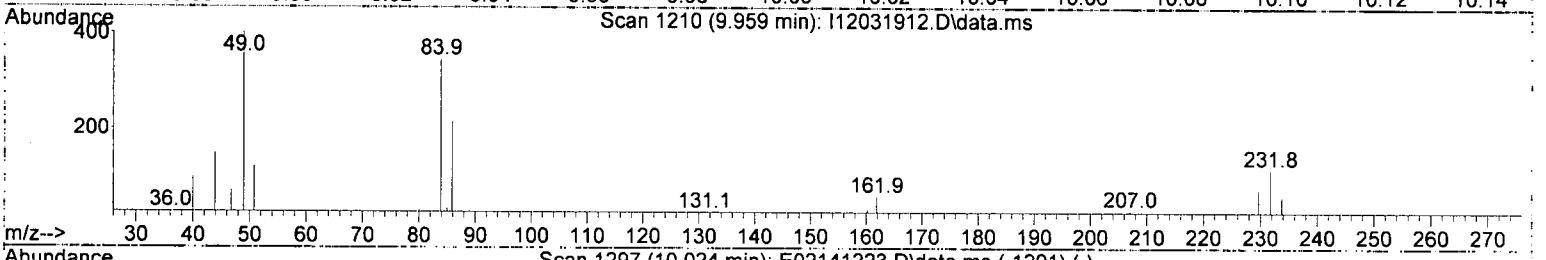
R = 1.69e-002 A*A + 2.87e-001 A - 5.61e-003
Coef of Det (r^2) = 0.988 Curve Fit: Quadratic w/1/(a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

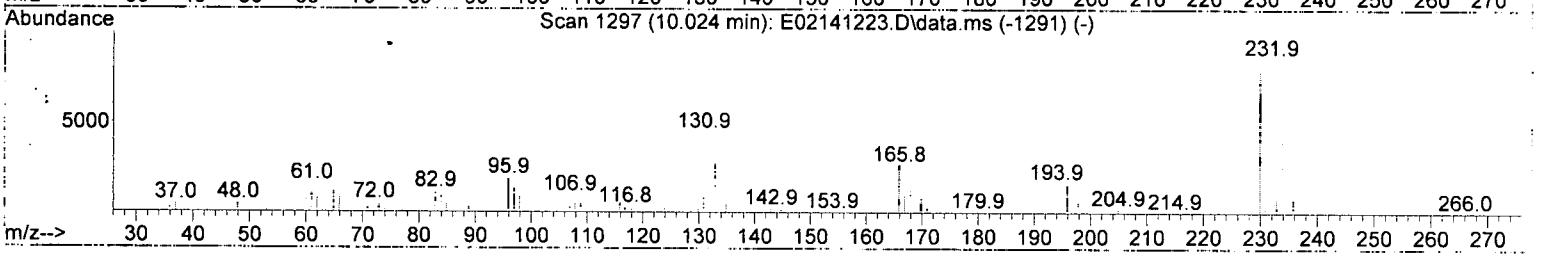
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







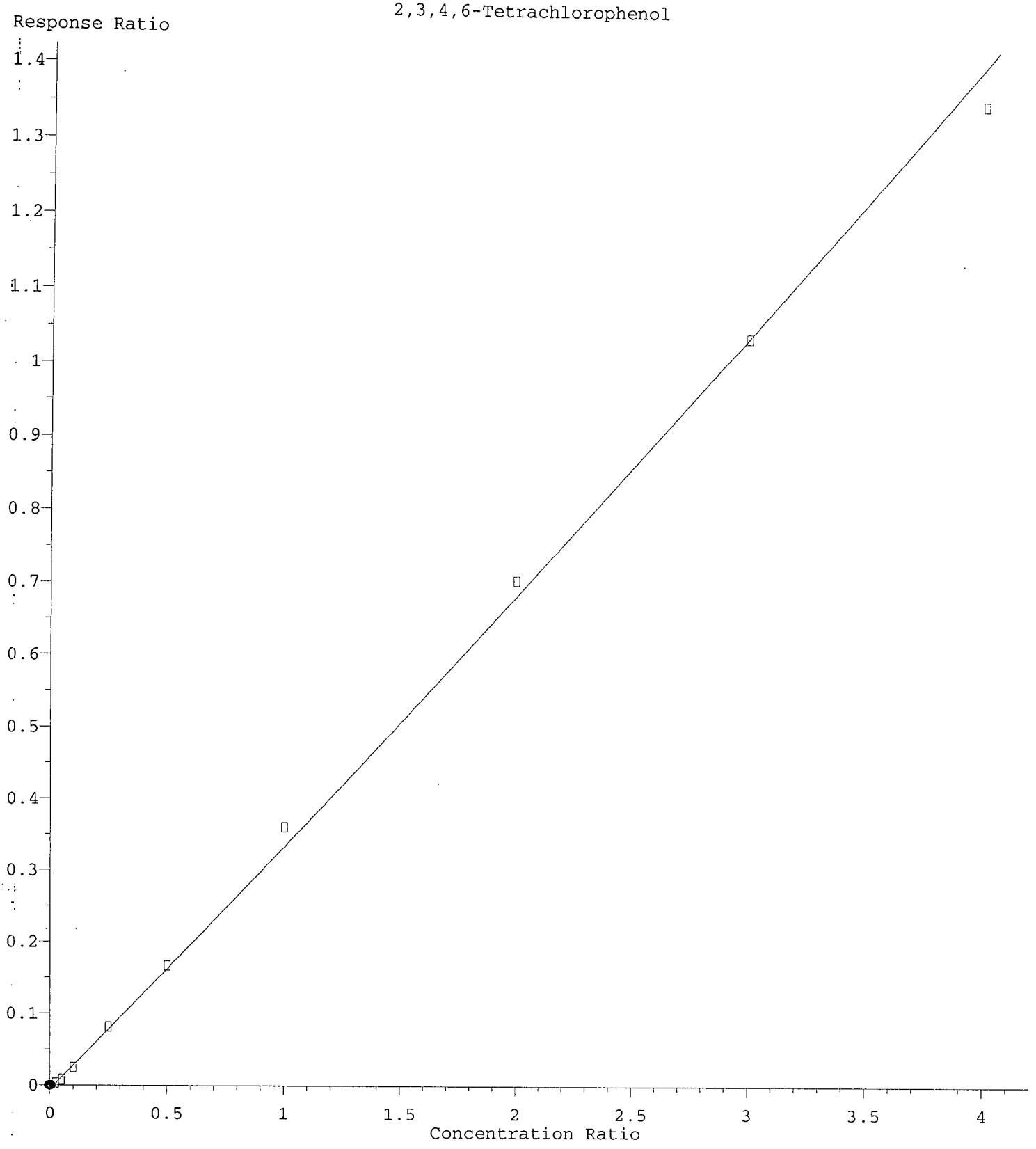
TIC: I12031912.D\data.ms

(56) 2,3,5,6-Tetrachlorophenol (T)

9.959min (+ 0.001) 43.46 ng/ml m

response 104

Ion	Exp%	Act%
231.90	100.00	100.00
233.90	49.20	49.57
130.90	41.10	21.74
0.00	0.00	0.00

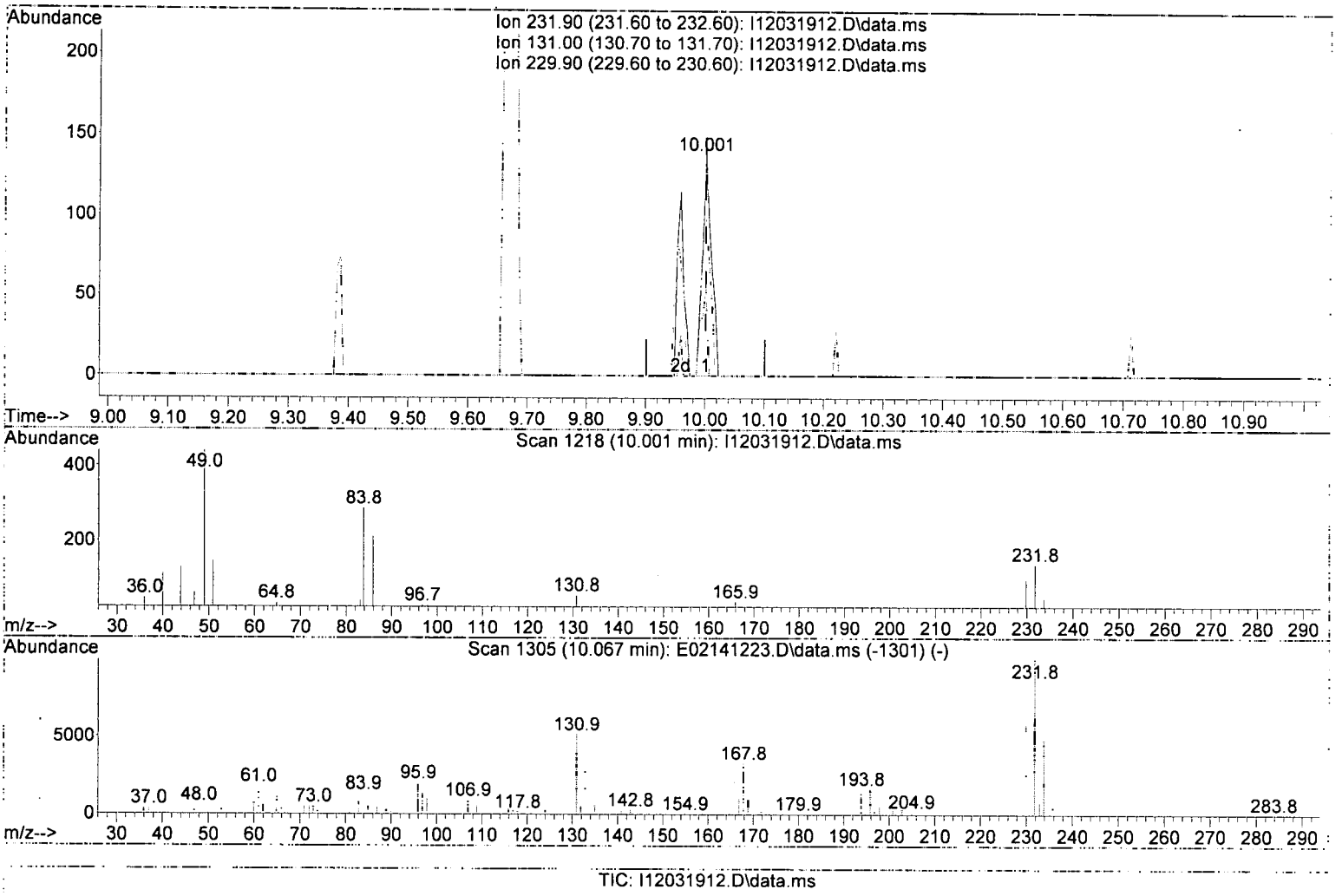


R = 4.91e-003 A*A + 3.34e-001 A - 6.05e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w/1/a02
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9



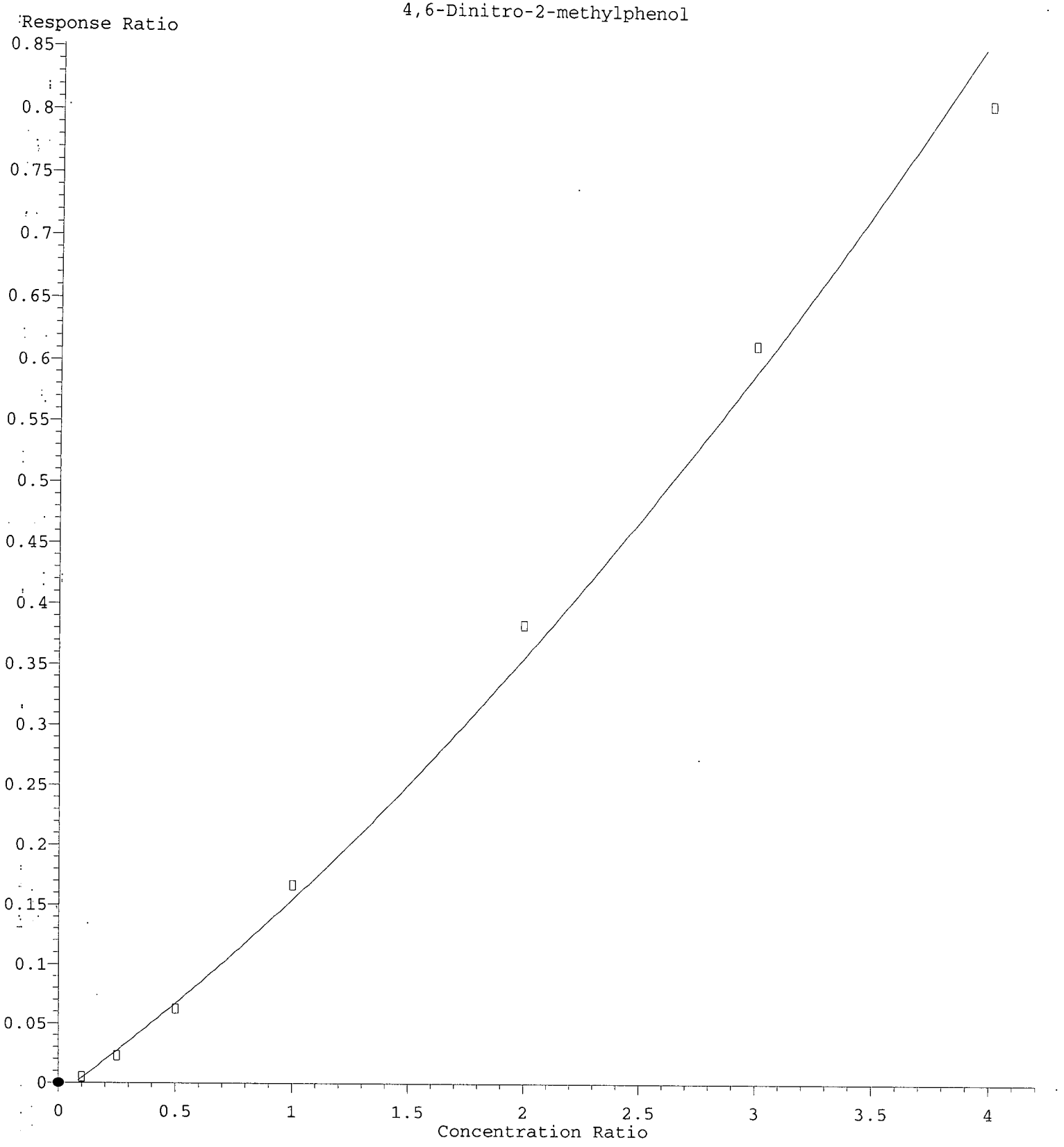
TIC: I12031912.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.001min (+ 0.000) 41.53 ng/ml √

response 148

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	47.70	39.86
229.90	78.50	70.29
0.00	0.00	0.00

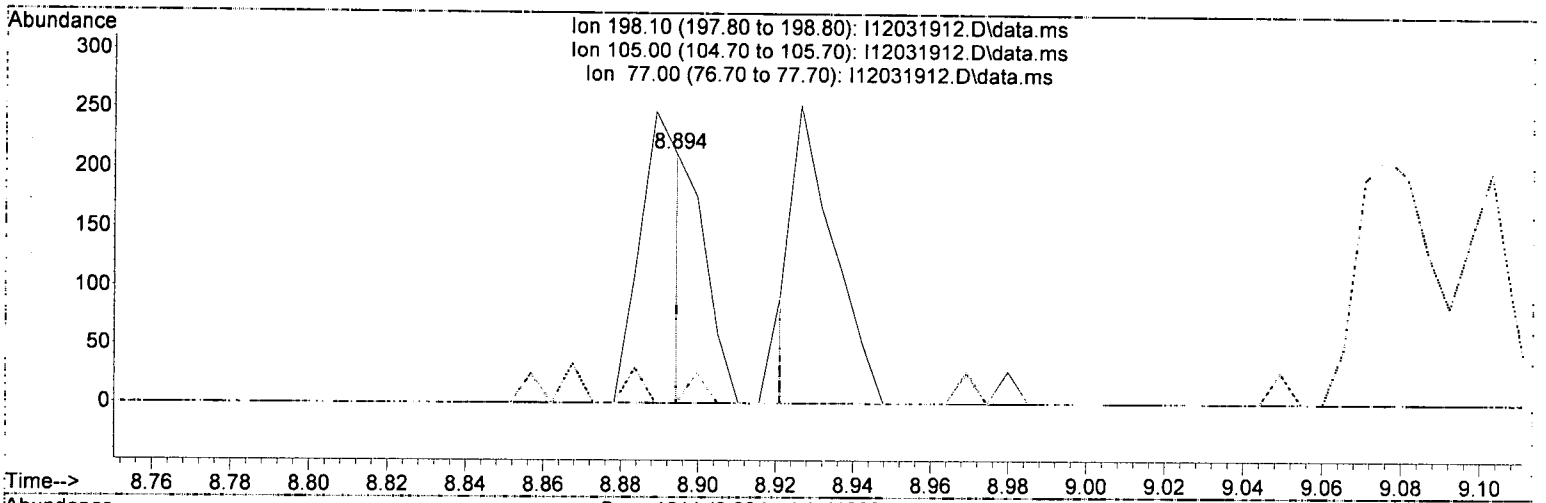


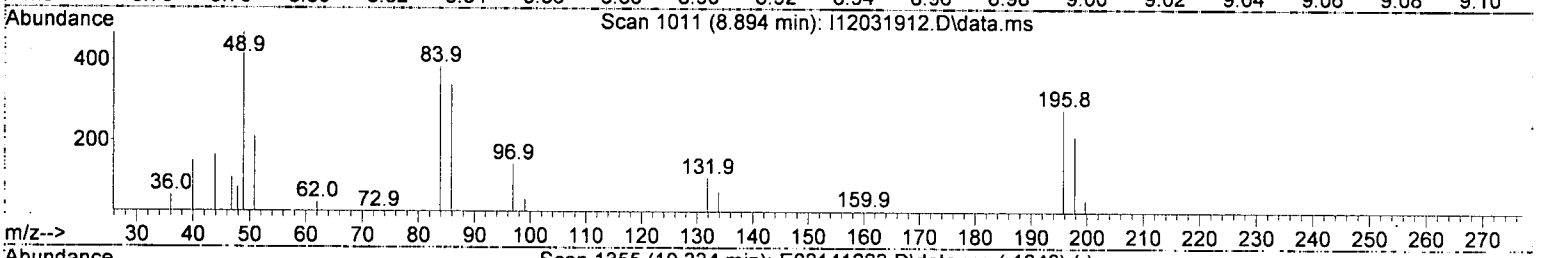
R = 1.80e-002 A*A + 1.47e-001 A - 1.08e-002
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w1/a^2
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

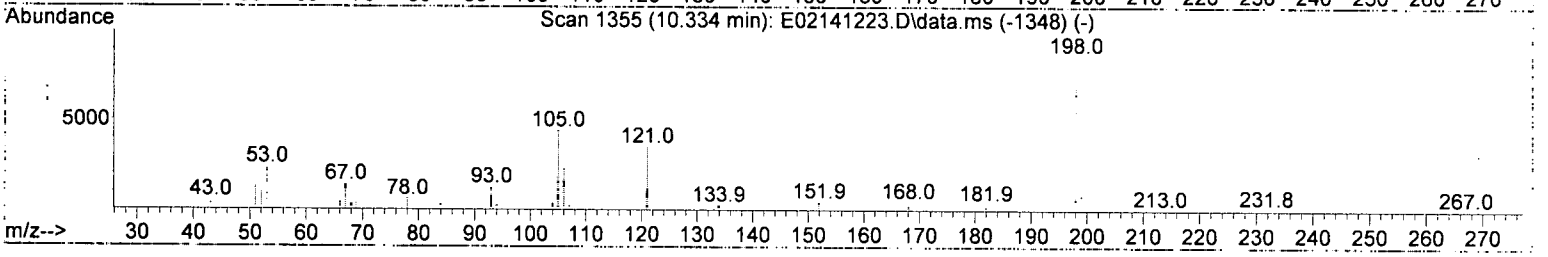
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







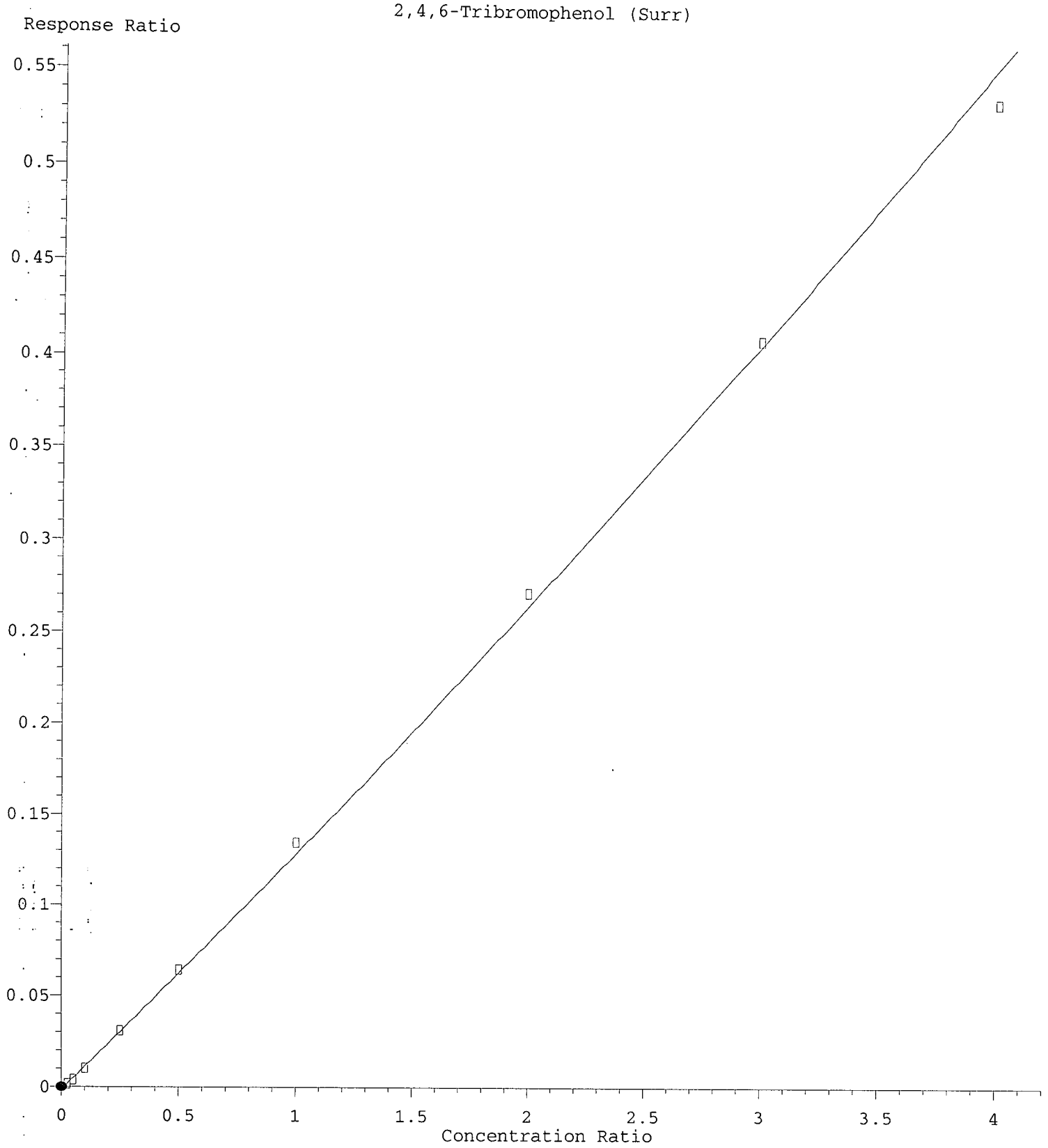
TIC: I12031912.D\data.ms

(63) 4,6-Dinitro-2-methylphenol (T)

8.894min (-1.369) 153.42 ng/ml m

response 105

Ion	Exp%	Act%
198.10	100.00	100.00
105.00	46.50	0.00#
77.00	25.30	0.00
0.00	0.00	0.00

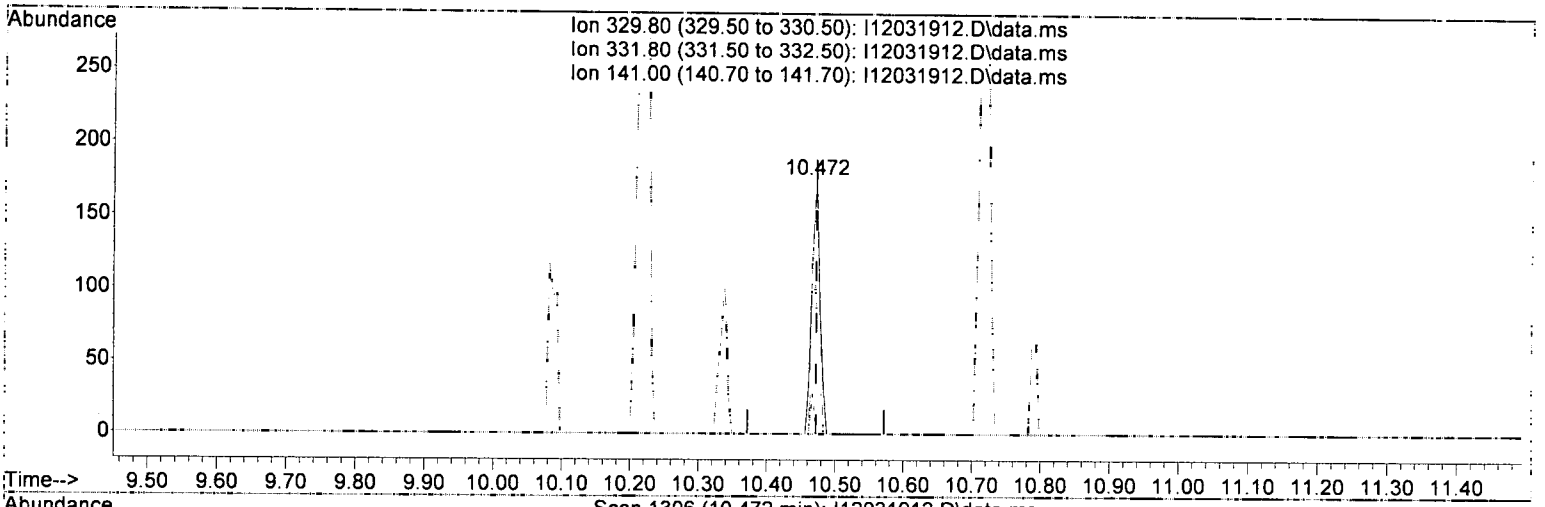


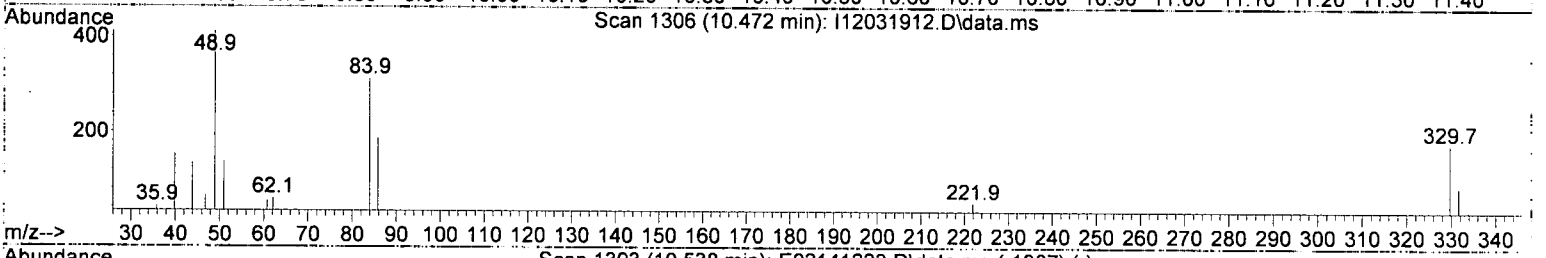
R = 3.03e-003 A*A + 1.27e-001 A - 1.82e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic (1/c^2)
Method Name: T:\methods\SV9_120319.M

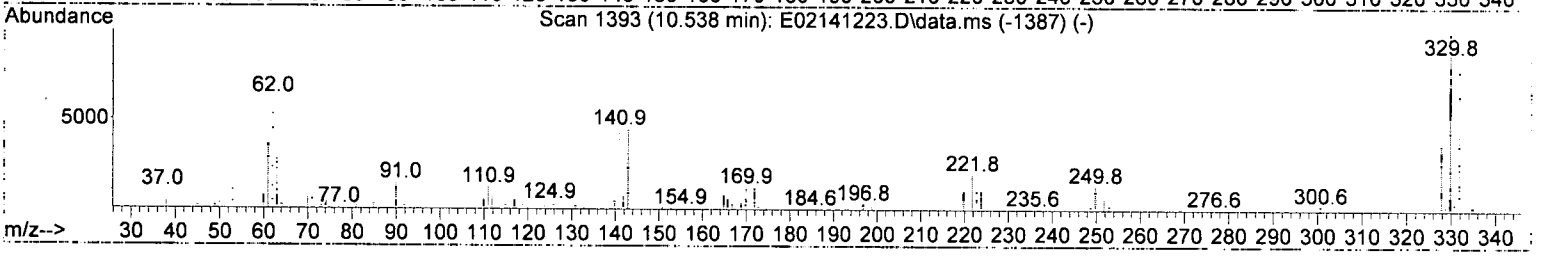
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







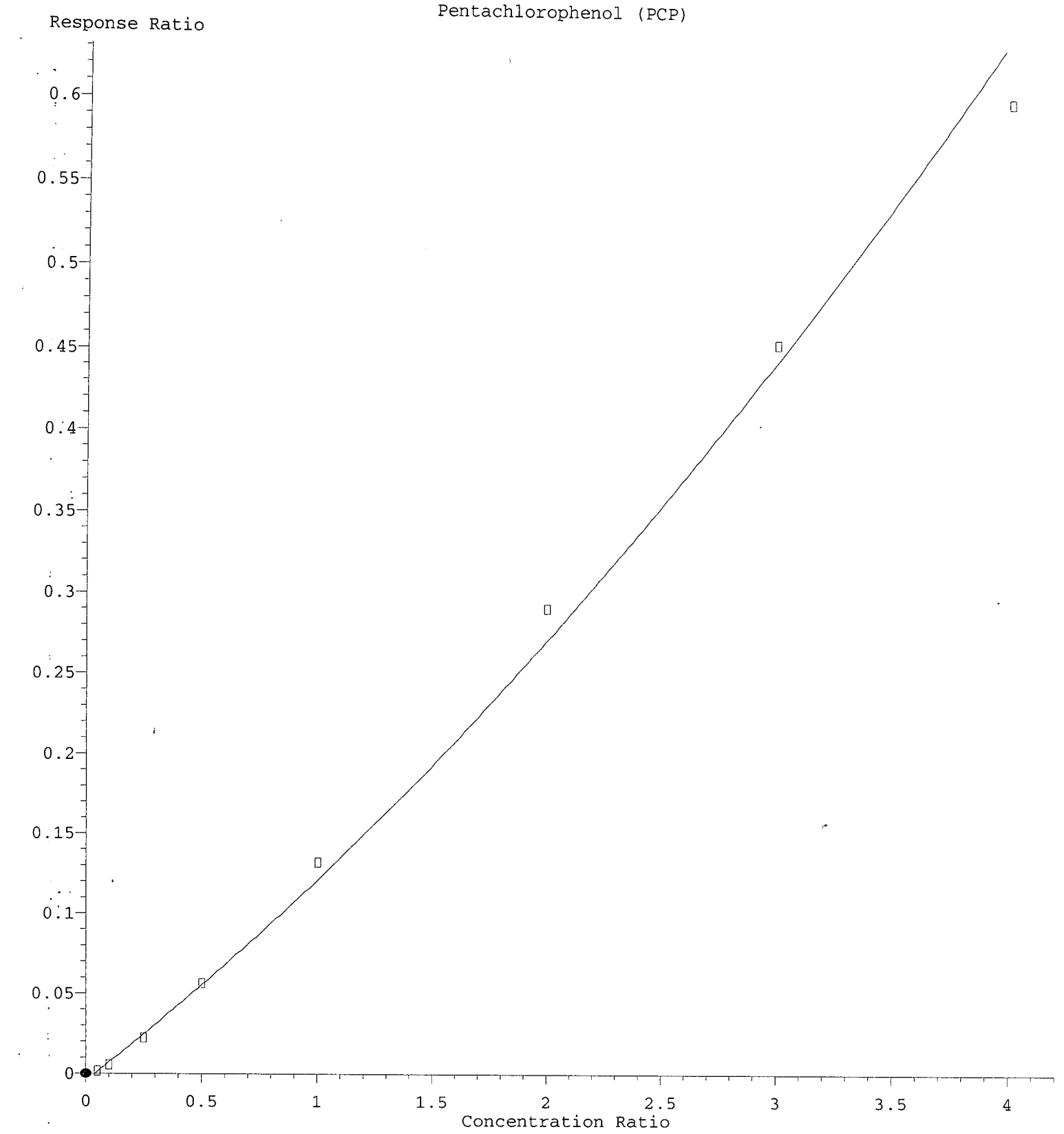
TIC: I12031912.D\data.ms

(67) 2,4,6-Tribromophenol (Surr) (S)

10.472min (+ 0.000) 36.95 ng/ml

response 146

Ion	Exp%	Act%
329.80	100.00	100.00
331.80	99.50	49.43#
141.00	32.90	0.00#
0.00	0.00	0.00

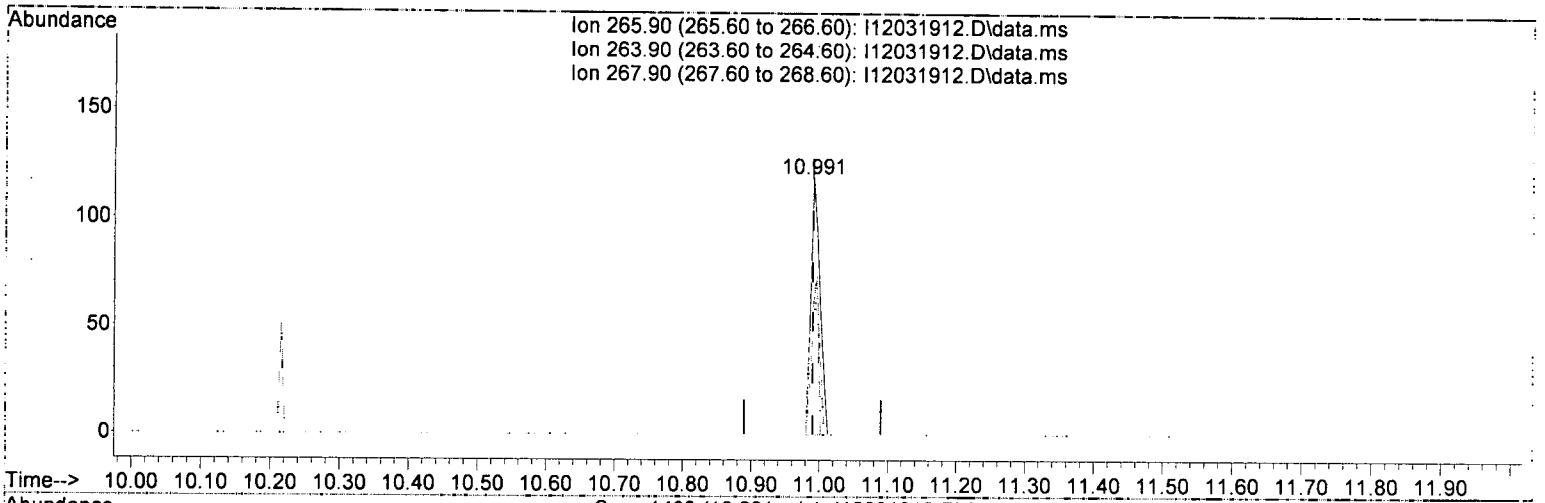


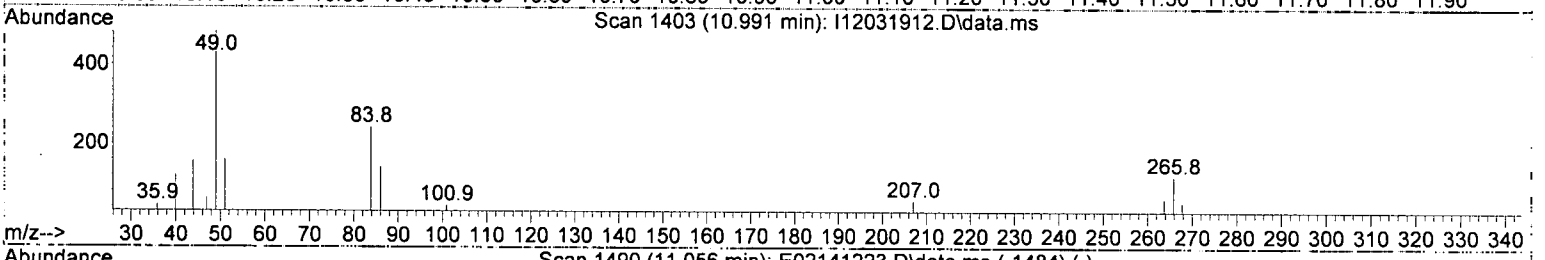
R = 1.19e-002 A*A + 1.14e-001 A - 4.56e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic (1/a^2)
Method Name: T:\methods\SV9_120319.M

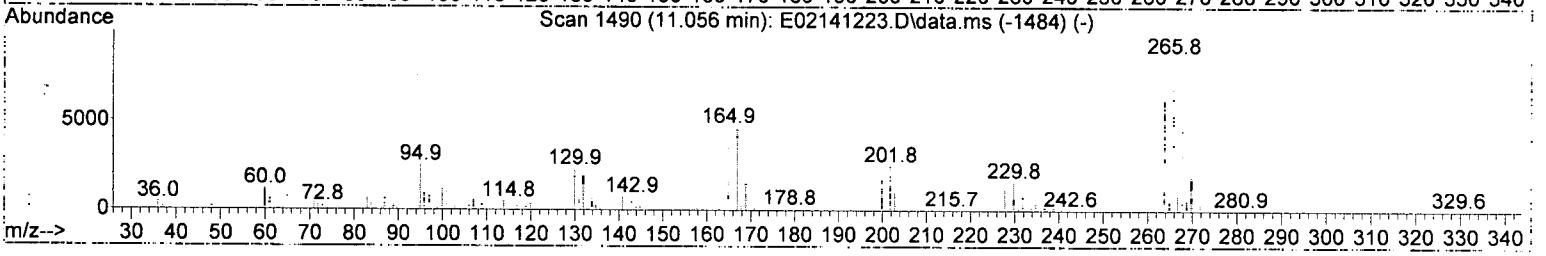
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







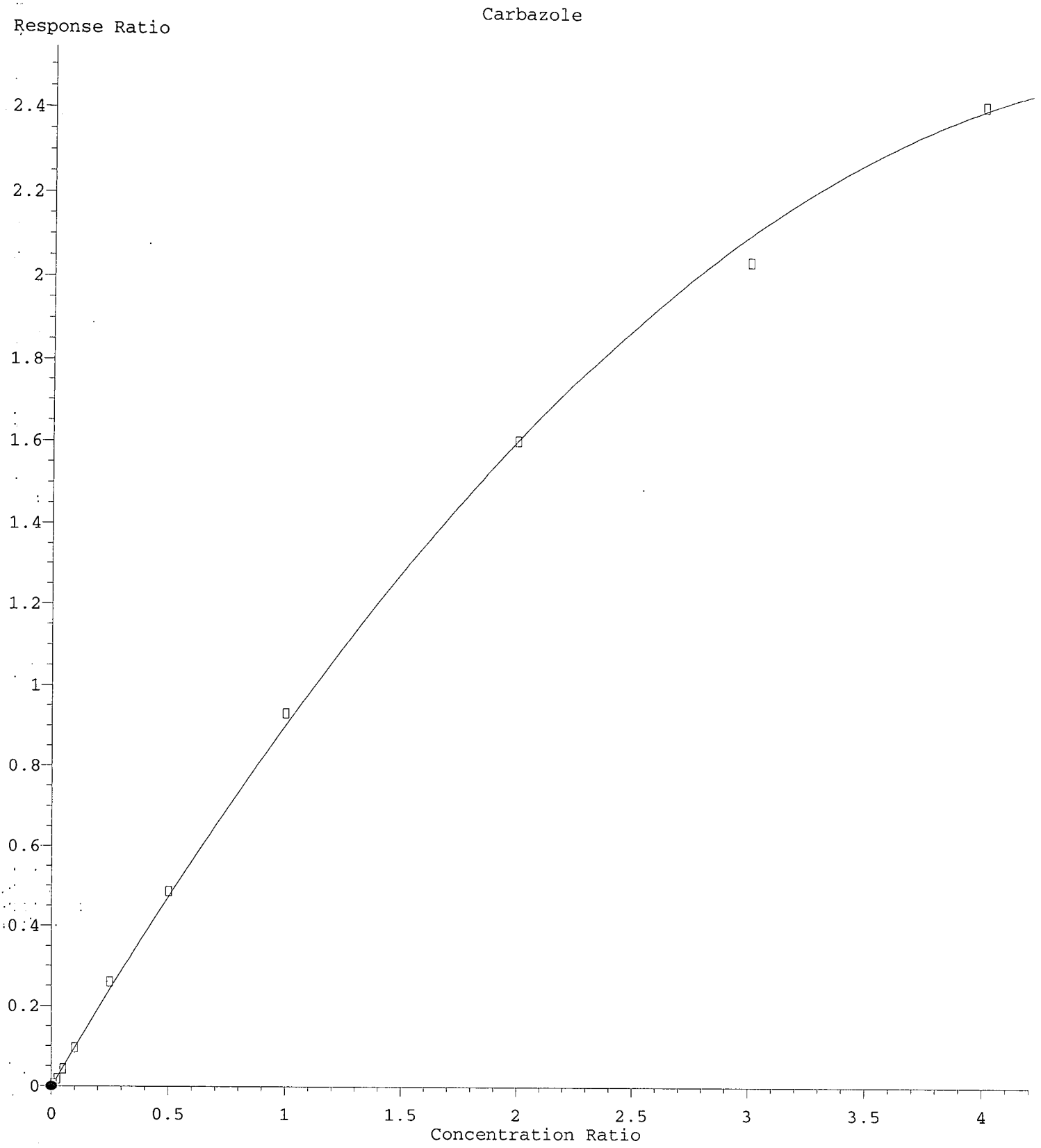
TIC: I12031912.D\data.ms

(70) Pentachlorophenol (PCP) (T)

10.991min (+ 0.001) 86.60 ng/ml

response 110

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	62.10	52.10
267.90	66.50	44.54
0.00	0.00	0.00

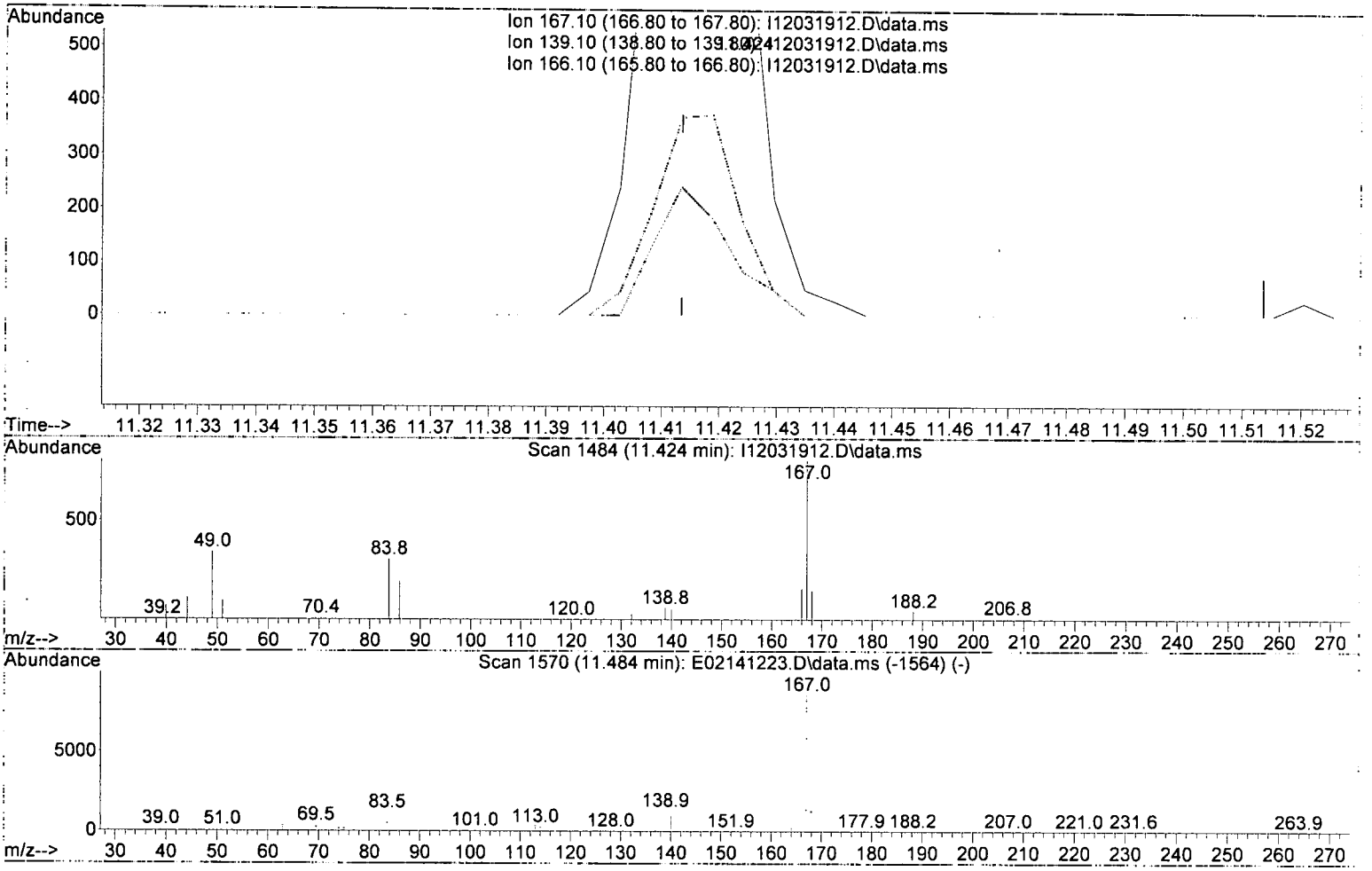


R = -1.00e-001 A*A + 1.01e+000 A - 4.20e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic (1/a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9



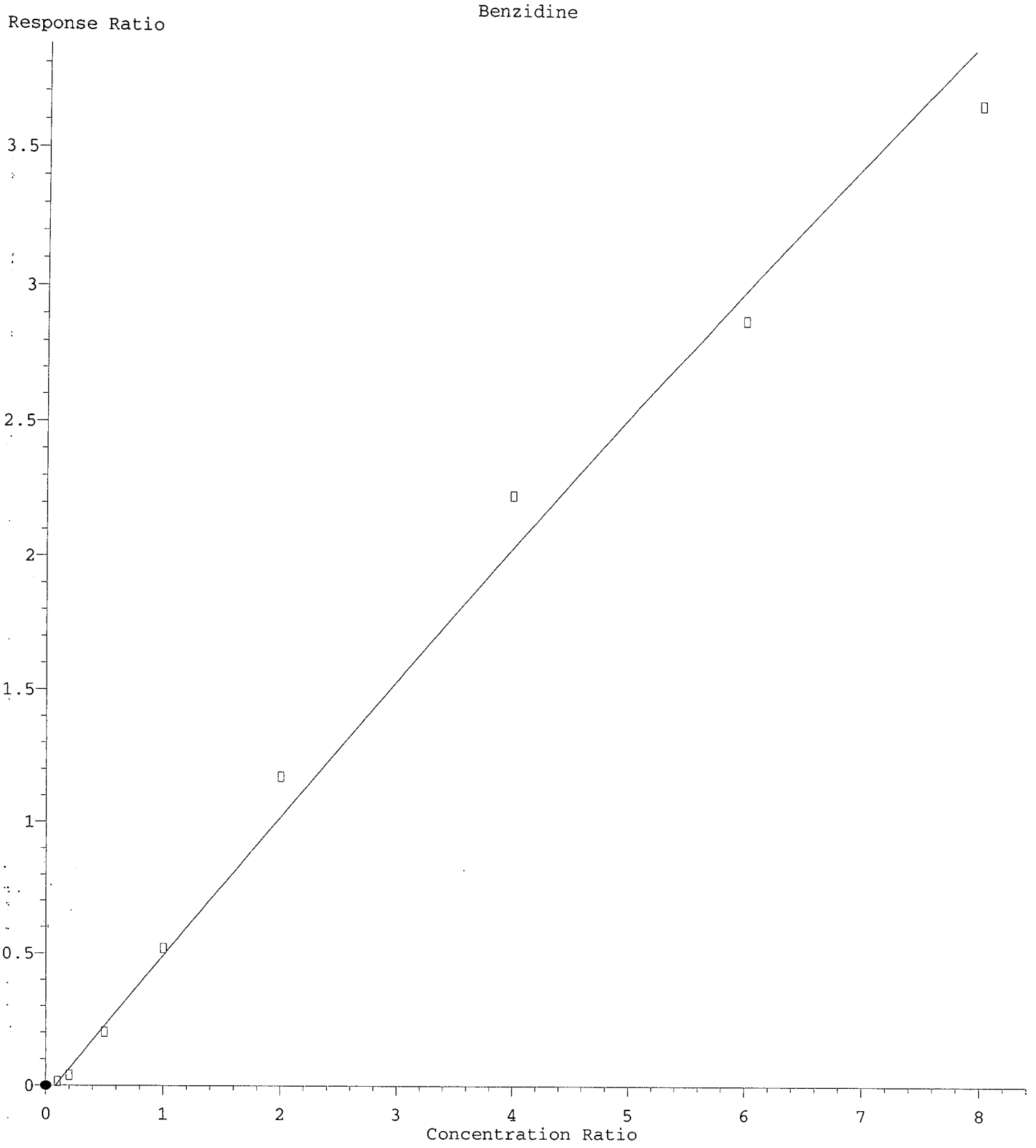
TIC: I12031912.D\data.ms

(73) Carbazole (T)

11.424min (+ 0.011) 9.07 ng/ml m

response 101

Ion	Exp%	Act%
167.10	100.00	100.00
139.10	13.40	10.25
166.10	20.80	21.90
0.00	0.00	0.00

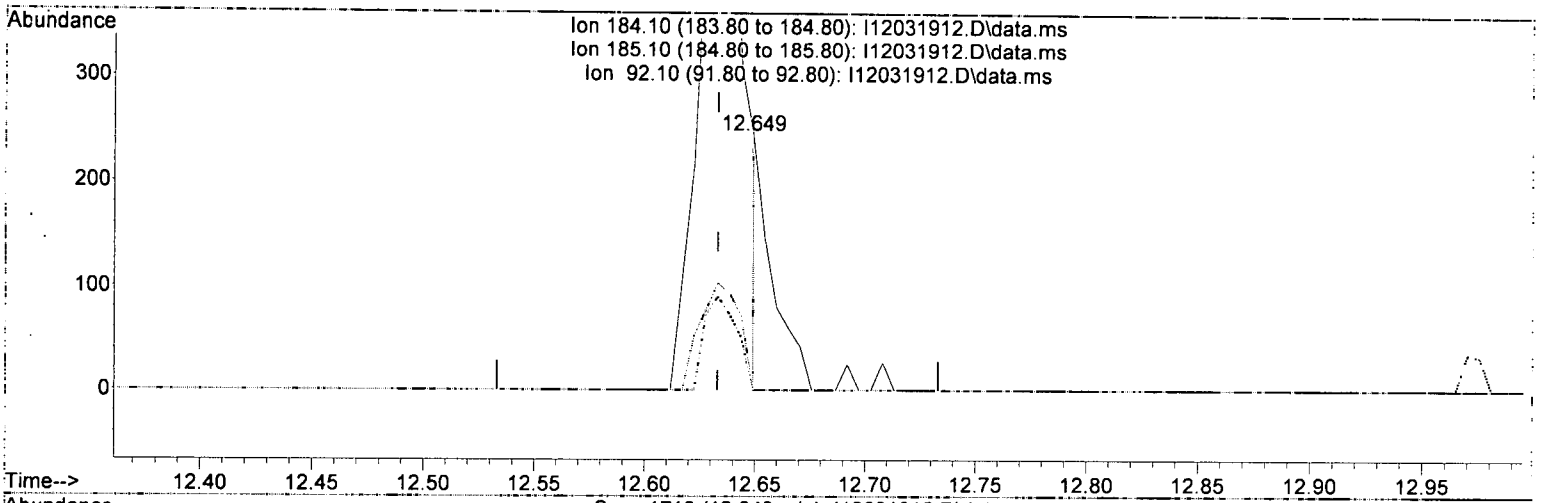


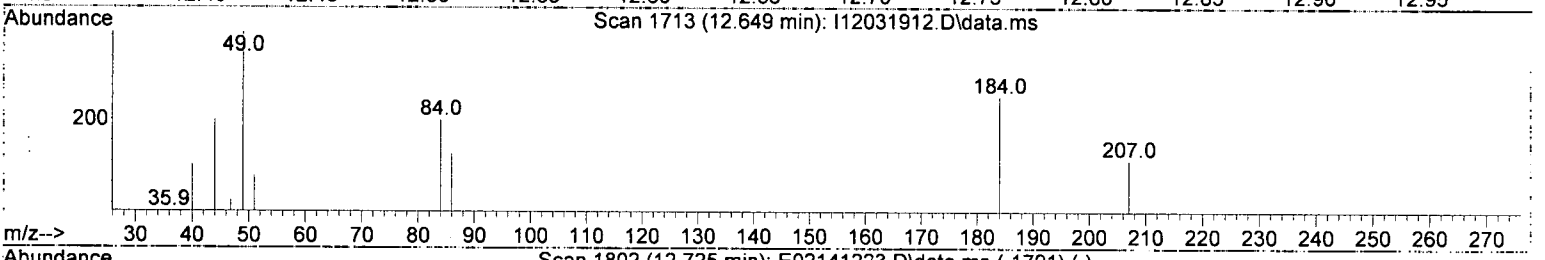
R = -6.28e-003 A*A + 5.45e-001 A - 4.53e-002
Coef of Det (r^2) = 0.978 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

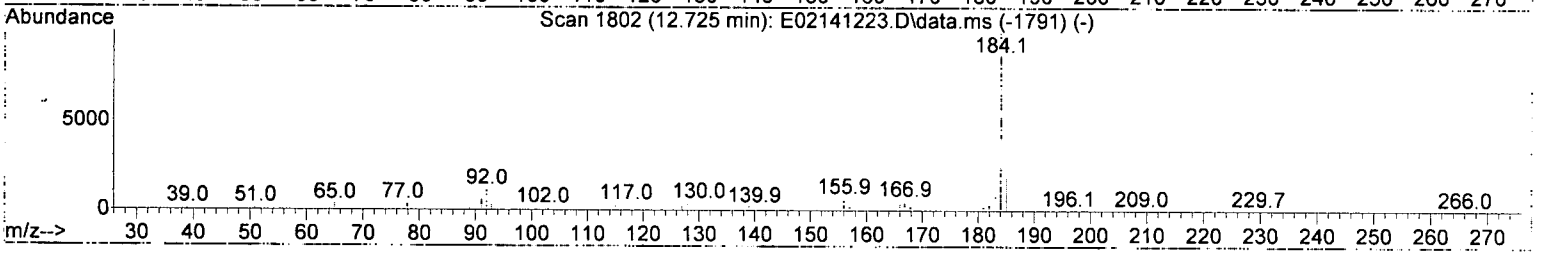
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







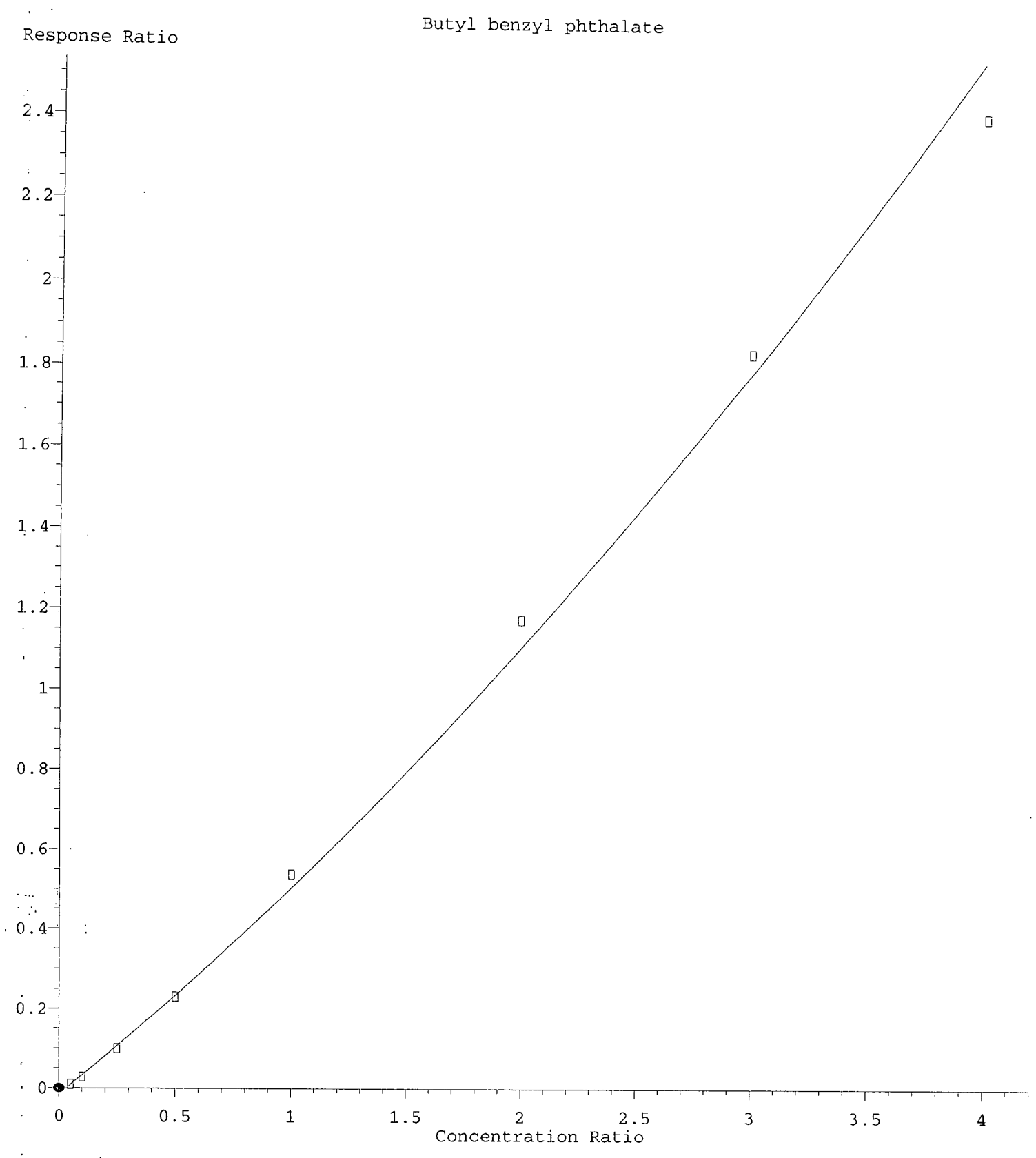
TIC: I12031912.D\data.ms

(76) Benzidine (T)

12.649min (+ 0.016) 167.94 ng/ml m

response 105

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.70	0.00
92.10	9.90	0.00
0.00	0.00	0.00

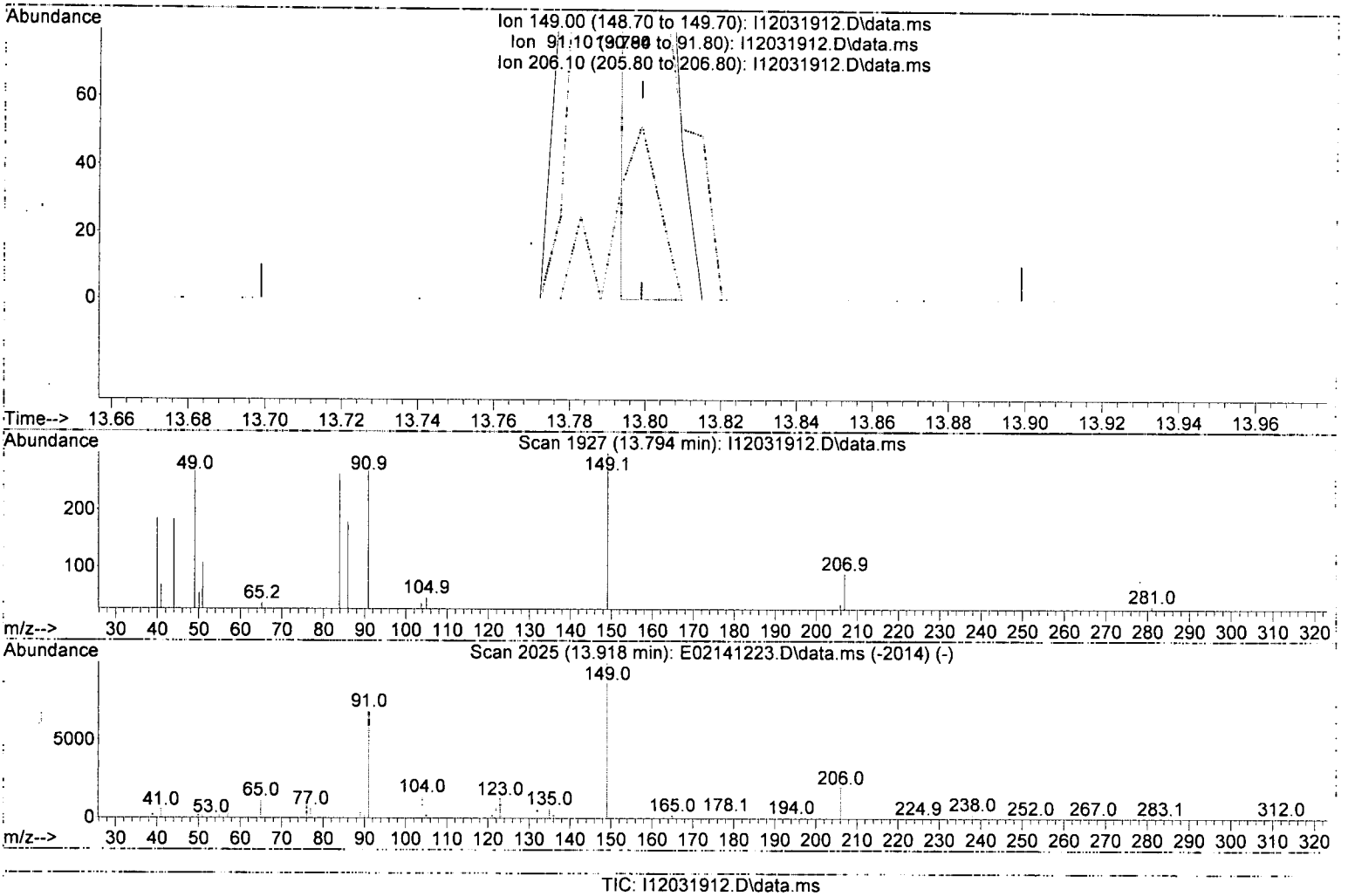


R = 4.12e-002 A*A + 4.78e-001 A - 1.57e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w/1/a^2
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9

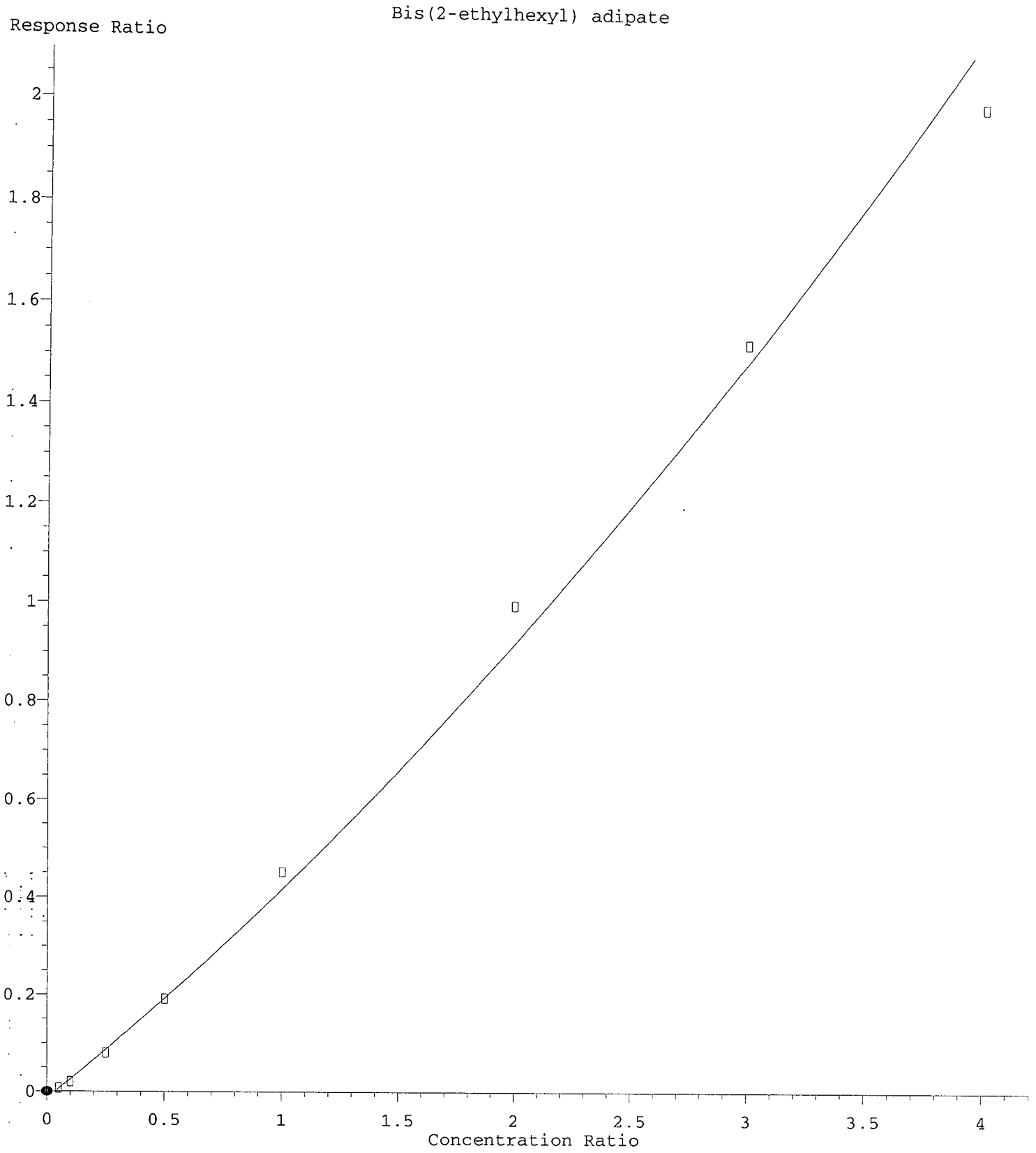


(80) Butyl benzyl phthalate (T)

13.794min (-0.005) 68.01 ng/ml m ✓

response 150

Ion	Exp%	Act%
149.00	100.00	100.00
91.10	73.80	89.63
206.10	20.40	11.37
0.00	0.00	0.00

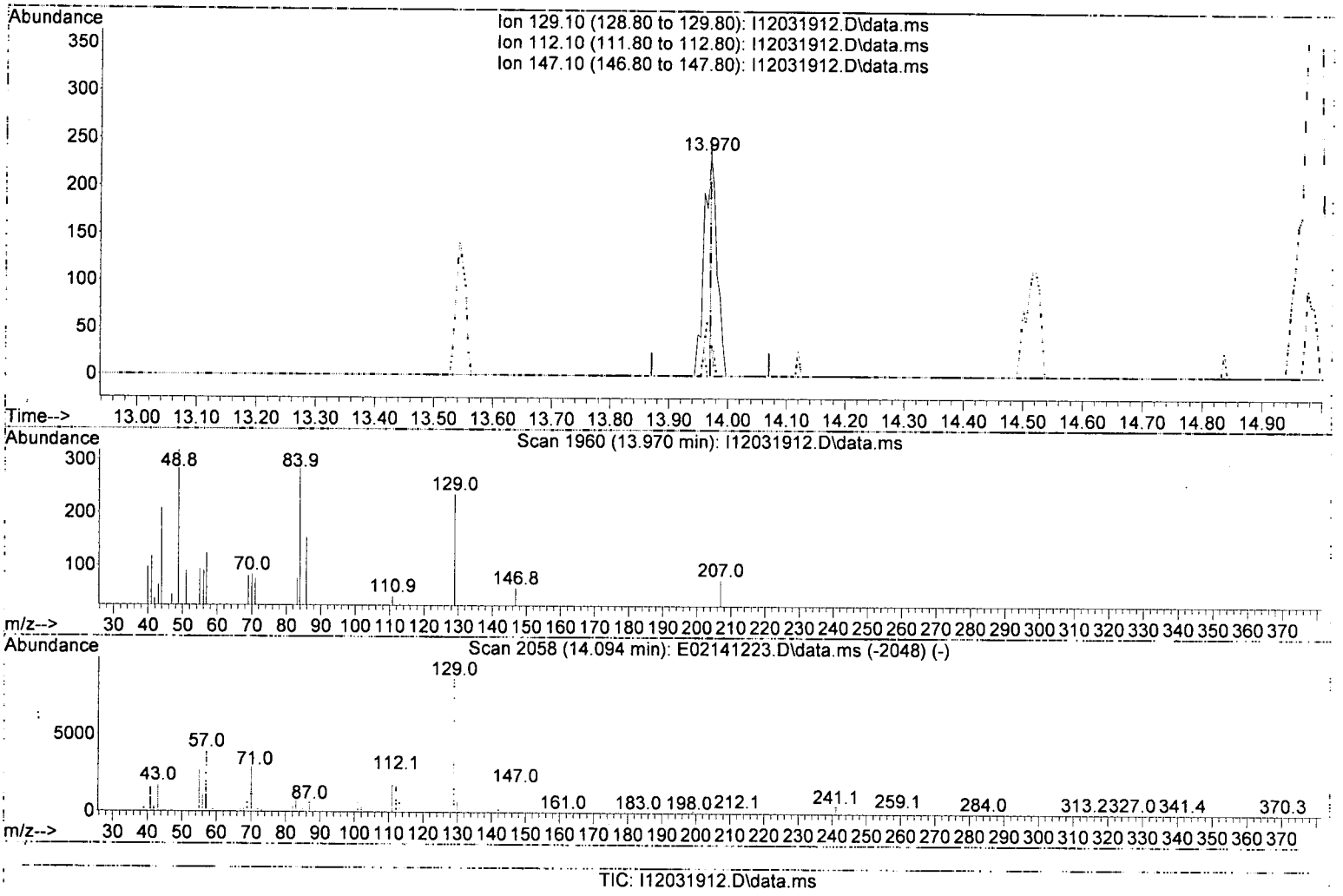


R = 3.53e-002 A*A + 3.95e-001 A - 1.45e-002
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w/1/(a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9



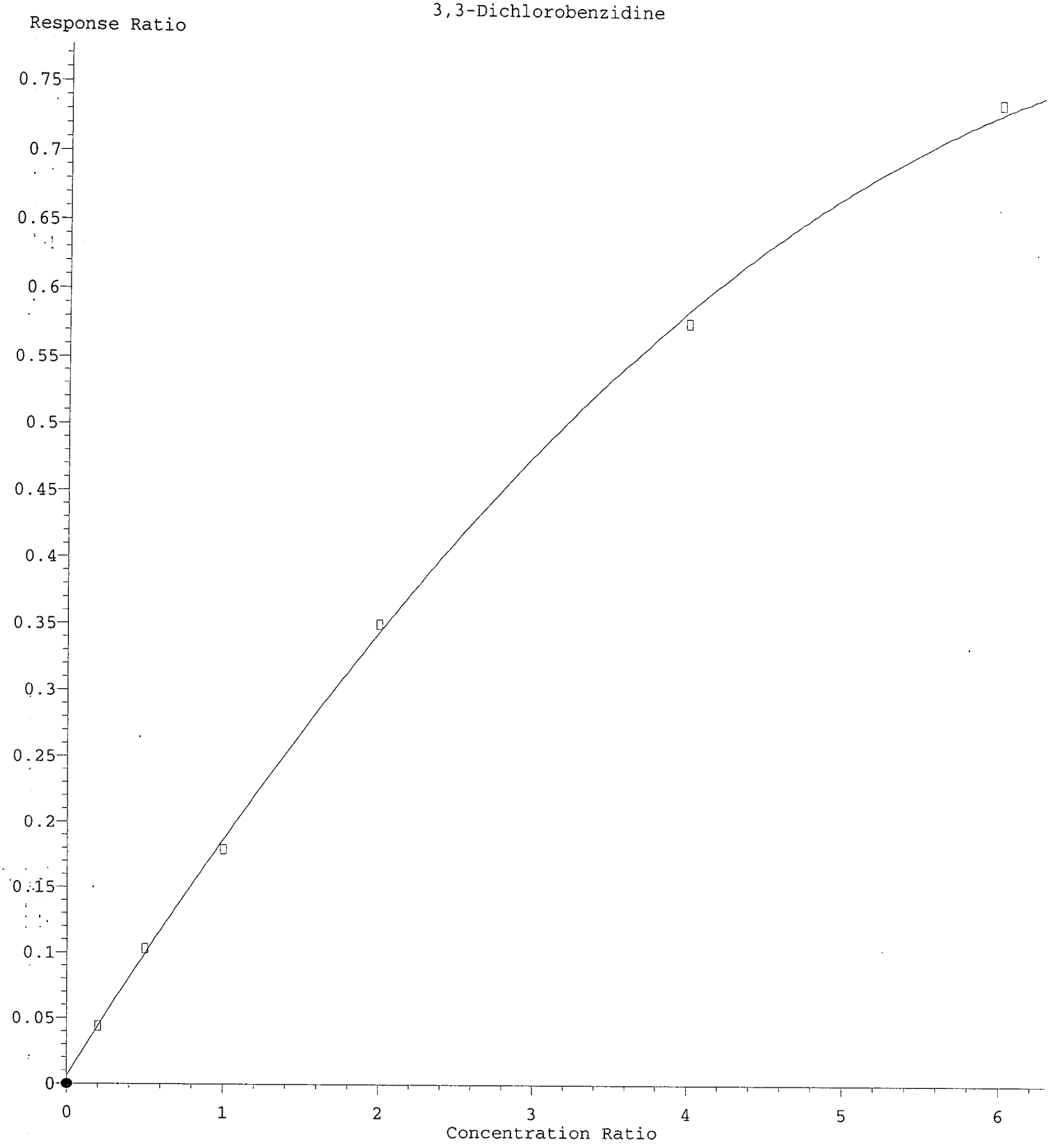
TIC: I12031912.D\data.ms

(81) Bis(2-ethylhexyl) adipate (T)

13.970min (+ 0.000) 75.44 ng/ml m ✓

response 136

Ion	Exp%	Act%
129.10	100.00	100.00
112.10	26.60	0.00
147.10	16.90	24.68
0.00	0.00	0.00

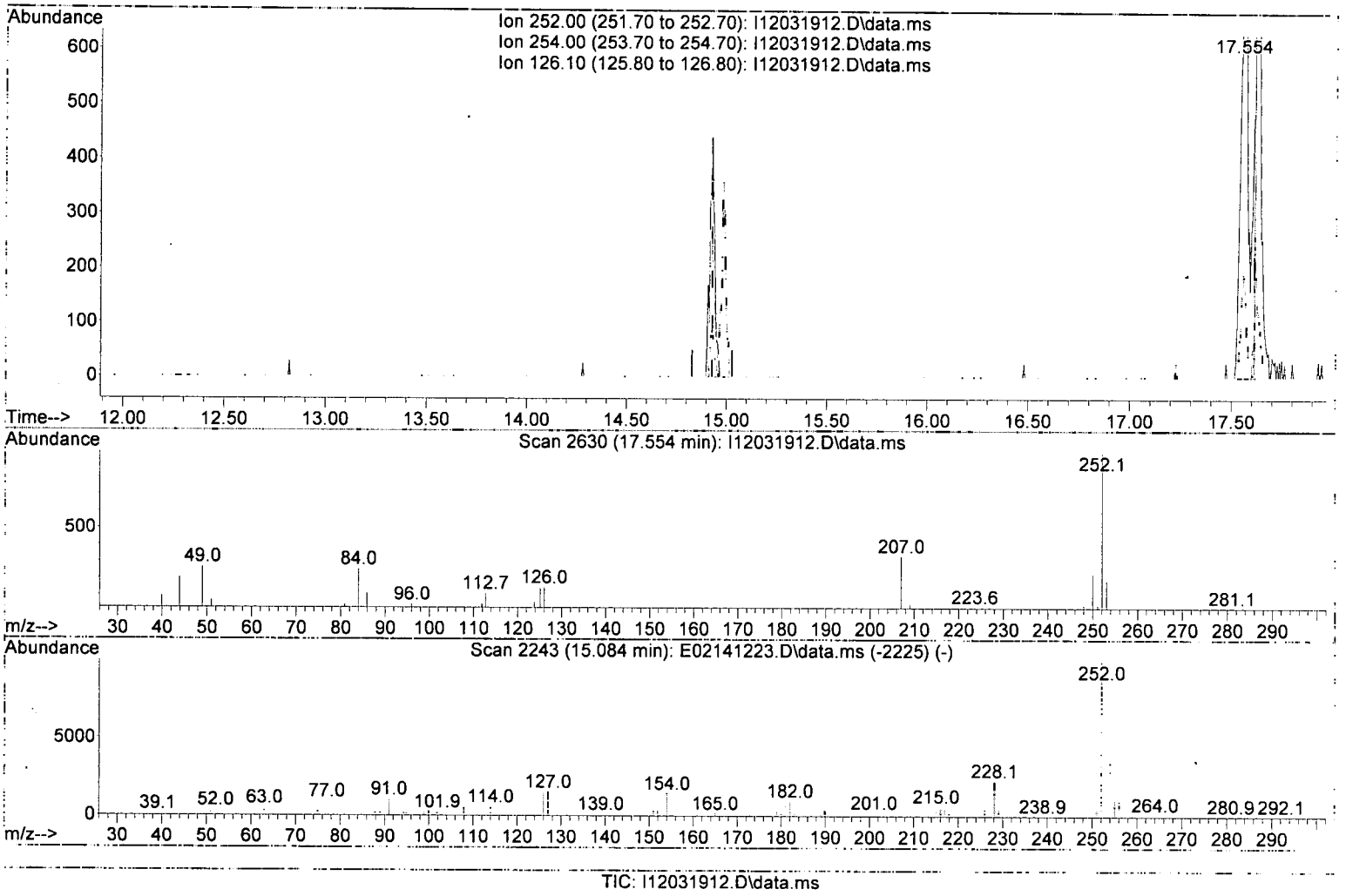


R = -1.19e-002 A*A + 1.92e-001 A + 6.21e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic (1/a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9



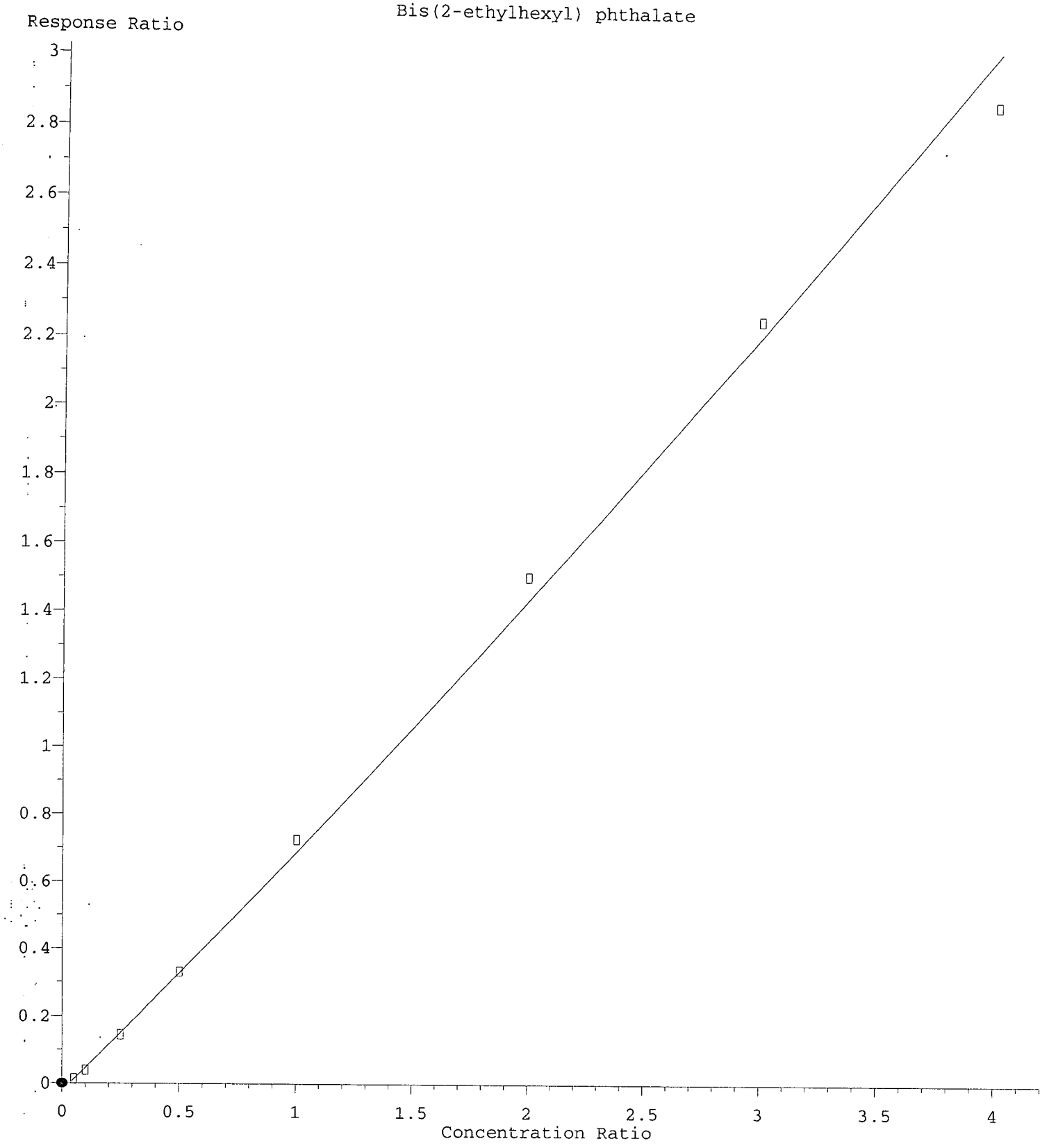
TIC: I12031912.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

17.554min (+ 2.627) 58.48 ng/ml m

response 3174

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	64.00	0.00#
126.10	14.00	15.37
0.00	0.00	0.00

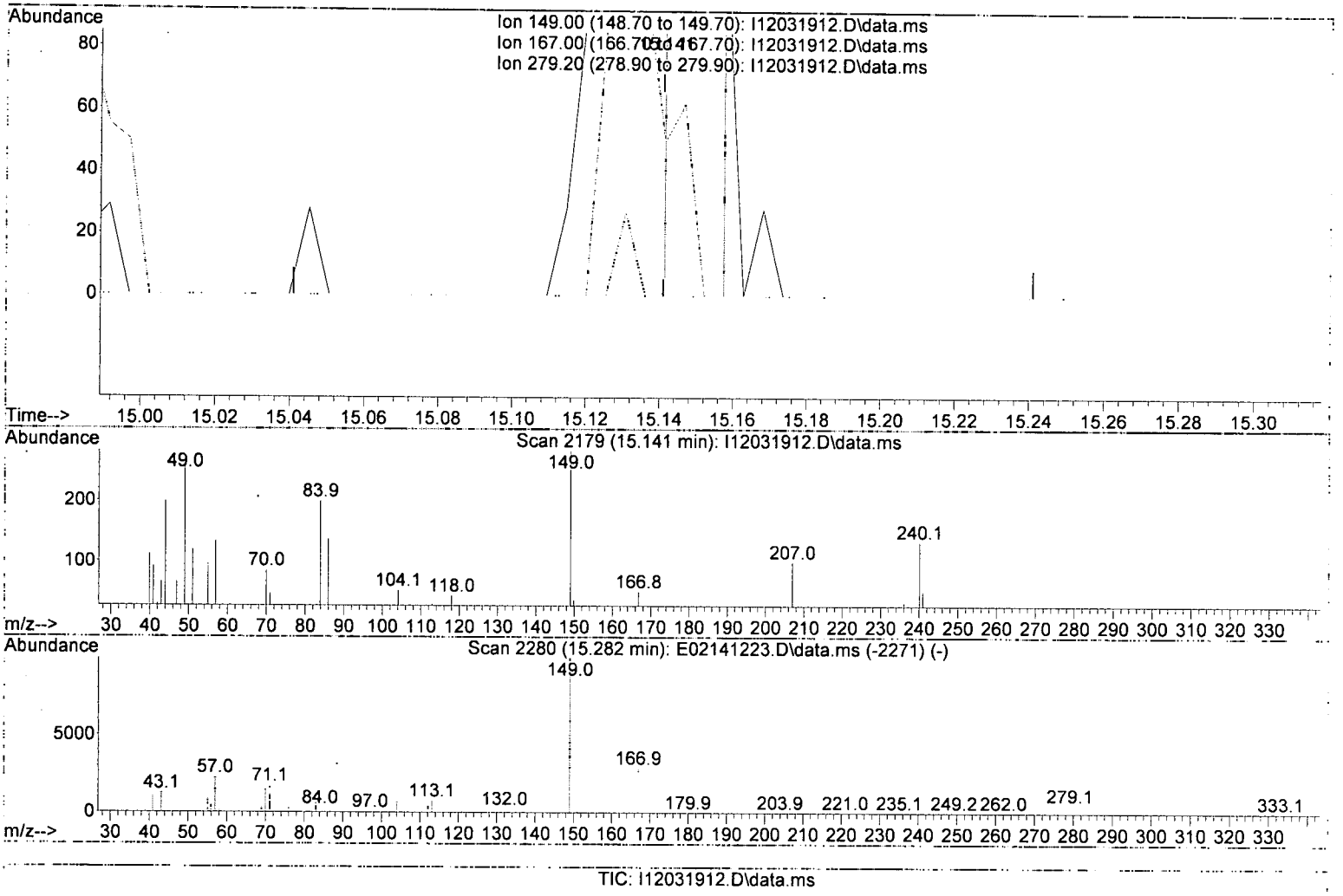


R = 1.71e-002 A*A + 6.94e-001 A - 2.39e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9



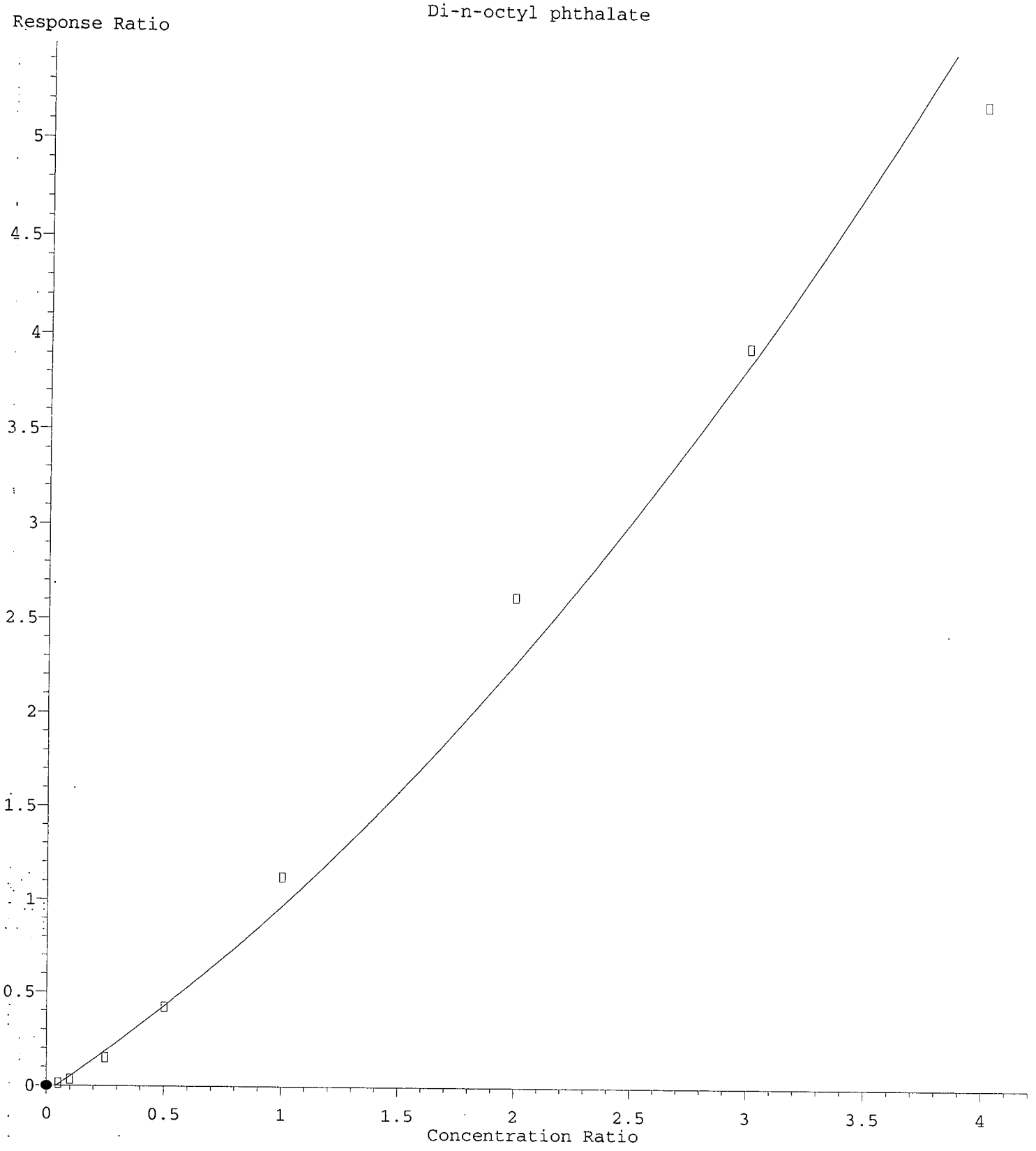
TIC: I12031912.D\data.ms

(85) Bis(2-ethylhexyl) phthalate (T)

15.141min (+ 0.000) 70.55 ng/ml m

response 154

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	29.50	17.73
279.20	6.80	0.00
0.00	0.00	0.00

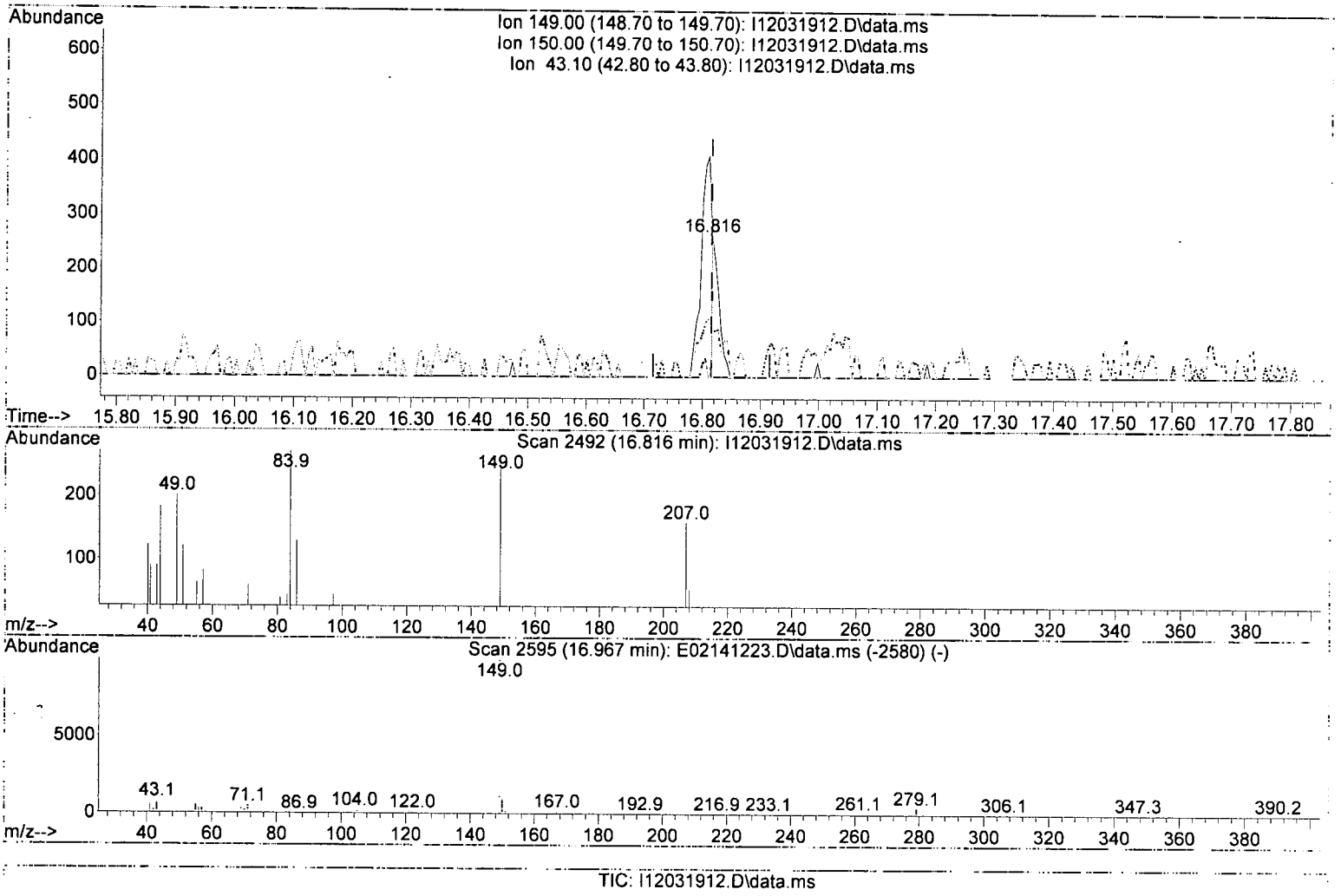


R = 1.49e-001 A*A + 8.54e-001 A - 3.58e-002
Coef of Det (r^2) = 0.981 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9



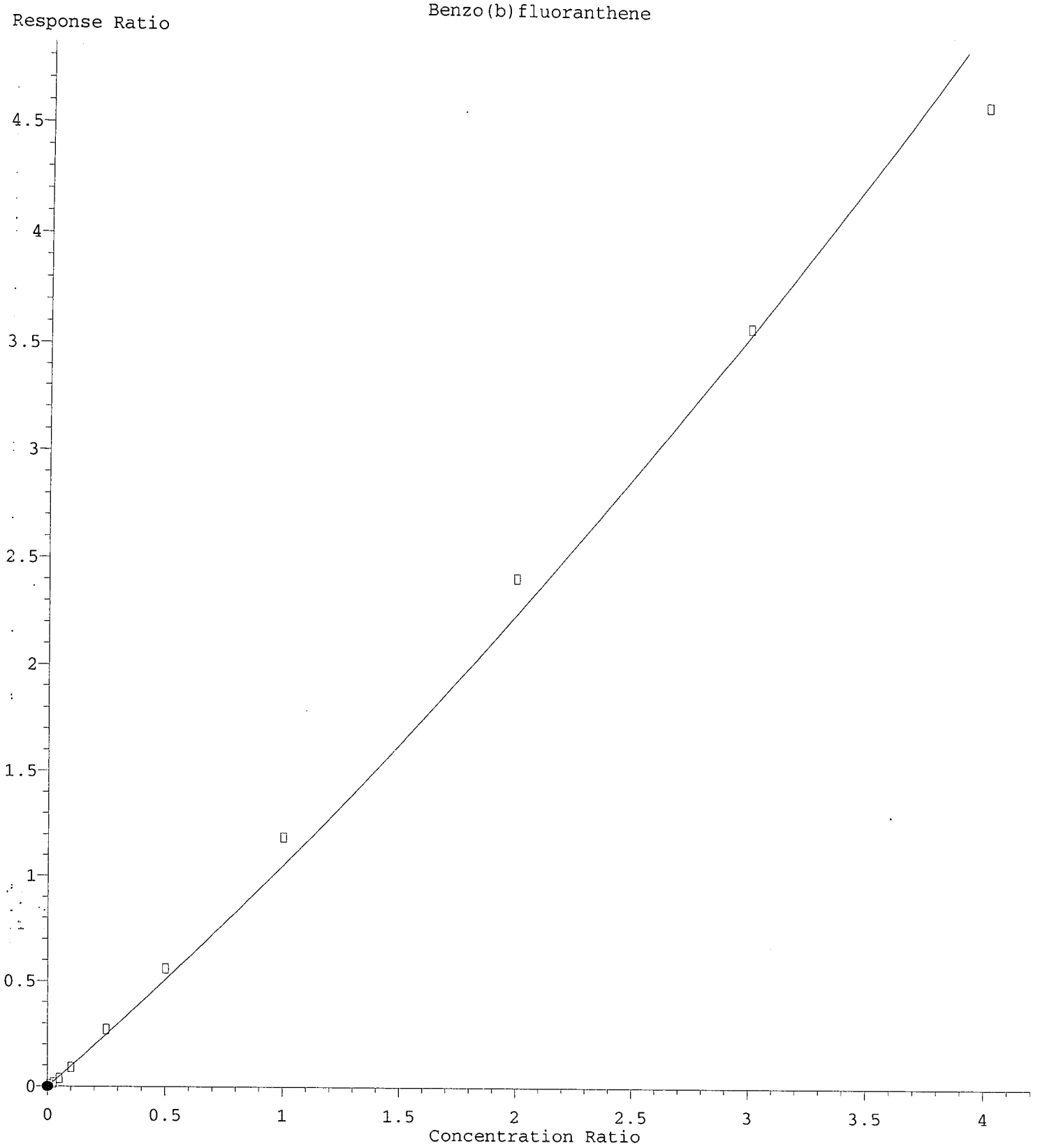
TIC: I12031912.D\data.ms

(87) Di-n-octyl phthalate (T)

16.816min (+ 0.001) 84.90 ng/ml m

response 171

Ion	Exp%	Act%
149.00	100.00	100.00
150.00	9.20	0.00
43.10	10.80	34.22
0.00	0.00	0.00

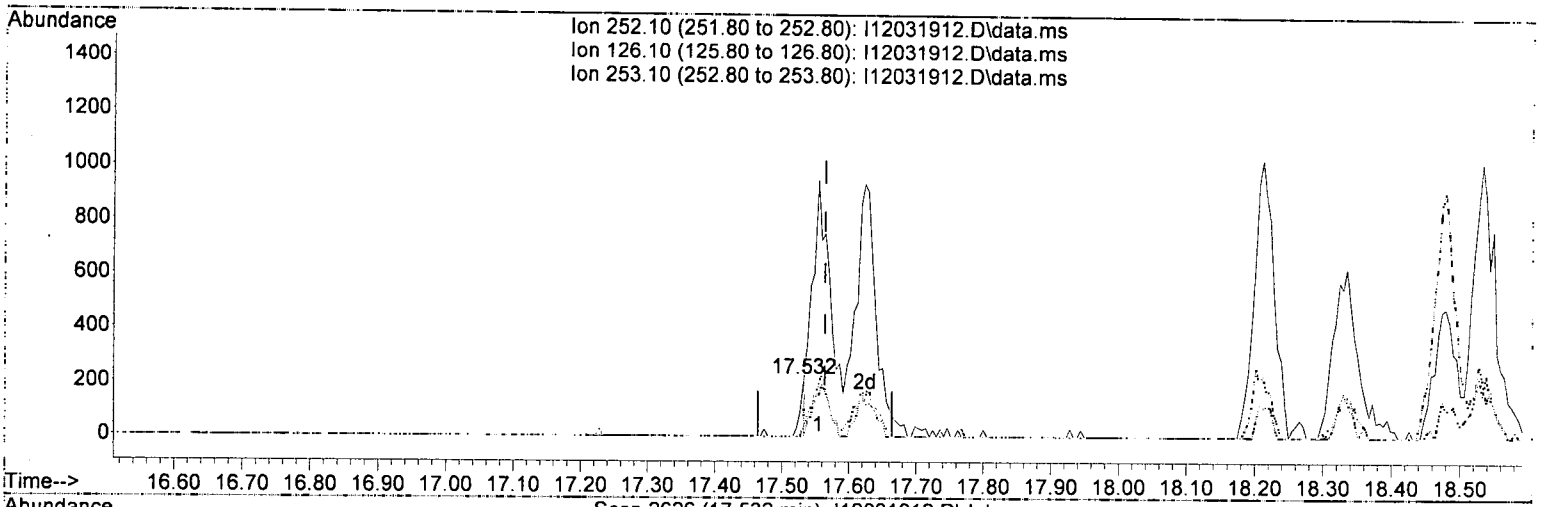


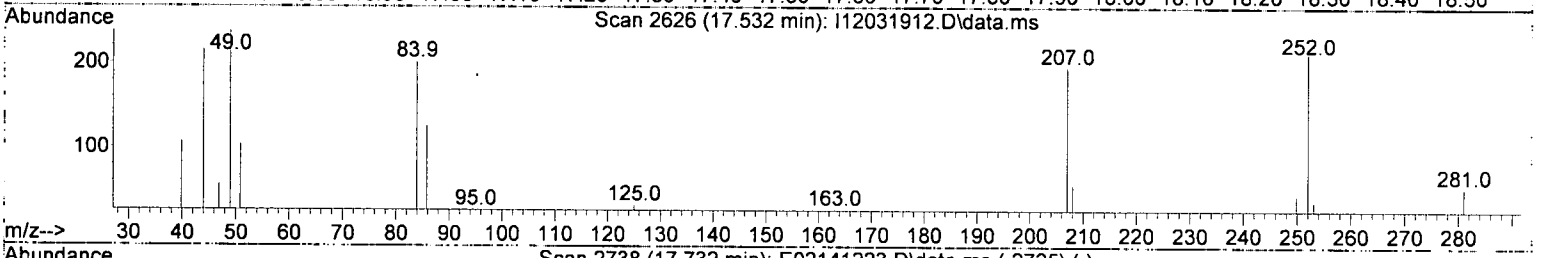
R = 6.58e-002 A*A + 9.91e-001 A - 3.68e-003
Coef of Det (r^2) = 0.984 Curve Fit: Quadratic w/1/(a*2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

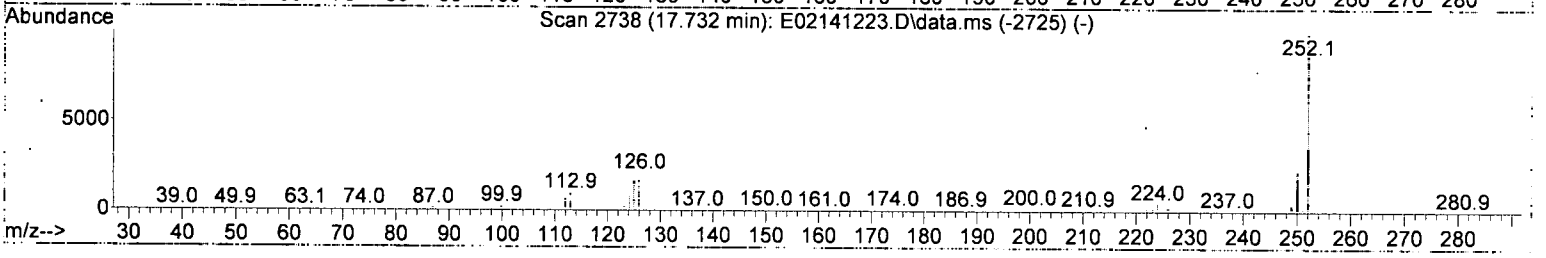
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







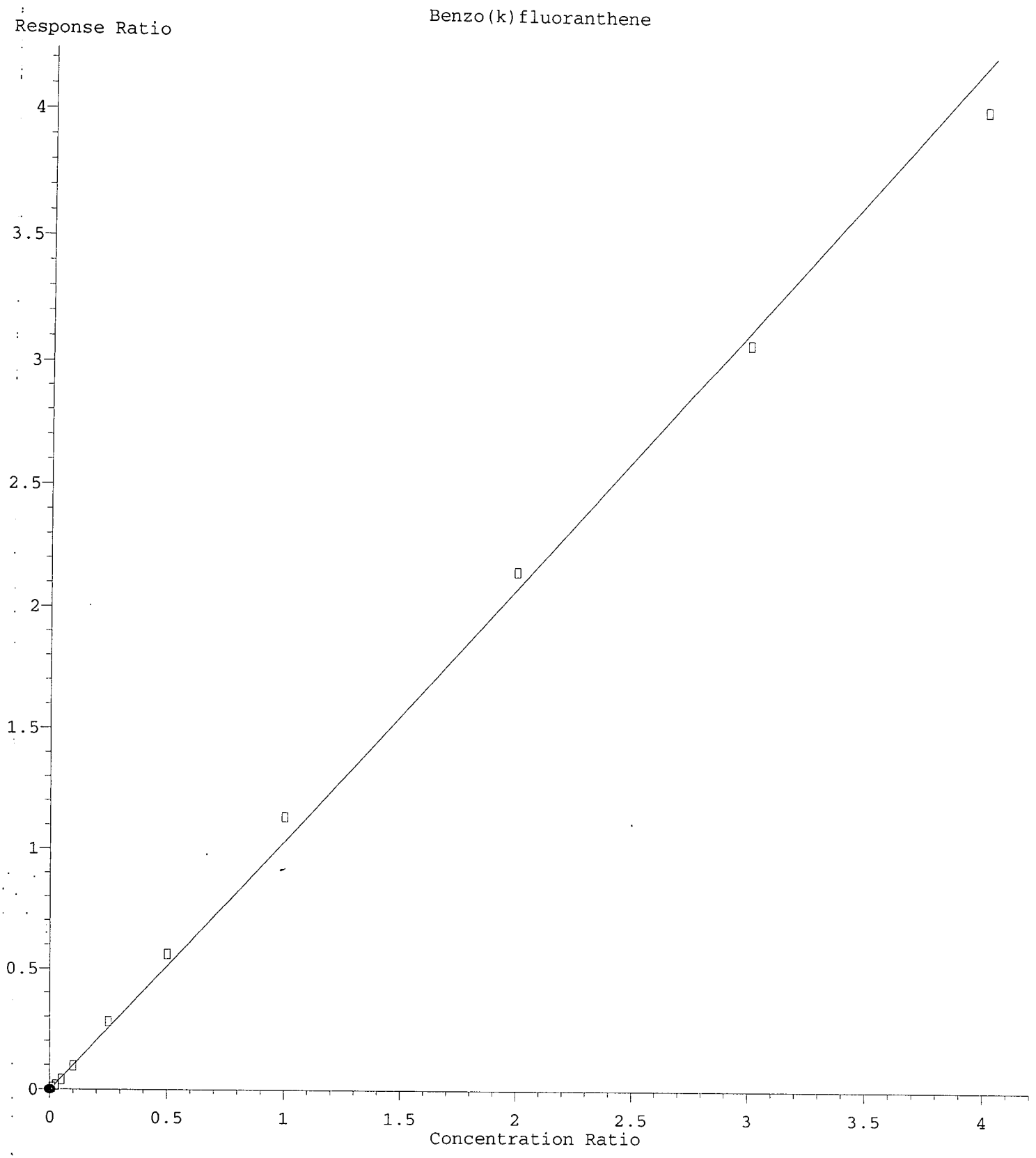
TIC: I12031912.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.532min (-0.032) 8.25 ng/ml m

response 108

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	16.90	0.00
253.10	21.90	17.13
0.00	0.00	0.00

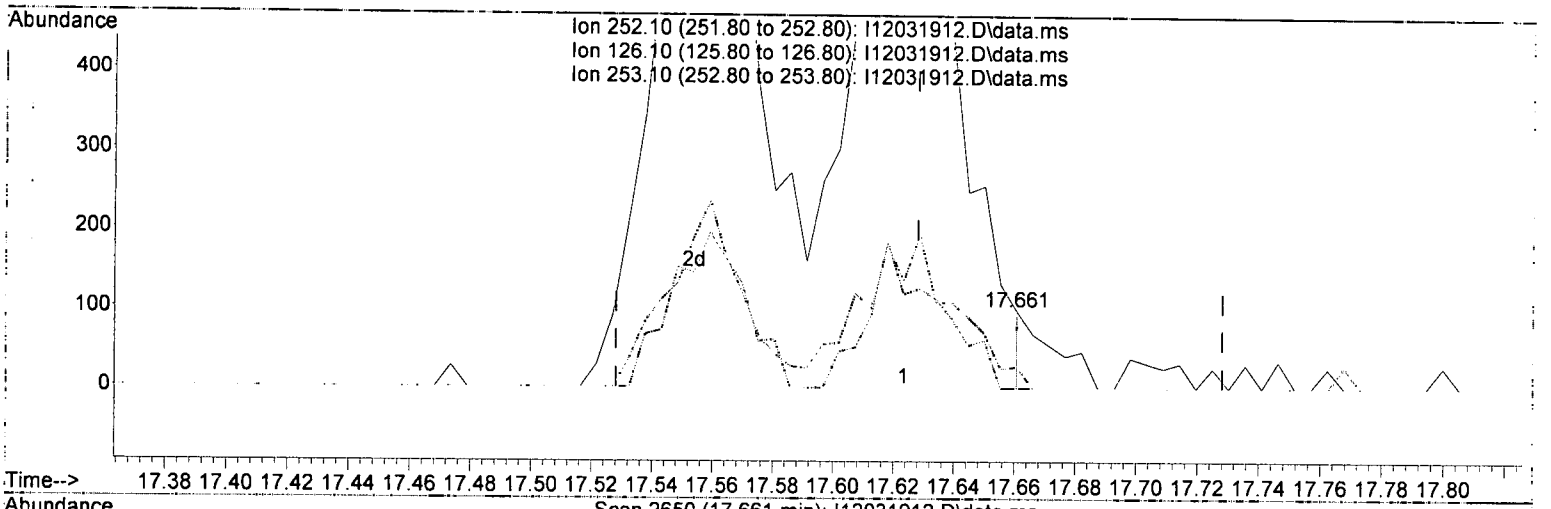


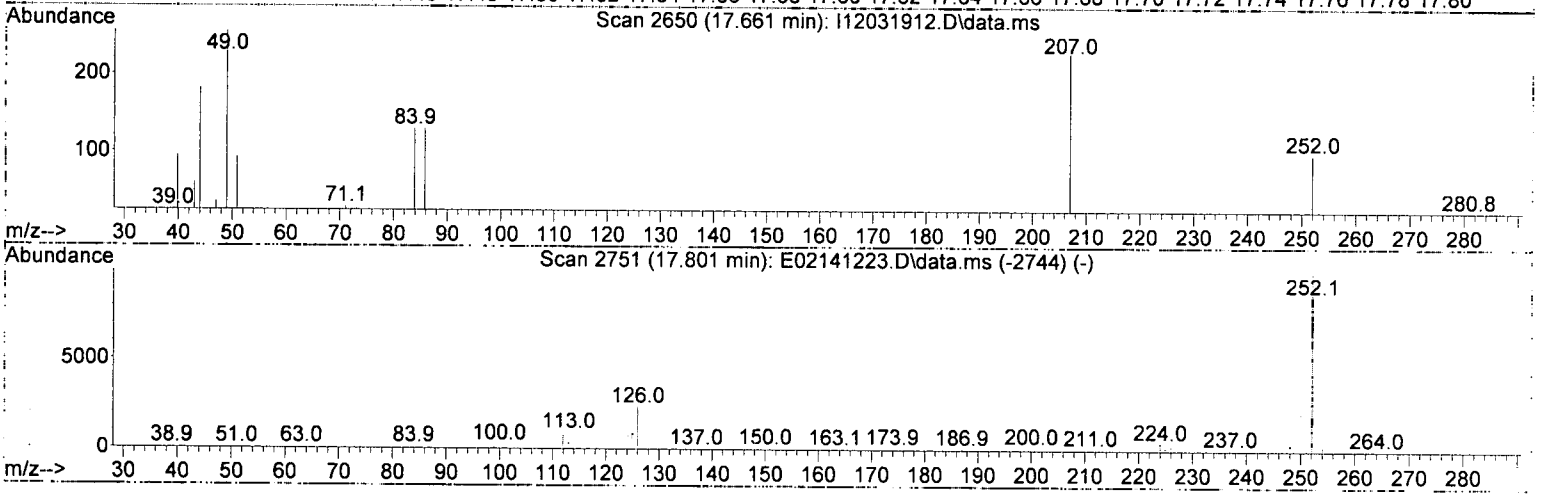
R = 6.72e-003 A*A + 1.03e+000 A - 3.60e-003
Coef of Det (r^2) = 0.985 Curve Fit: Quadratic w(1/a02)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9





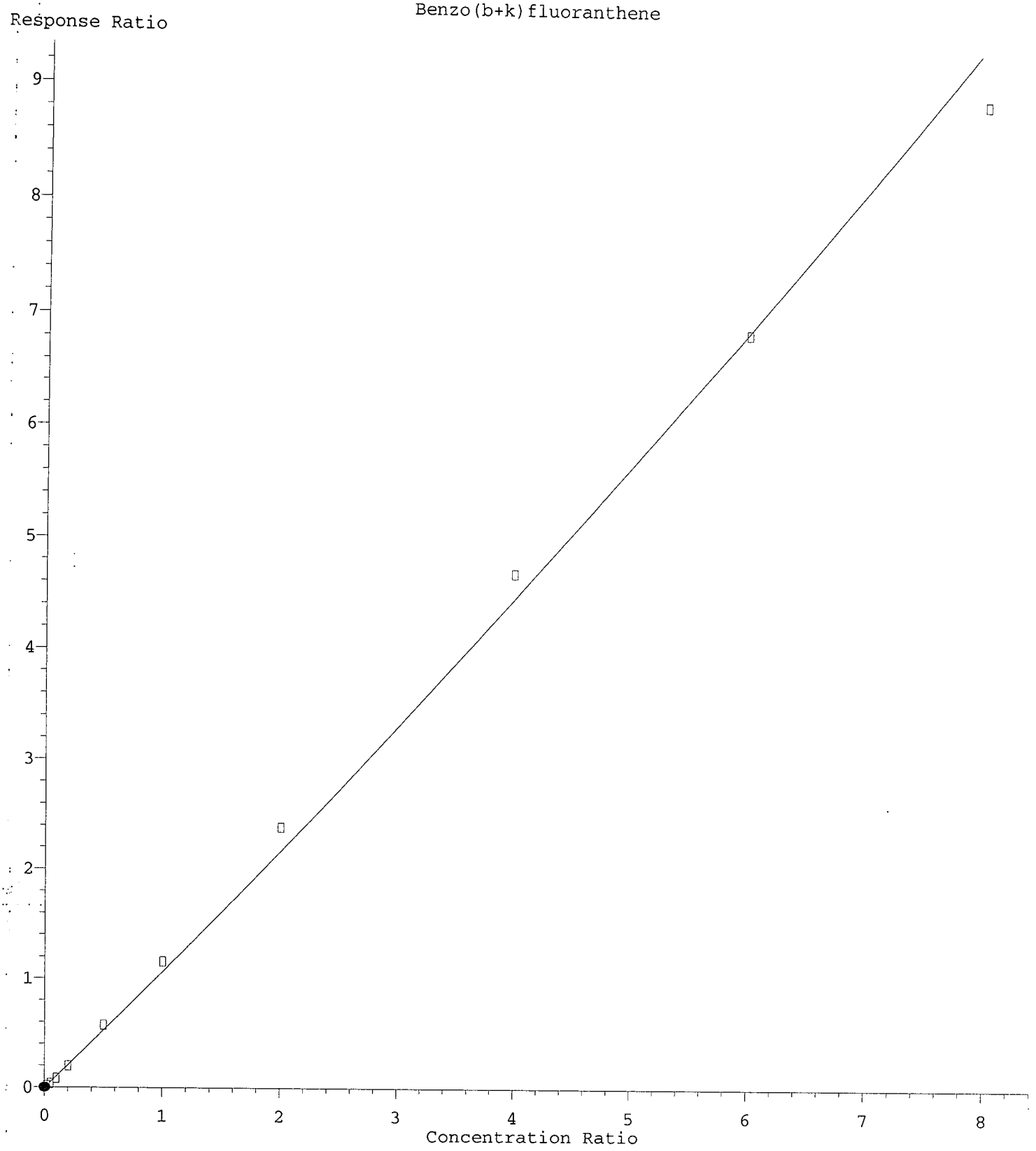
TIC: I12031912.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.661min (+ 0.033) 8.08 ng/ml m

response 143

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	17.60	0.00
253.10	21.80	27.55
0.00	0.00	0.00

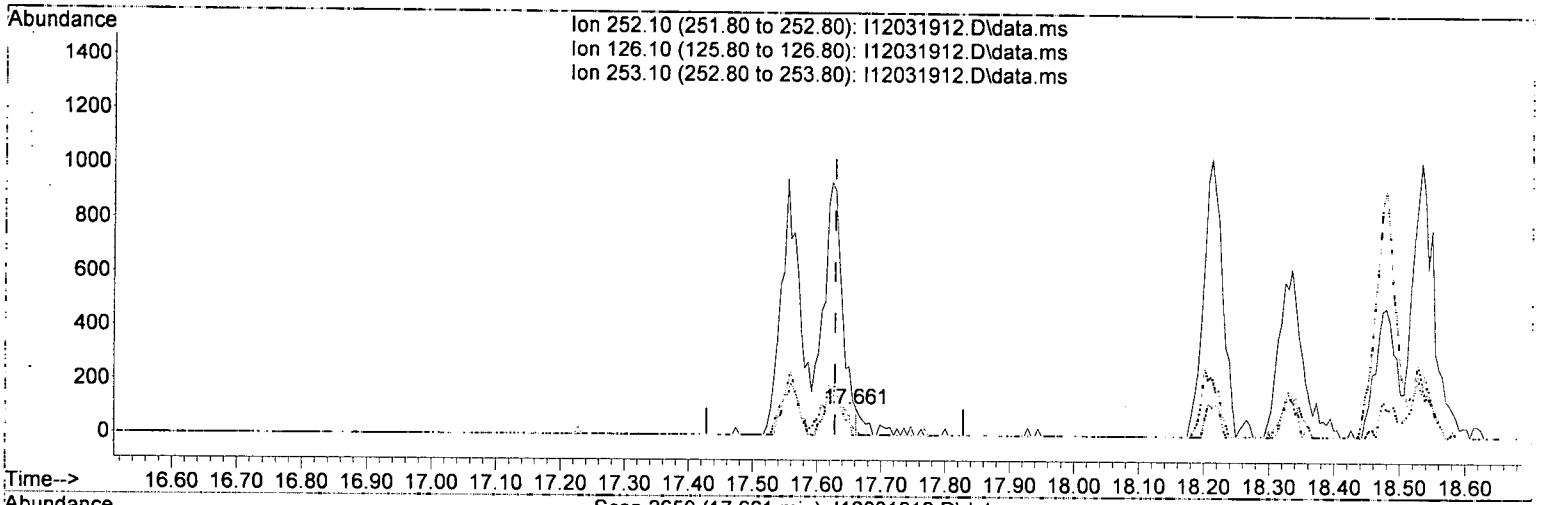


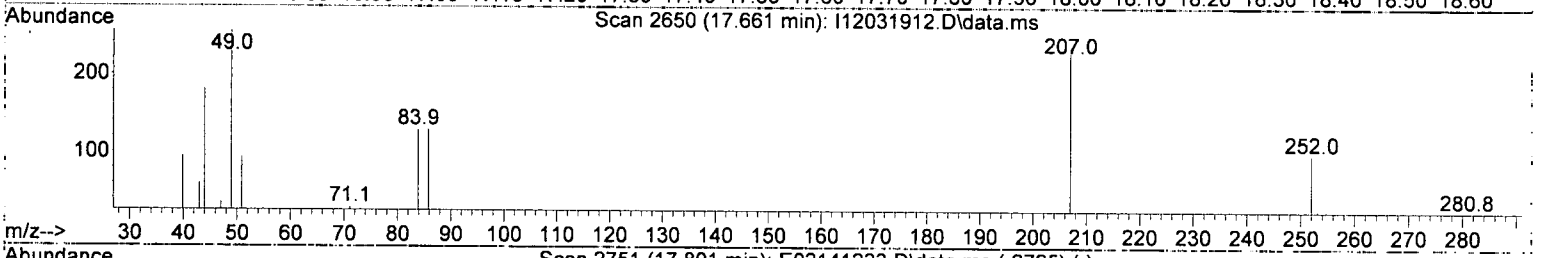
R = 1.54e-002 A*A + 1.05e+000 A - 7.99e-003
Coef of Det (r^2) = 0.988 Curve Fit: Quadratic w/1/(a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

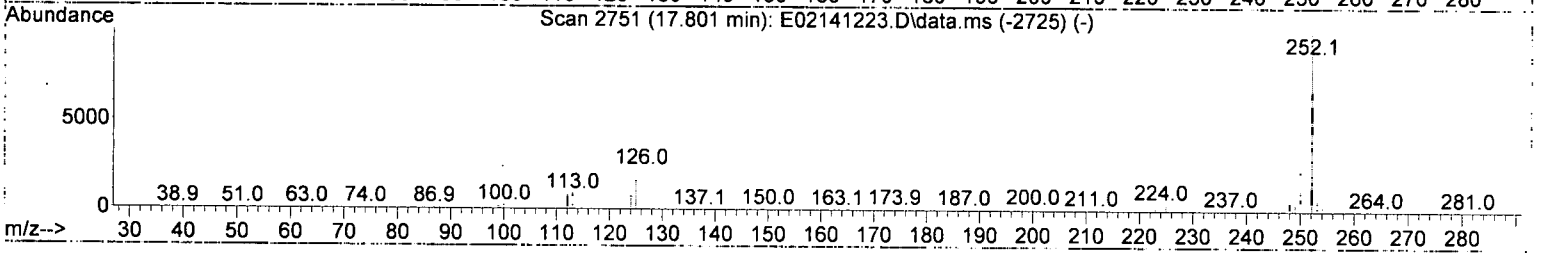
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







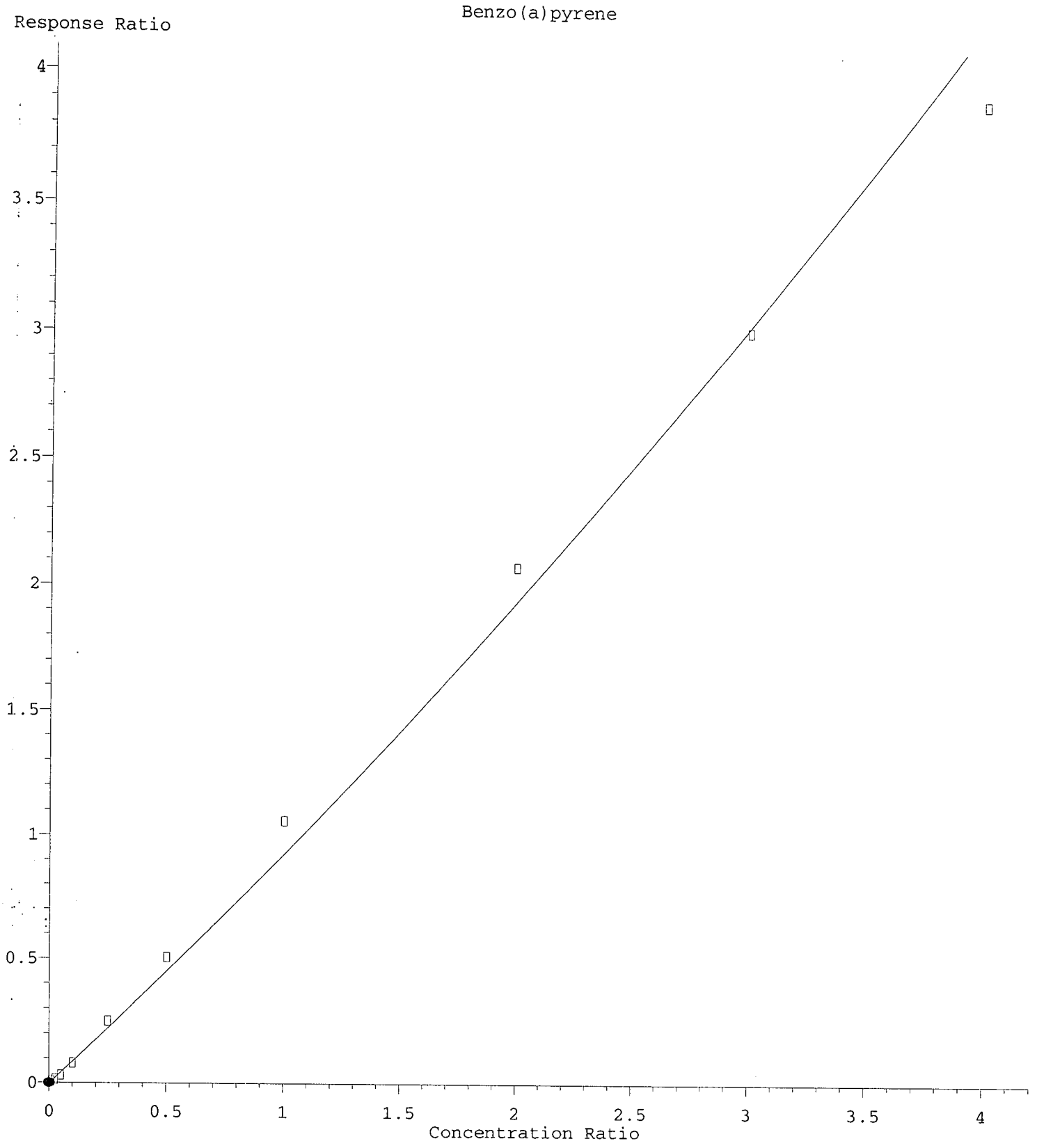
TIC: I12031912.D\data.ms

(90) Benzo(b+k)fluoranthene (T)

17.661min (+ 0.033) 15.92 ng/ml m ✓

response 107

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	17.60	0.00
253.10	21.80	27.55
0.00	0.00	0.00

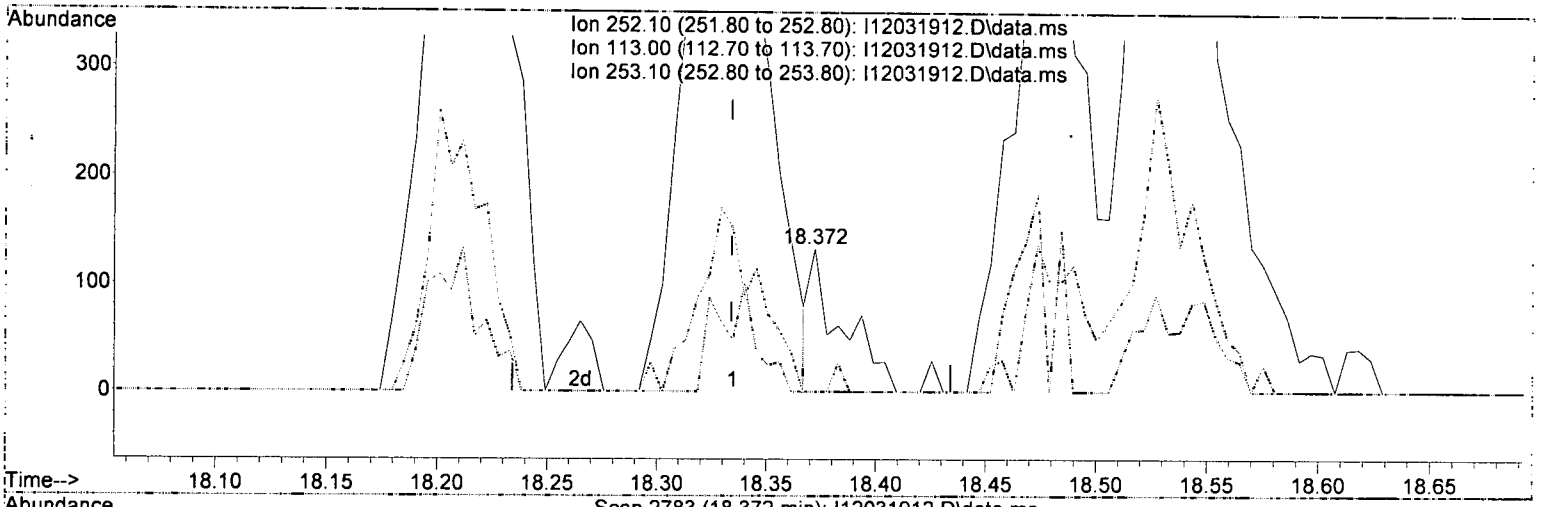


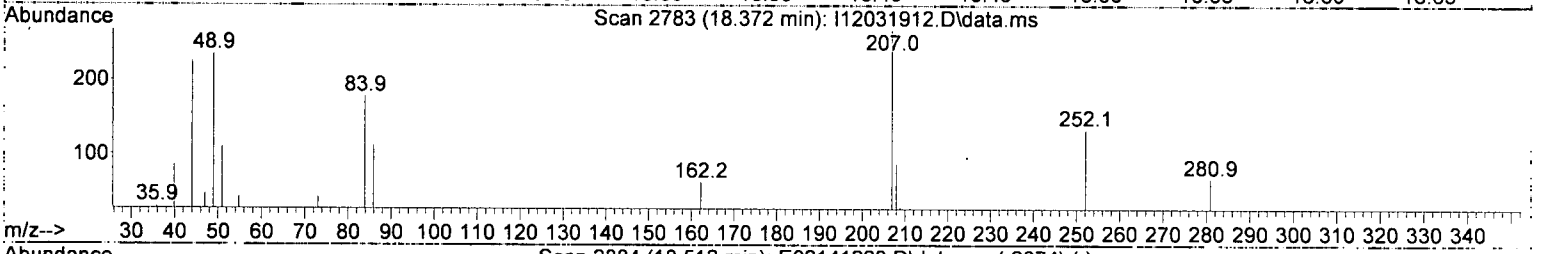
R = 4.26e-002 A*A + 8.83e-001 A - 3.87e-003
Coef of Det (r^2) = 0.978 Curve Fit: Quadratic w/1/(a^2)
Method Name: T:\methods\SV9_120319.M
Calibration Table Last Updated: Thu Dec 05 10:37:26 2019

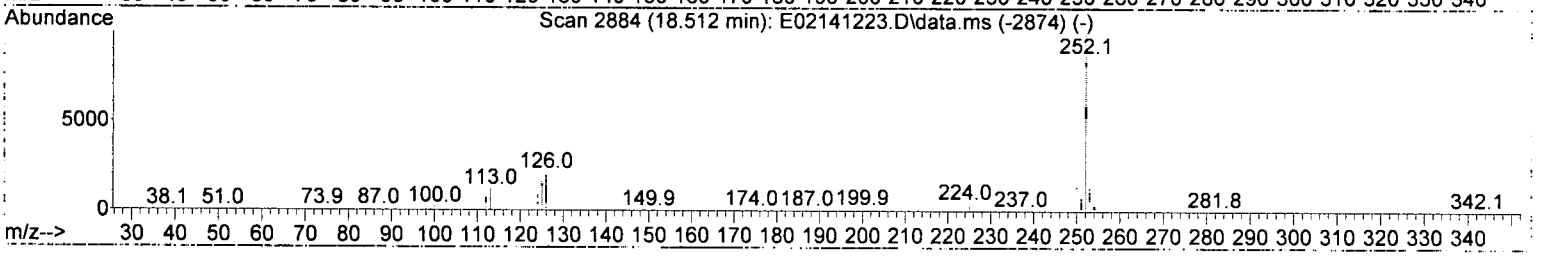
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\REQUANT\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 12:53:59 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I12031912.D\data.ms

(92) Benzo(a)pyrene (T)

18.372min (+ 0.038) 9.94 ng/ml m

response 135 ✓

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	10.80	0.00
253.10	22.90	0.00
0.00	0.00	0.00

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9L03048

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
9L03048-TUN1	MS Tune	Soil	A19K329	A19I086	12/3/2019 3:02:00PM
9L03048-ICB1	Initial Cal Blank	Soil		A19I086	12/3/2019 3:29:00PM
9L03048-CAL1	Cal Standard	Soil	A19K211	"	12/3/2019 4:03:00PM
9L03048-CAL2	Cal Standard	Soil	A19K212	"	12/3/2019 4:38:00PM
9L03048-CAL3	Cal Standard	Soil	A19K213	"	12/3/2019 5:12:00PM
9L03048-CAL4	Cal Standard	Soil	A19K214	"	12/3/2019 5:46:00PM
9L03048-CAL5	Cal Standard	Soil	A19K215	"	12/3/2019 6:20:00PM
9L03048-CAL6	Cal Standard	Soil	A19K216	"	12/3/2019 6:54:00PM
9L03048-CAL7	Cal Standard	Soil	A19K217	"	12/3/2019 7:28:00PM
9L03048-CAL8	Cal Standard	Soil	A19K218	"	12/3/2019 8:02:00PM
9L03048-CAL9	Cal Standard	Soil	A19K219	"	12/3/2019 8:36:00PM
9L03048-CALA	Cal Standard	Soil	A19K220	"	12/3/2019 9:10:00PM
9L03048-ICV1	Initial Cal Check	Soil	A19I254	"	12/3/2019 10:18:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9L0505** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9L03048** Matrix: **Soil**

9L03048-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual

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.

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9L03048

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: **A9L0505** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9L03048** Matrix: **Soil**

9L03048-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.

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9L03048

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
9L03048-TUN1	MS Tune	Water	A19K329	A19I086	12/3/2019 3:02:00PM
9L03048-ICB1	Initial Cal Blank	Water		A19I086	12/3/2019 3:29:00PM
9L03048-CAL1	Cal Standard	Water	A19K211	"	12/3/2019 4:03:00PM
9L03048-CAL2	Cal Standard	Water	A19K212	"	12/3/2019 4:38:00PM
9L03048-CAL3	Cal Standard	Water	A19K213	"	12/3/2019 5:12:00PM
9L03048-CAL4	Cal Standard	Water	A19K214	"	12/3/2019 5:46:00PM
9L03048-CAL5	Cal Standard	Water	A19K215	"	12/3/2019 6:20:00PM
9L03048-CAL6	Cal Standard	Water	A19K216	"	12/3/2019 6:54:00PM
9L03048-CAL7	Cal Standard	Water	A19K217	"	12/3/2019 7:28:00PM
9L03048-CAL8	Cal Standard	Water	A19K218	"	12/3/2019 8:02:00PM
9L03048-CAL9	Cal Standard	Water	A19K219	"	12/3/2019 8:36:00PM
9L03048-CALA	Cal Standard	Water	A19K220	"	12/3/2019 9:10:00PM
9L03048-ICV1	Initial Cal Check	Water	A19I254	"	12/3/2019 10:18:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9L0505** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9L03048** Matrix: **Water**

9L03048-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9L03048-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual

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.

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9L03048

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: **A9L0505** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9L03048** Matrix: **Water**

9L03048-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 : T:\data\2019-12\9L03048\
Data File : I12031923.D
Acq On : 3 Dec 2019 10:18 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 05 10:40:53 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9

12/5/19

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	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	98	0.00
2	T	N-Nitrosodimethylamine	1000.000	978.295	2.2	94	0.00
3	T	Pyridine	1000.000	891.856	10.8	82	0.00
4	S	2-Fluorophenol (Surr)	1000.000	1011.107	-1.1	100	0.00
5	S	Phenol-d6 (Surr)	1000.000	1064.287	-6.4	97	0.00
6	T	Phenol	1000.000	1089.724	-9.0	97	0.00
7	T	Aniline	1000.000	1109.000	-10.9	96	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1010.657	-1.1	97	0.00
9	T	2-Chlorophenol	1000.000	1077.436	-7.7	97	0.00
10	T	1,3-Dichlorobenzene	1000.000	1028.919	-2.9	98	0.00
11	T	1,4-Dichlorobenzene	1000.000	1012.675	-1.3	96	0.00
12	T	Benzyl alcohol	1000.000	910.317	9.0	94	0.00
13	T	1,2-Dichlorobenzene	1000.000	1010.029	-1.0	96	0.00
14	T	2-Methylphenol	1000.000	1105.418	-10.5	99	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	930.418	7.0	92	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1074.079	-7.4	97	0.00
17	T	3+4-Methylphenol	1000.000	1135.283	-13.5	100	0.00
18	T	Hexachloroethane	1000.000	1062.551	-6.3	102	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1088.317	-8.8	98	0.00
20	T	Nitrobenzene	1000.000	1081.639	-8.2	97	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	98	0.00
22	T	Isophorone	1000.000	1052.379	-5.2	97	0.00
23	T	2-Nitrophenol	1000.000	1120.123	-12.0	101	0.00
24	T	2,4-Dimethylphenol	1000.000	1034.072	-3.4	94	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1074.545	-7.5	99	0.00
26	T	Benzoic acid	2000.000	1833.571	8.3	100	0.00
27	T	2,4-Dichlorophenol	1000.000	1107.924	-10.8	102	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1041.039	-4.1	99	0.00
29	T	Naphthalene	1000.000	1036.065	-3.6	99	0.00
30	T	4-Chloroaniline	1000.000	1158.182	-15.8	101	0.00
31	T	Hexachlorobutadiene	1000.000	1059.733	-6.0	100	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1027.519	-2.8	98	0.00
33	T	2-Methylnaphthalene	1000.000	1063.275	-6.3	100	0.00
34	T	1-Methylnaphthalene	1000.000	1060.101	-6.0	100	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	99	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1088.255	-8.8	100	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1055.262	-5.5	101	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1075.383	-7.5	102	0.00
39	T	1,1'-Biphenyl	1000.000	1047.374	-4.7	98	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1082.434	-8.2	102	0.00
41	T	2-Chloronaphthalene	1000.000	1041.948	-4.2	98	0.00
42	T	2-Nitroaniline	1000.000	1046.918	-4.7	101	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1053.047	-5.3	98	0.00
44	T	1,4-Dinitrobenzene	1000.000	1090.820	-9.1	108	0.00
45	T	Dimethyl phthalate	1000.000	1088.452	-8.8	100	0.00
46	T	1,3-Dinitrobenzene	1000.000	1074.385	-7.4	104	0.00
47	T	2,6-Dinitrotoluene	1000.000	1114.028	-11.4	101	0.00
48	T	1,2-Dinitrobenzene	1000.000	1032.793	-3.3	97	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-12\9L03048\
Data File : I12031923.D
Acq On : 3 Dec 2019 10:18 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 05 10:40:53 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9

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)
49	T	Acenaphthylene	1000.000	1103.973	-10.4	99	0.00
50	T	3-Nitroaniline	1000.000	1135.488	-13.5	98	0.00
51	T	Acenaphthene	1000.000	1030.661	-3.1	99	0.00
52	T	2,4-Dinitrophenol	1000.000	955.980	4.4	107	0.00
53	T	4-Nitrophenol	1000.000	1059.913	-6.0	106	0.00
54	T	2,4-Dinitrotoluene	1000.000	1022.736	-2.3	102	0.00
55	T	Dibenzofuran	1000.000	1047.165	-4.7	98	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1080.961	-8.1	101	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1035.279	-3.5	100	0.00
58	T	Diethyl phthalate	1000.000	1101.273	-10.1	100	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1053.869	-5.4	98	0.00
60	T	Fluorene	1000.000	1068.614	-6.9	98	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1037.339	-3.7	100	0.00
62	T	4-Nitroaniline	1000.000	1042.064	-4.2	100	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1106.989	-10.7	121	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	99	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1090.947	-9.1	97	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1073.246	-7.3	97	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1067.330	-6.7	103	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1062.820	-6.3	100	0.00
69	T	Hexachlorobenzene	1000.000	1038.115	-3.8	101	0.00
70	T	Pentachlorophenol (PCP)	1000.000	1056.571	-5.7	104	0.00
71	T	Phenanthrene	1000.000	1025.265	-2.5	98	0.00
72	T	Anthracene	1000.000	1108.129	-10.8	99	0.00
73	T	Carbazole	1000.000	1035.048	-3.5	100	0.00
74	T	Di-n-butyl phthalate	1000.000	1162.303	-16.2	101	0.00
75	T	Fluoranthene	1000.000	1138.427	-13.8	99	0.00
76	T	Benzidine	2000.000	2100.063	-5.0	99	0.00
77	T	Pyrene	1000.000	1146.409	-14.6	101	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	100	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1088.643	-8.9	102	0.00
80	T	Butyl benzyl phthalate	1000.000	1016.172	-1.6	103	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1037.941	-3.8	104	0.00
82	T	3,3-Dichlorobenzidine	2000.000	2020.169	-1.0	105	0.00
83	T	Benz(a)anthracene	1000.000	1106.063	-10.6	105	0.00
84	T	Chrysene	1000.000	1013.819	-1.4	99	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1047.981	-4.8	104	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	101	0.00
87	T	Di-n-octyl phthalate	1000.000	1032.509	-3.3	107	0.01
88	T	Benzo(b)fluoranthene	1000.000	1066.786	-6.7	98	0.00
89	T	Benzo(k)fluoranthene	1000.000	1090.328	-9.0	101	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2138.052	-6.9	100	0.00
91	T	Benzo(e)pyrene	1000.000	1089.727	-9.0	100	0.01
92	T	Benzo(a)pyrene	1000.000	1046.683	-4.7	94	0.01
93	T	Perylene	1000.000	1191.015	-19.1	117	0.00
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	102	0.02

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-12\9L03048\
Data File : I12031923.D
Acq On : 3 Dec 2019 10:18 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 05 10:40:53 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9

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)
95 T	Indeno(1,2,3-cd)pyrene	1000.000	1002.655	-0.3	101	0.01
96 T	Dibenz(a,h)anthracene	1000.000	1042.598	-4.3	101	0.01
97 T	Benzo(g,h,i)perylene	1000.000	1114.563	-11.5	101	0.02

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031910.D
Acq On : 3 Dec 2019 3:02 pm
Operator : JK /AMS /DTH
Sample : 9L03048-TUN1
Misc : 1x, A19K329 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Dec 04 09:09:11 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Wed Dec 04 09:09:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.889	136	87384	2.00	ug/mL	0.00
2) Acenaphthene-d10	9.670	162	42215	2.00	ug/mL	0.00
4) Phenanthrene-d10	11.184	188	72470	2.00	ug/mL	0.00
10) Chrysene-d12	14.901	240	62442	2.00	ug/mL	0.00
11) Perylene-d12	16.971	264	56594	2.00	ug/mL	0.00
Target Compounds						Qvalue
3) Pentachlorophenol	10.991	266	179831	37.97	ug/mL	89
5) DFTPP	11.472	442	253687	41.64	ug/mL#	58
6) Benzidine	12.649	184	805064	36.90	ug/mL	90
7) 4,4-DDE	12.906	TIC	4158	No Calib	#	
8) 4,4-DDD	13.425	TIC	2312	0.77	ug/mL#	1
9) 4,4-DDT	13.986	TIC	2319093	37.97	ug/mL#	1

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

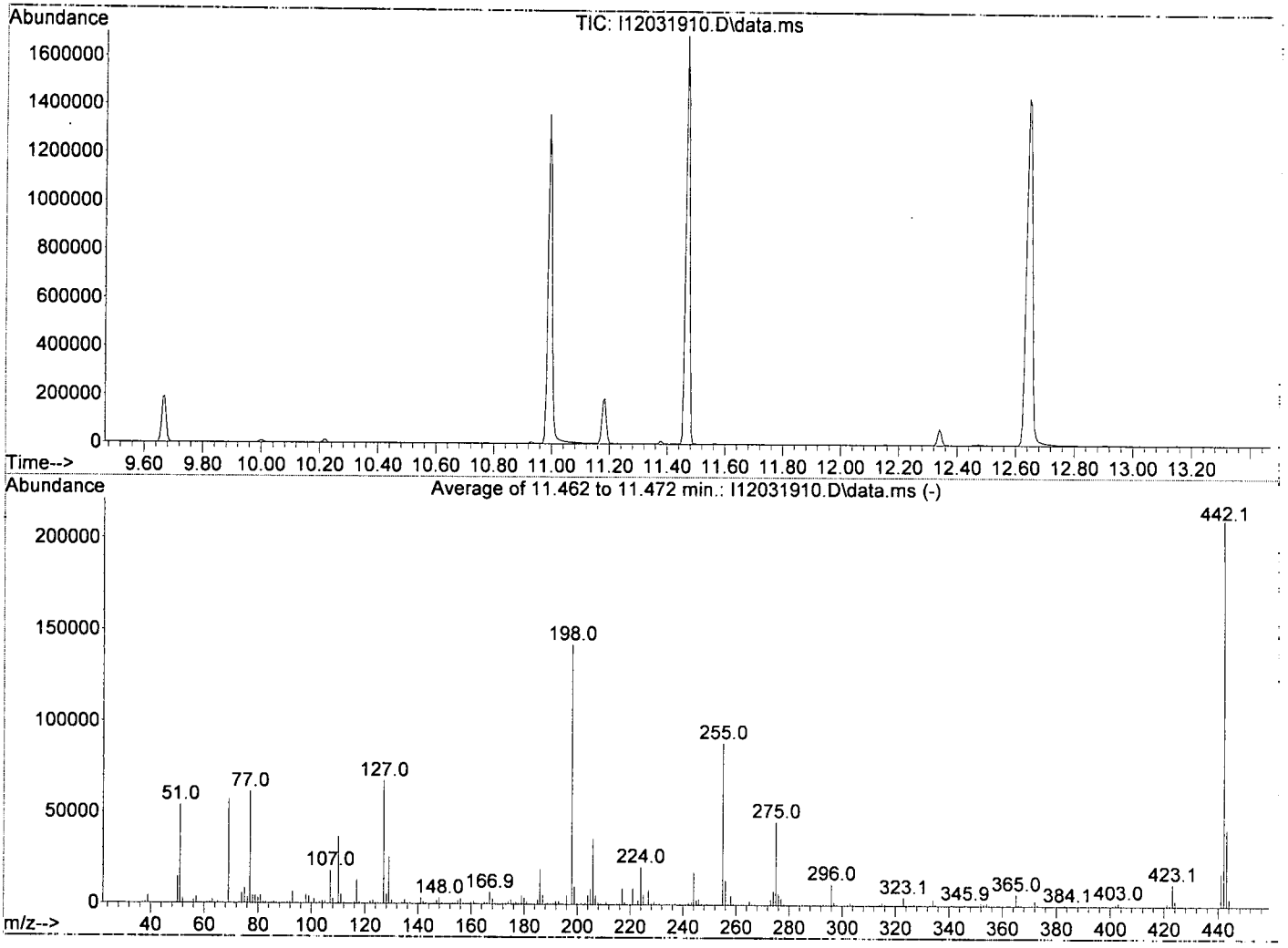
DFTPP

Data Path : T:\data\2019-12\9L03048\
Data File : I12031910.D
Acq On : 3 Dec 2019 3:02 pm
Operator : JK /AMS /DTH
Sample : 9L03048-TUN1
Misc : 1x, A19K329 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : T:\methods\DFTPP.M
Title : DFTPP Tune Methodug/mL
Last Update : Wed Dec 04 09:09:00 2019

12/4/19



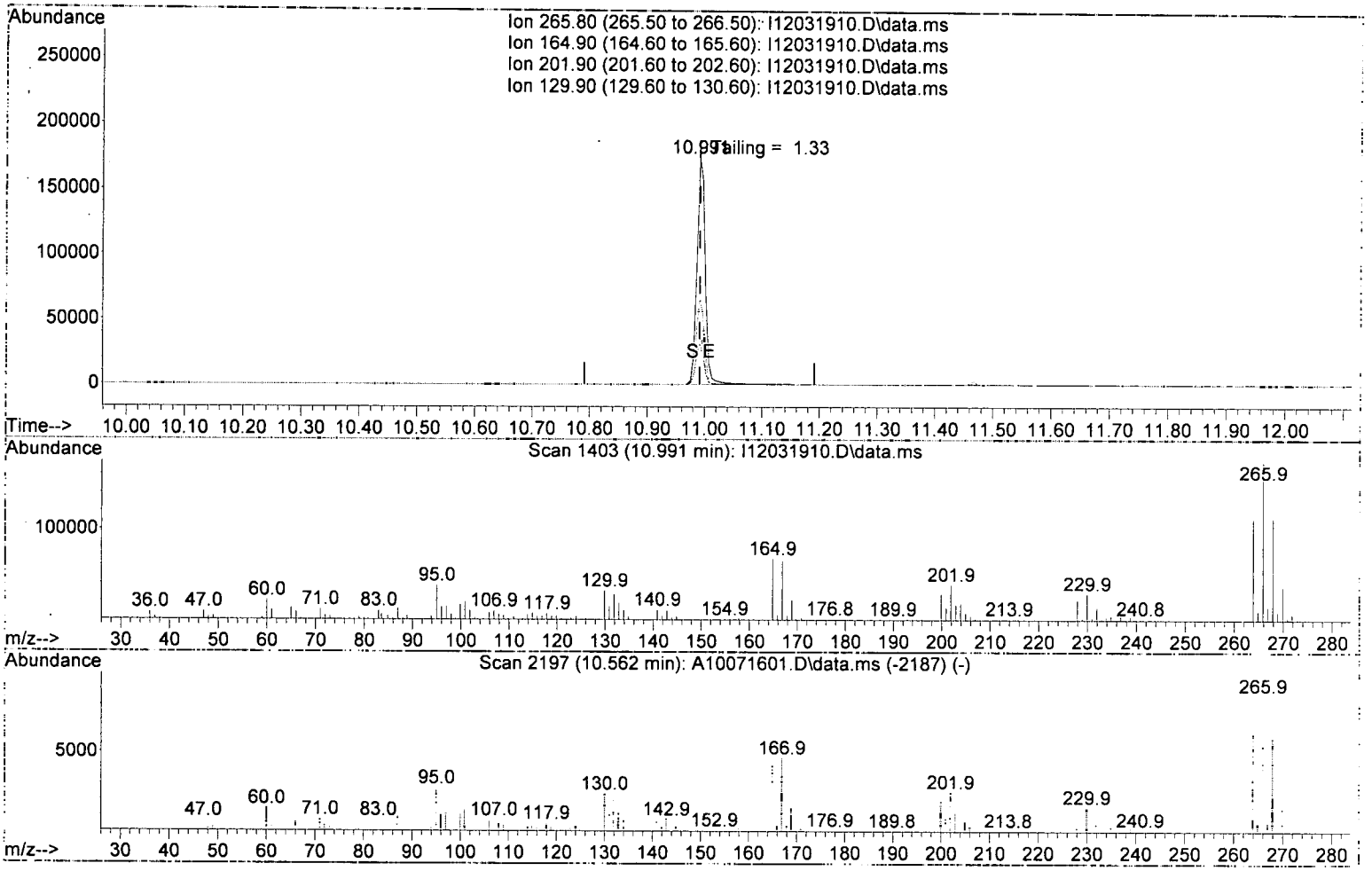
AutoFind: Scans 1491, 1492, 1493; Background Corrected with Scan 1485

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	56984	PASS
70	69	0.00	2	0.5	266	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	142403	PASS
199	198	5	9	6.9	9873	PASS
365	198	1	100	4.5	6365	PASS
441	443	0.01	150	43.0	18011	PASS
442	198	0.10	200	147.9	210659	PASS
443	442	15	24	19.9	41896	PASS

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031910.D
Acq On : 3 Dec 2019 3:02 pm
Operator : JK /AMS /DTH
Sample : 9L03048-TUN1
Misc : 1x, A19K329 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Dec 04 09:09:11 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Wed Dec 04 09:09:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I12031910.D\data.ms

(3) Pentachlorophenol

10.991min (0.000) 37.97 ug/mL

response 179831

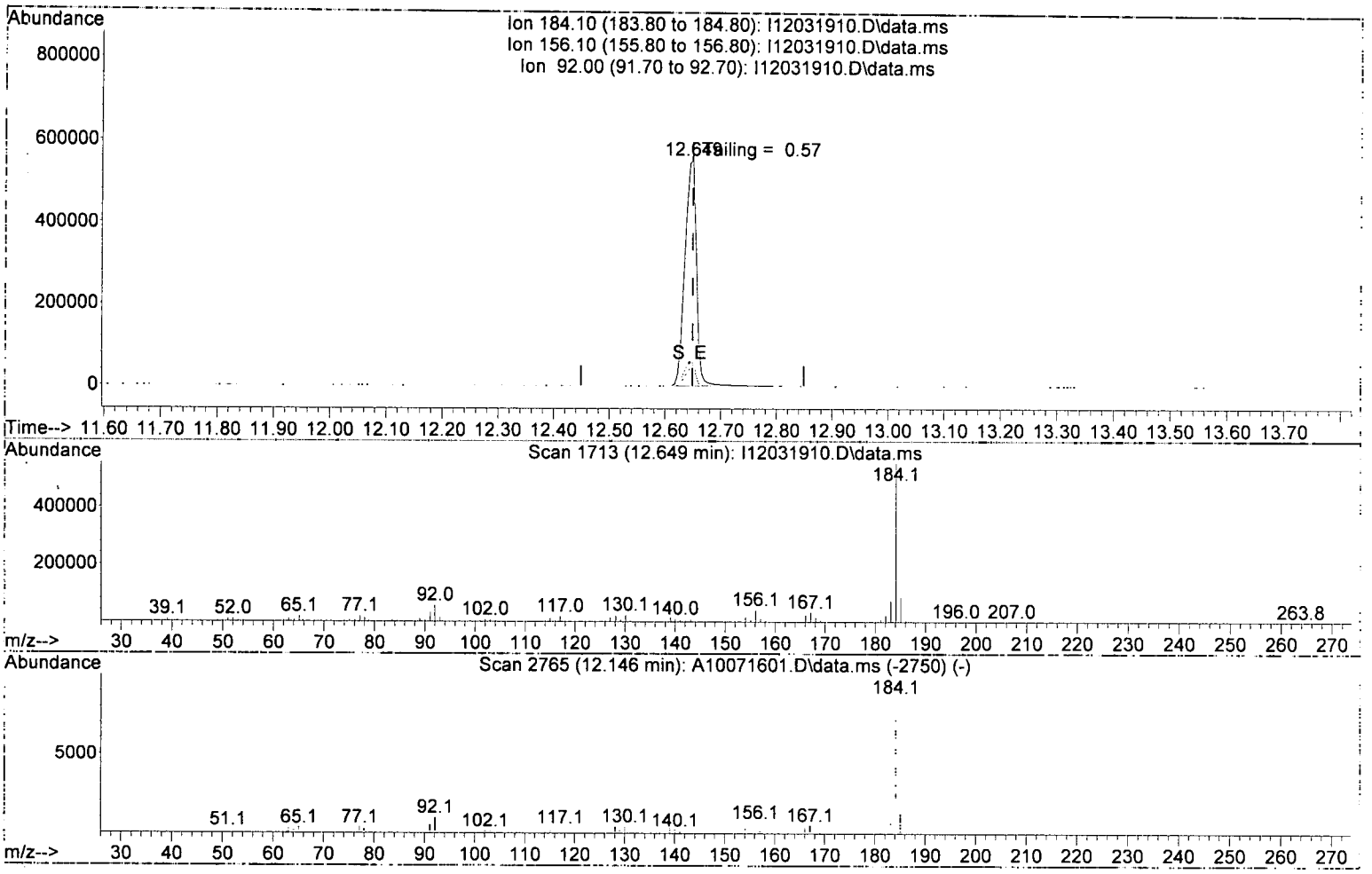
Ion	Exp%	Act%
265.80	100.00	100.00
164.90	47.40	38.44
201.90	26.10	21.98
129.90	22.80	18.10

JK 12/4/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031910.D
Acq On : 3 Dec 2019 3:02 pm
Operator : JK /AMS /DTH
Sample : 9L03048-TUN1
Misc : 1x, A19K329 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Dec 04 09:09:11 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Wed Dec 04 09:09:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I12031910.D\data.ms

(6) Benzidine

12.649min (0.000) 36.90 ug/mL

response 805064

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	9.40	7.53
92.00	15.50	10.11
0.00	0.00	0.00

JK 12/4/19

DDT Breakdown Check (Validated 5/1/2013)

From:
9L03048-TUN1
SV-GCMS9

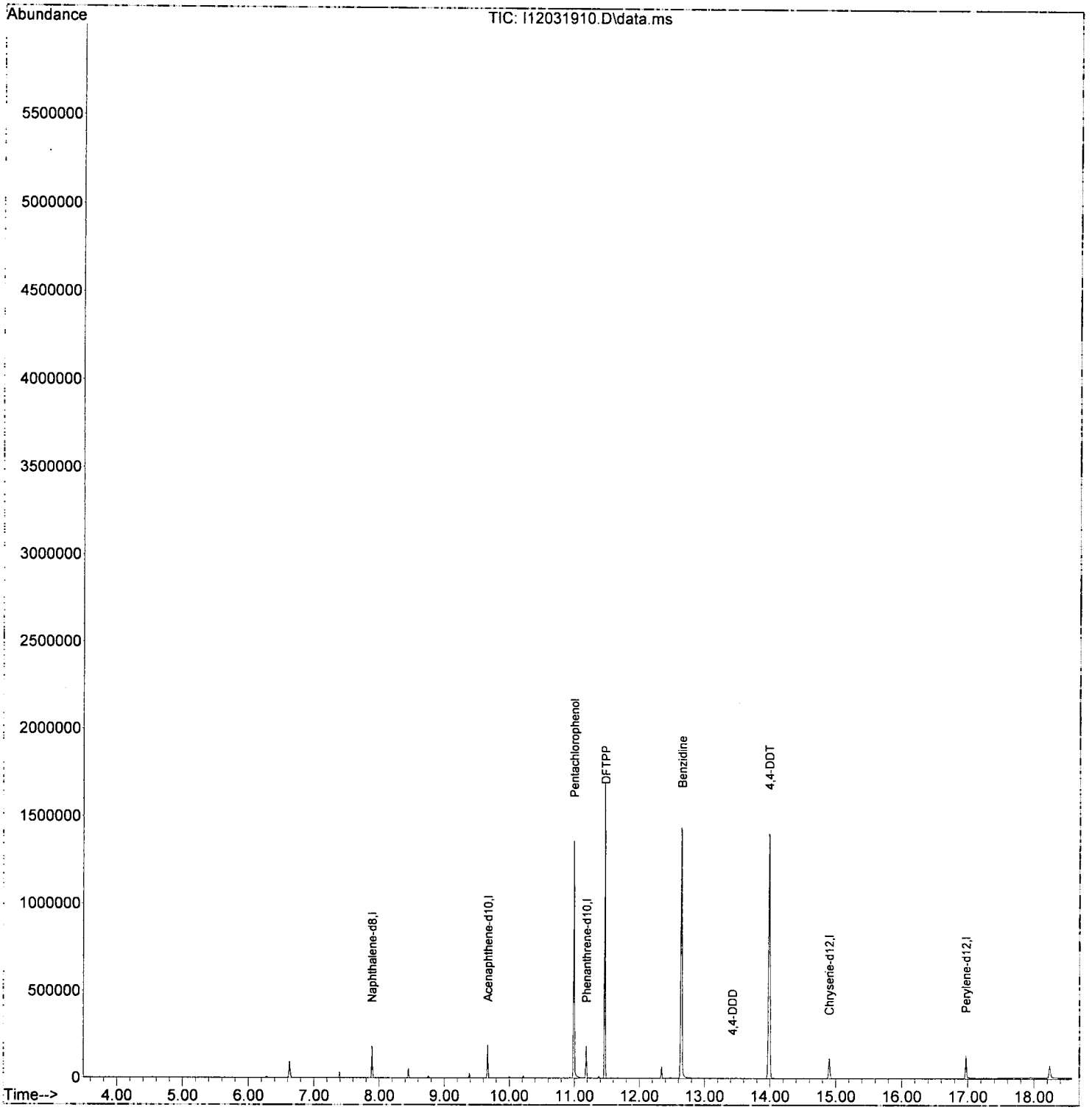
First Column Area Counts		Percent Breakdown	
DDE	4158		✓
DDD	2312		
DDT	2319093	0.28	PASS

Breakdown must be less than 20% to accept sample data.

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031910.D
Acq On : 3 Dec 2019 3:02 pm
Operator : JK /AMS /DTH
Sample : 9L03048-TUN1
Misc : 1x, A19K329 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Dec 04 09:09:11 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Wed Dec 04 09:09:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031911.D
Acq On : 3 Dec 2019 3:29 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:32 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.626	152	72716	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.889	136	314821	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	155418	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.183	188	257400	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.986	240	239075	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.479	264	224812	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.881	292	174975	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6 (Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00	ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	0.000		0	N.D.		
7) Aniline	0.000		0	N.D.		
8) Bis(2-chloroethyl) ether	0.000		0	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	0.000		0	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	0.000		0	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.		
16) N-Nitrosodi-n-propylamine	0.000		0	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
22) Isophorone	0.000		0	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031911.D
Acq On : 3 Dec 2019 3:29 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:32 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

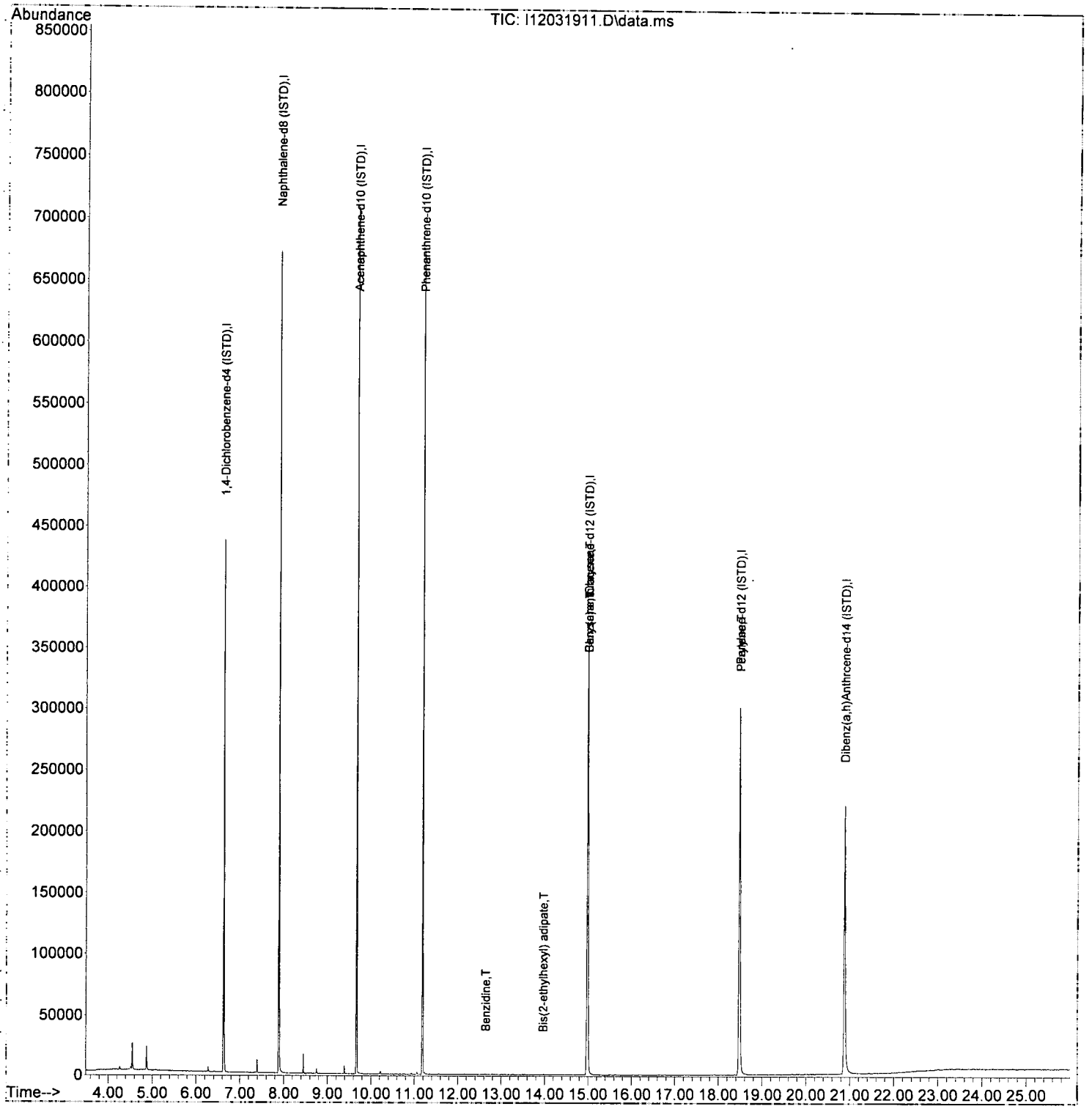
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.		
45) Dimethyl phthalate	0.000		0	N.D.		
46) 1,3-Dinitrobenzene	0.000		0	N.D.		
47) 2,6-Dinitrotoluene	0.000		0	N.D.		
48) 1,2-Dinitrobenzene	0.000		0	N.D.		
49) Acenaphthylene	0.000		0	N.D.		
50) 3-Nitroaniline	0.000		0	N.D.		
51) Acenaphthene	0.000		0	N.D.		
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	0.000		0	N.D.		
54) 2,4-Dinitrotoluene	0.000		0	N.D.		
55) Dibenzofuran	0.000		0	N.D.		
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.		
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
58) Diethyl phthalate	0.000		0	N.D.		
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.		
60) Fluorene	0.000		0	N.D.		
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
62) 4-Nitroaniline	0.000		0	N.D.		
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
65) N-Nitrosodiphenylamine	0.000		0	N.D.		
66) Azobenzene (1,2-DPH)	0.000		0	N.D.		
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.		
69) Hexachlorobenzene	0.000		0	N.D.		
70) Pentachlorophenol (PCP)	0.000		0	N.D.		
71) Phenanthrene	11.178	178	86	N.D.		
72) Anthracene	11.178	178	86	N.D.		
73) Carbazole	0.000		0	N.D.		
74) Di-n-butyl phthalate	0.000		0	N.D.		
75) Fluoranthene	0.000		0	N.D.		
76) Benzidine	12.638	184	473	14.17	ng/ml	63
77) Pyrene	0.000		0	N.D.		
80) Butyl benzyl phthalate	0.000		0	N.D.		
81) Bis(2-ethylhexyl) adipate	13.965	129	107	114.52	ng/ml	53
82) 3,3-Dichlorobenzidine	0.000		0	N.D.		
83) Benz(a)anthracene	14.992	228	612	4.70	ng/ml	71
84) Chrysene	14.992	228	612	5.03	ng/ml	67
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.		
87) Di-n-octyl phthalate	0.000		0	N.D.		
88) Benzo(b)fluoranthene	0.000		0	N.D.		
89) Benzo(k)fluoranthene	0.000		0	N.D.		
90) Benzo(b+k)fluoranthene	0.000		0	N.D.		
91) Benzo(e)pyrene	0.000		0	N.D.		
92) Benzo(a)pyrene	0.000		0	N.D.		
93) Perylene	18.484	252	773	7.64	ng/ml#	70
95) Indeno(1,2,3-cd)pyrene	20.875	276	66	N.D.		
96) Dibenz(a,h)anthracene	0.000		0	N.D.		
97) Benzo(g,h,i)perylene	0.000		0	N.D.		

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031911.D
Acq On : 3 Dec 2019 3:29 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:32 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031911.D
Acq On : 3 Dec 2019 3:29 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Final Reqnant

Quant Time: Dec 05 10:40:20 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9

12/5/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.626	152	72716	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.889	136	314821	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	155418	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.183	188	257400	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.986	240	239075	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.479	264	224812	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.881	292	174975	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6 (Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00	ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	0.000		0	N.D.		
7) Aniline	0.000		0	N.D.		
8) Bis(2-chloroethyl) ether	0.000		0	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	0.000		0	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	0.000		0	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.		
16) N-Nitrosodi-n-propylamine	0.000		0	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
22) Isophorone	0.000		0	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031911.D
Acq On : 3 Dec 2019 3:29 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 05 10:40:20 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9

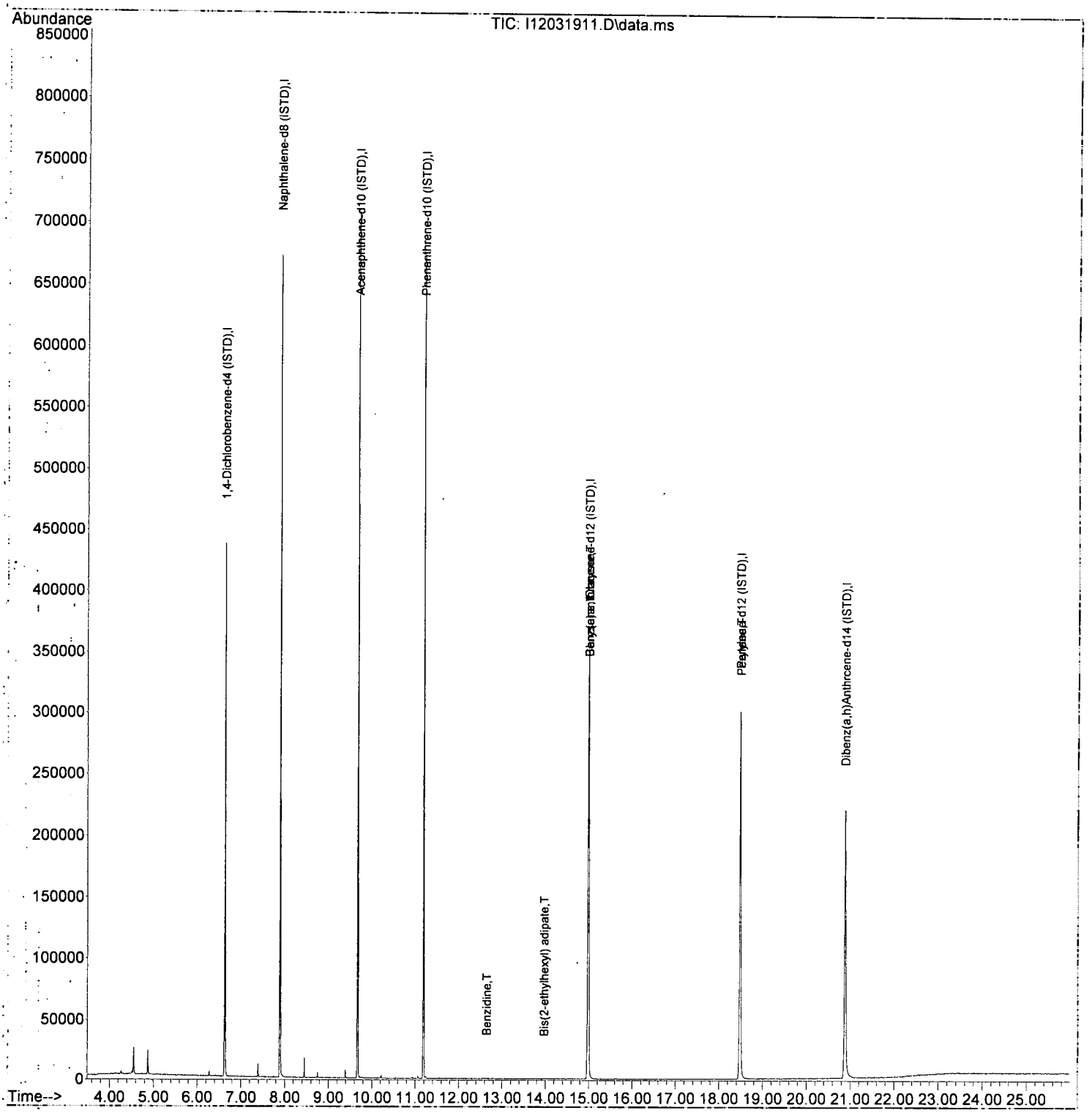
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	0.000		0	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	0.000		0	N.D.	
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	0.000		0	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.178	178	86	N.D.	
72) Anthracene	11.178	178	86	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	0.000		0	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	12.638	184	473	173.33 ng/ml	63
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.965	129	107	75.15 ng/ml	53
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.992	228	612	4.92 ng/ml	71
84) Chrysene	14.992	228	612	5.04 ng/ml	67
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.484	252	773	7.57 ng/ml#	70
95) Indeno(1,2,3-cd)pyrene	20.875	276	66	N.D.	
96) Dibenz(a,h)anthracene	0.000		0	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031911.D
Acq On : 3 Dec 2019 3:29 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 05 10:40:20 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.626	152	81092	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.889	136	342890	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	167774	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.183	188	281845	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.986	240	268423	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.479	264	258693	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.881	292	204569	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.359	112	760	22.76	ng/ml	0.00
5) Phenol-d6 (Surr)	6.257	99	1072	17.24	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.172	82	968	20.21	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.974	172	2573	19.56	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.472	330	146	36.54	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.981	244	1858	14.87	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.968	74	620	16.32	ng/ml	91
3) Pyridine	~~4.075~~	~~79~~	~~221~~	~~3.61~~	~~ng/ml~~	67
6) Phenol	6.273	94	1298	20.54	ng/ml	84
7) Aniline	6.305	93	1255	34.52	ng/ml	98
8) Bis(2-chloroethyl) ether	6.359	93	1322	22.71	ng/ml	97
9) 2-Chlorophenol	6.429	128	967	18.09	ng/ml	90
10) 1,3-Dichlorobenzene	6.573	146	1153	18.25	ng/ml	97
11) 1,4-Dichlorobenzene	6.642	146	1163	19.10	ng/ml	90
12) Benzyl alcohol	6.765	108	203	72.33	ng/ml#	78
13) 1,2-Dichlorobenzene	6.792	146	1271	21.24	ng/ml	85
14) 2-Methylphenol	6.867	107	726	18.74	ng/ml	79
15) 2,2'-Oxybis(1-Chloropr...	6.888	45	1701	28.26	ng/ml	97
16) N-Nitrosodi-n-propylamine	7.017	70	798	24.08	ng/ml	93
17) 3+4-Methylphenol	7.017	107	826	24.51	ng/ml	79
18) Hexachloroethane	7.135	201	302	15.66	ng/ml	95
20) Nitrobenzene	7.188	77	1029	21.84	ng/ml	82
22) Isophorone	7.423	82	2062	18.79	ng/ml	95
23) 2-Nitrophenol	7.509	139	250	7.11	ng/ml	85
24) 2,4-Dimethylphenol	7.541	122	660	24.53	ng/ml	82
25) Bis(2-chloroethoxy) me...	7.632	93	1334	19.90	ng/ml	97
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	7.744	162	445	40.49	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.830	180	1085	17.95	ng/ml	94
29) Naphthalene	7.910	128	3690	21.15	ng/ml	96
30) 4-Chloroaniline	7.958	127	953	34.65	ng/ml	93
31) Hexachlorobutadiene	8.044	225	513	15.81	ng/ml	81
32) 4-Chloro-3-methylphenol	8.440	107	340	77.25	ng/ml#	40
33) 2-Methylnaphthalene	8.605	142	2430	19.41	ng/ml	96
34) 1-Methylnaphthalene	8.707	142	2328	19.35	ng/ml	93
36) Hexachlorocyclopentadiene	8.777	237	396	36.83	ng/ml	99
37) 2,4,6-Trichlorophenol	8.894	196	293	42.36	ng/ml	78
38) 2,4,5-Trichlorophenol	8.926	198	217	33.82	ng/ml	85
39) 1,1'-Biphenyl	9.076	154	2772	19.42	ng/ml	93
41) 2-Chloronaphthalene	9.103	162	2071	19.54	ng/ml	91
42) 2-Nitroaniline	9.199	138	248	7.75	ng/ml	88
43) 2,6-Dimethylnaphthalene	9.237	156	2019	19.30	ng/ml	96

See MS

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

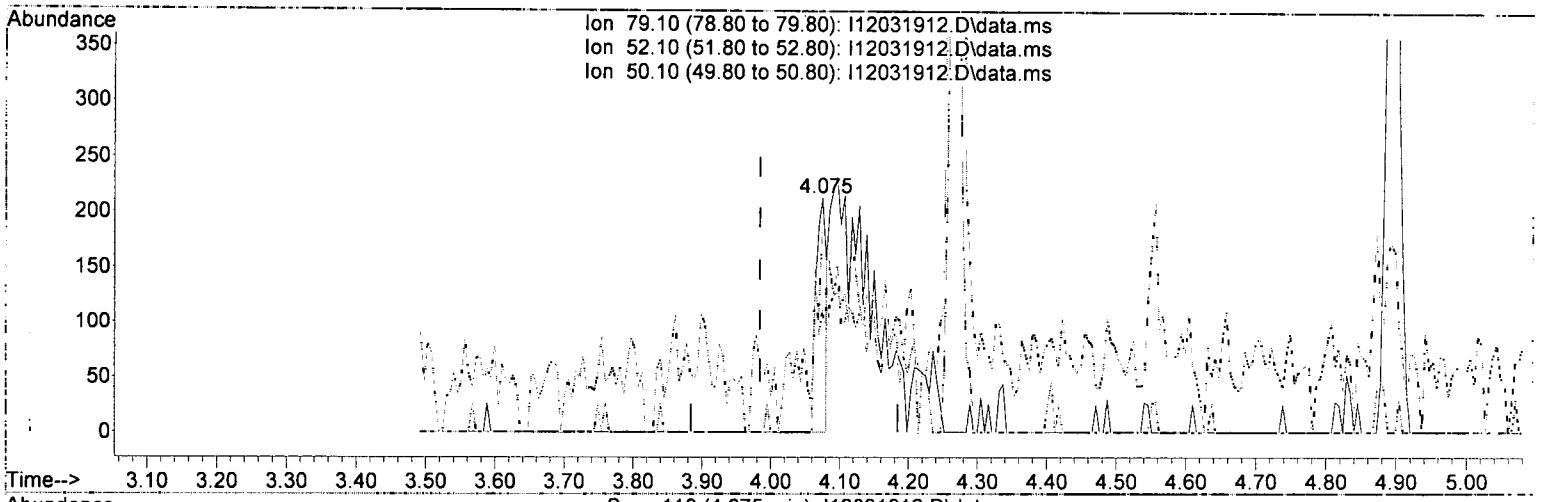
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.322	168	78	65.88 ng/ml	88
45) Dimethyl phthalate	9.376	163	2021	16.99 ng/ml	96
46) 1,3-Dinitrobenzene	9.408	168	91	4.72 ng/ml#	51
47) 2,6-Dinitrotoluene	9.434	165	222	8.23 ng/ml	69
48) 1,2-Dinitrobenzene	9.408	168	61	4.67 ng/ml#	71
49) Acenaphthylene	9.525	152	2850	17.13 ng/ml	96
50) 3-Nitroaniline	9.616	138	174	3.67 ng/ml	94
51) Acenaphthene	9.702	153	2357	21.75 ng/ml	93
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.852	165	193	36.78 ng/ml	93
55) Dibenzofuran	9.873	168	2936	19.32 ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	9.959	232	90	33.25 ng/ml	86
57) 2,3,4,6-Tetrachlorophenol	10.001	232	148	36.48 ng/ml	90
58) Diethyl phthalate	10.092	149	1942	18.13 ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.087	170	1727	17.66 ng/ml	96
60) Fluorene	10.221	166	2103	17.82 ng/ml	97
61) 4-Chlorophenyl phenyl ...	10.221	204	1156	19.50 ng/ml	97
62) 4-Nitroaniline	10.231	138	154	7.03 ng/ml	72
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.333	169	1283	14.78 ng/ml	92
66) Azobenzene (1,2-DPH)	10.376	77	1643	19.95 ng/ml	97
68) 4-Bromophenyl phenyl e...	10.718	248	579	17.04 ng/ml	96
69) Hexachlorobenzene	10.793	284	821	18.90 ng/ml	96
70) Pentachlorophenol (PCP)	10.991	266	110	80.99 ng/ml	80
71) Phenanthrene	11.205	178	3456	22.51 ng/ml	97
72) Anthracene	11.258	178	2551	17.68 ng/ml	97
73) Carbazole	11.419	167	1783	18.92 ng/ml	96
74) Di-n-butyl phthalate	11.761	149	1716	11.37 ng/ml	97
75) Fluoranthene	12.478	202	2450	14.48 ng/ml	93
76) Benzidine	12.633	184	926	48.49 ng/ml	95
77) Pyrene	12.772	202	2612	15.22 ng/ml	96
80) Butyl benzyl phthalate	13.794	149	391	66.26 ng/ml	81
81) Bis(2-ethylhexyl) adipate	13.970	129	358	118.32 ng/ml	61
82) 3,3-Dichlorobenzidine	14.928	252	740	Below Cal	84
83) Benz(a)anthracene	14.965	228	2620	17.91 ng/ml	91
84) Chrysene	15.040	228	2548	18.65 ng/ml	95
85) Bis(2-ethylhexyl) phth...	15.136	149	563	71.59 ng/ml	94
87) Di-n-octyl phthalate	16.810	149	707	77.67 ng/ml	66
88) Benzo(b)fluoranthene	17.554	252	1911	14.65 ng/ml	96
89) Benzo(k)fluoranthene	17.623	252	2017	25.58 ng/ml	86
90) Benzo(b+k)fluoranthene	17.554	252	3928	45.93 ng/ml	96
91) Benzo(e)pyrene	18.212	252	2091	15.65 ng/ml	97
92) Benzo(a)pyrene	18.335	252	1587	30.50 ng/ml	96
93) Perylene	18.532	252	2263	19.45 ng/ml	97
95) Indeno(1,2,3-cd)pyrene	20.875	276	2118	17.75 ng/ml	50
96) Dibenz(a,h)anthracene	20.939	278	1905	18.58 ng/ml	90
97) Benzo(g,h,i)perylene	21.410	276	1656	14.28 ng/ml	88

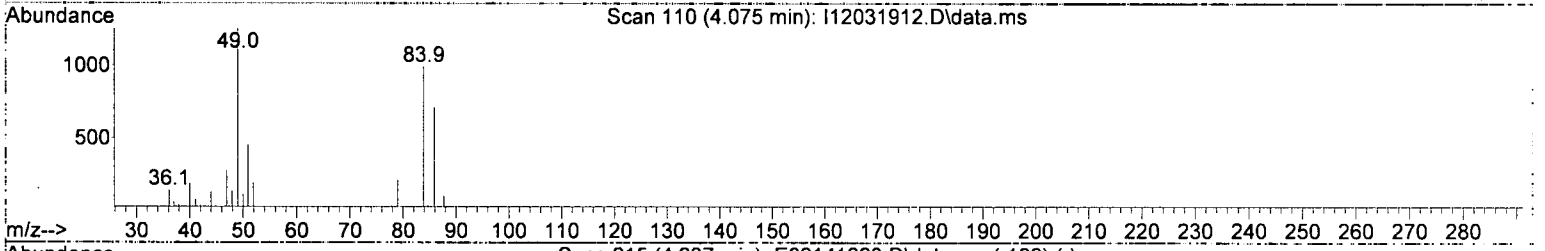
(#) = qualifier out of range (m) = manual integration (+) = signals summed

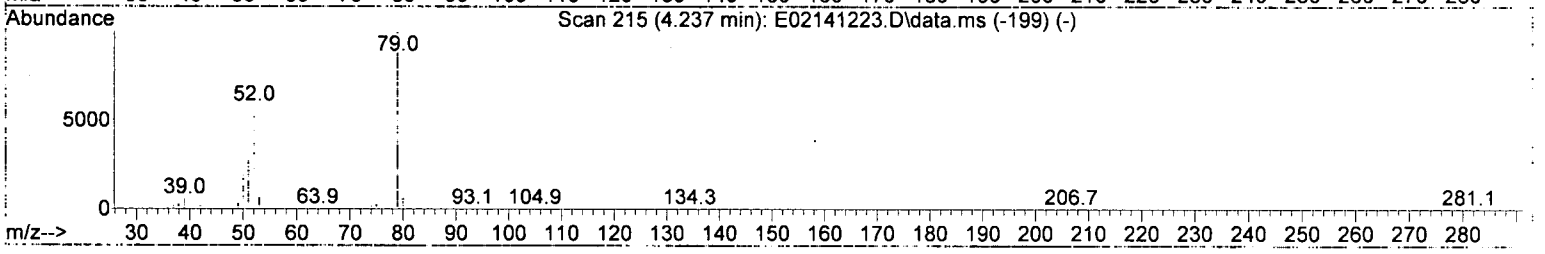
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I12031912.D\data.ms

(3) Pyridine (T)

4.075min (+ 0.091) 3.61 ng/ml

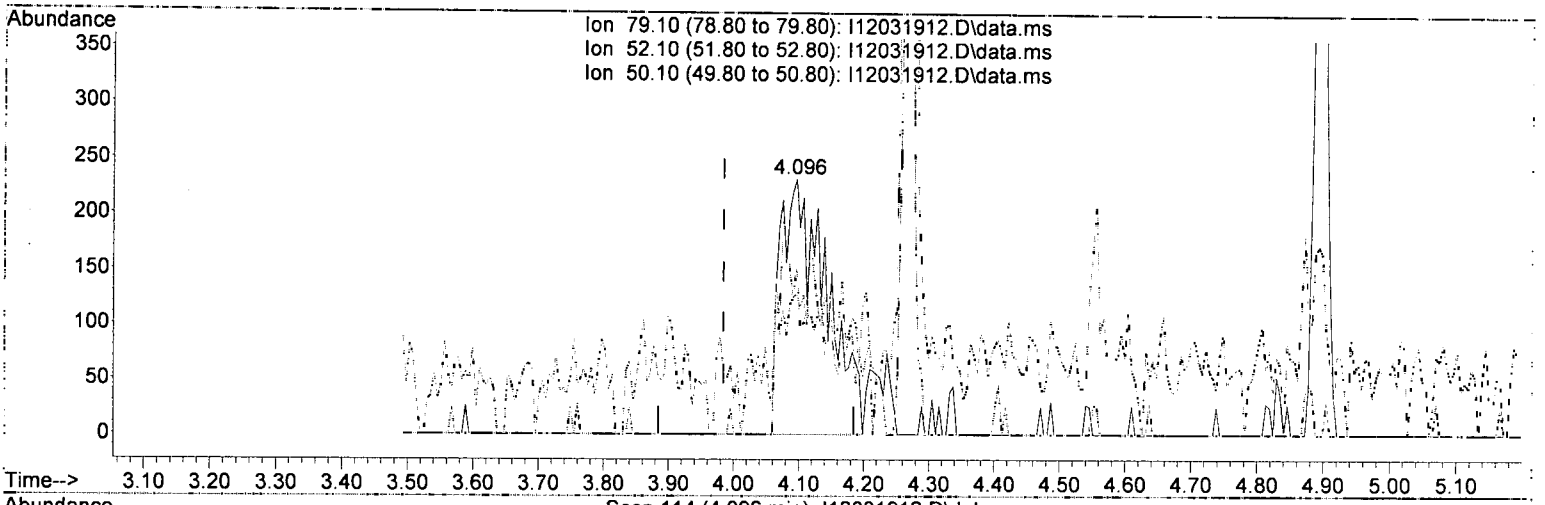
response 221

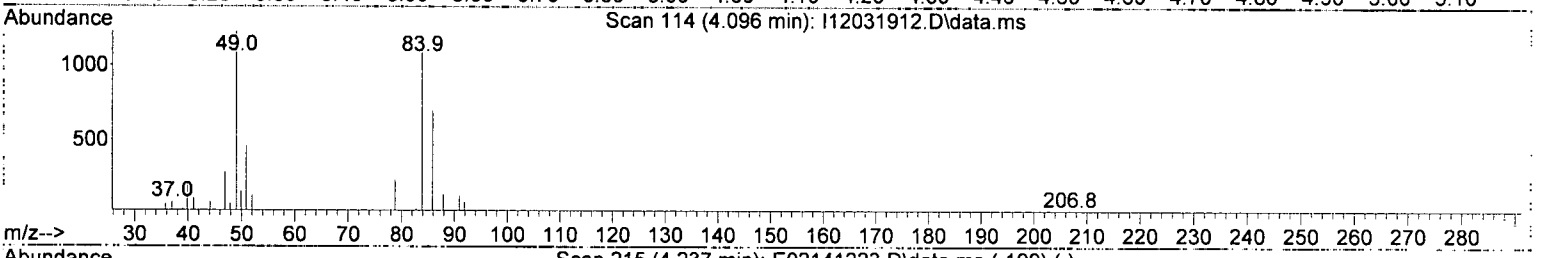
Ion	Exp%	Act%
79.10	100.00	100.00
52.10	69.90	90.61
50.10	25.60	52.58
0.00	0.00	0.00

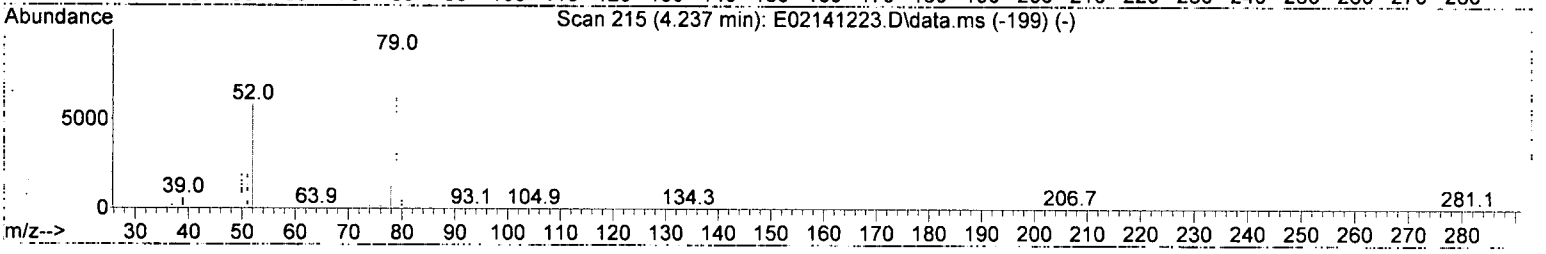
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I12031912.D\data.ms

(3) Pyridine (T)

4.096min (+ 0.112) 18.53 ng/ml m 12/9/19

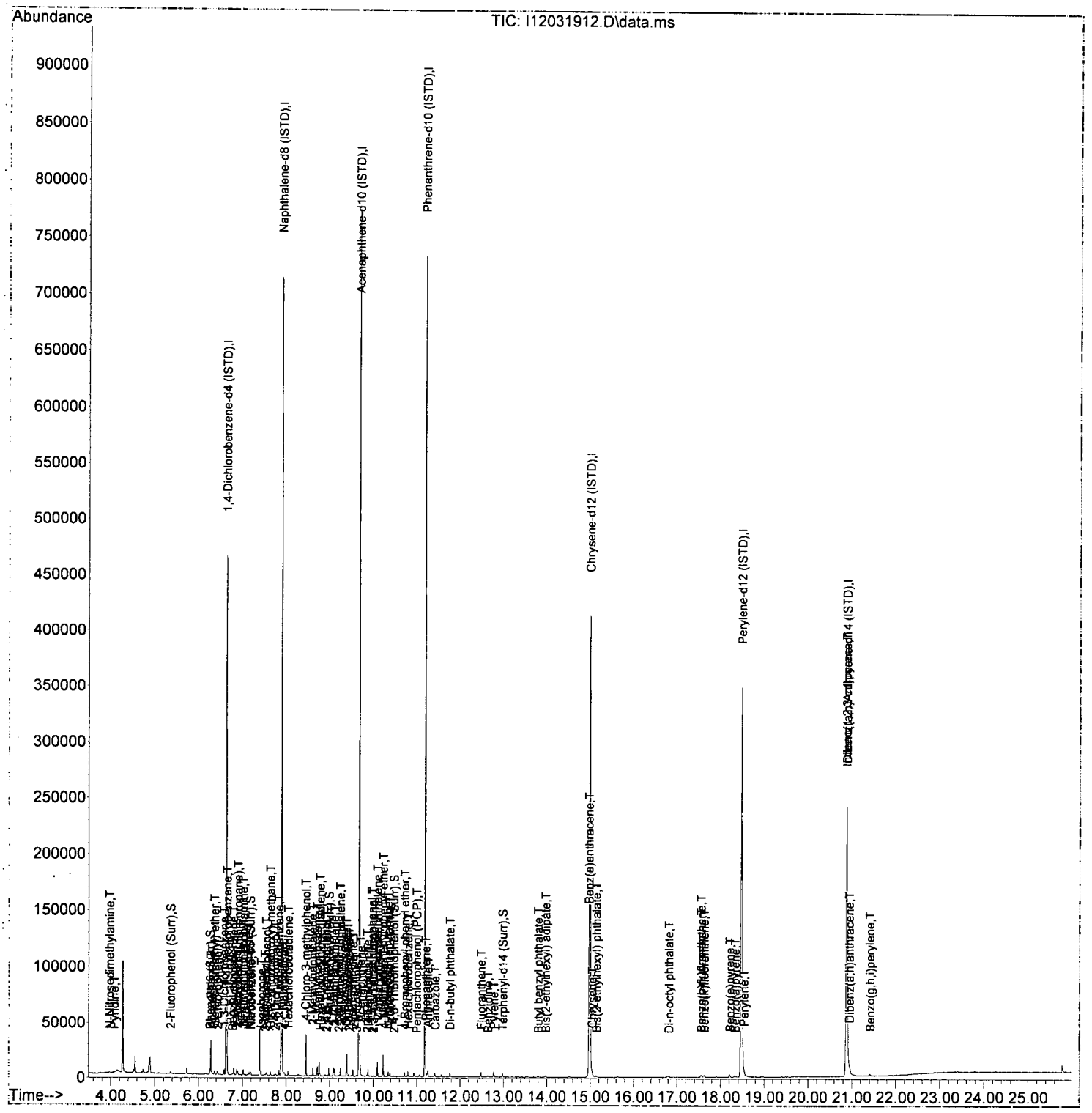
response 1133

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	69.90	55.60
50.10	25.60	65.95#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031912.D
Acq On : 3 Dec 2019 4:03 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL1
Misc : 1x, A19K211@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:38 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031913.D
Acq On : 3 Dec 2019 4:38 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL2
Misc : 1x, A19K212@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:46 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JJR 12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.627	152	76901	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.889	136	331693	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	161834	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.184	188	274003	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.987	240	261138	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.479	264	244791	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.875	292	196186	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.359	112	1965	48.28	ng/ml	0.00
5) Phenol-d6 (Surr)	6.263	99	2800	47.49	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.167	82	2472	54.41	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.975	172	6633	52.26	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.472	330	423	51.45	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.981	244	5357	44.06	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.963	74	1783	49.50	ng/ml	98
3) Pyridine	4.038	79	2675	46.14	ng/ml	86
6) Phenol	6.268	94	3365	56.14	ng/ml	95
7) Aniline	6.300	93	3454	86.69	ng/ml	100
8) Bis(2-chloroethyl) ether	6.359	93	3277	59.37	ng/ml	96
9) 2-Chlorophenol	6.423	128	2376	46.88	ng/ml	95
10) 1,3-Dichlorobenzene	6.573	146	3054	50.98	ng/ml	99
11) 1,4-Dichlorobenzene	6.643	146	3134	54.29	ng/ml	98
12) Benzyl alcohol	6.760	108	947	98.10	ng/ml	95
13) 1,2-Dichlorobenzene	6.798	146	3087	54.40	ng/ml	96
14) 2-Methylphenol	6.862	107	2000	54.43	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.889	45	4371	76.58	ng/ml	95
16) N-Nitrosodi-n-propylamine	7.017	70	1987	63.22	ng/ml	96
17) 3+4-Methylphenol	7.012	107	2417	58.85	ng/ml	95
18) Hexachloroethane	7.129	201	789	43.13	ng/ml	94
20) Nitrobenzene	7.188	77	2592	58.01	ng/ml	94
22) Isophorone	7.424	82	5441	51.25	ng/ml	99
23) 2-Nitrophenol	7.504	139	751	22.09	ng/ml	89
24) 2,4-Dimethylphenol	7.541	122	2005	52.18	ng/ml	94
25) Bis(2-chloroethoxy) me...	7.632	93	3419	52.73	ng/ml	99
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	7.744	162	1440	62.66	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.830	180	2902	49.62	ng/ml	96
29) Naphthalene	7.910	128	9311	55.18	ng/ml	97
30) 4-Chloroaniline	7.958	127	2616	88.87	ng/ml	98
31) Hexachlorobutadiene	8.044	225	1319	42.03	ng/ml	97
32) 4-Chloro-3-methylphenol	8.440	107	1256	97.00	ng/ml	92
33) 2-Methylnaphthalene	8.606	142	6232	51.46	ng/ml	94
34) 1-Methylnaphthalene	8.707	142	6060	52.07	ng/ml	96
36) Hexachlorocyclopentadiene	8.777	237	1037	57.41	ng/ml	99
37) 2,4,6-Trichlorophenol	8.894	196	859	59.75	ng/ml	97
38) 2,4,5-Trichlorophenol	8.927	196	739	50.78	ng/ml	90
39) 1,1'-Biphenyl	9.076	154	7529	54.68	ng/ml	94
41) 2-Chloronaphthalene	9.098	162	5582	54.59	ng/ml	99
42) 2-Nitroaniline	9.194	138	816	26.44	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.237	156	5091	50.45	ng/ml	97

See NJ

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031913.D
Acq On : 3 Dec 2019 4:38 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL2
Misc : 1x, A19K212@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:46 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

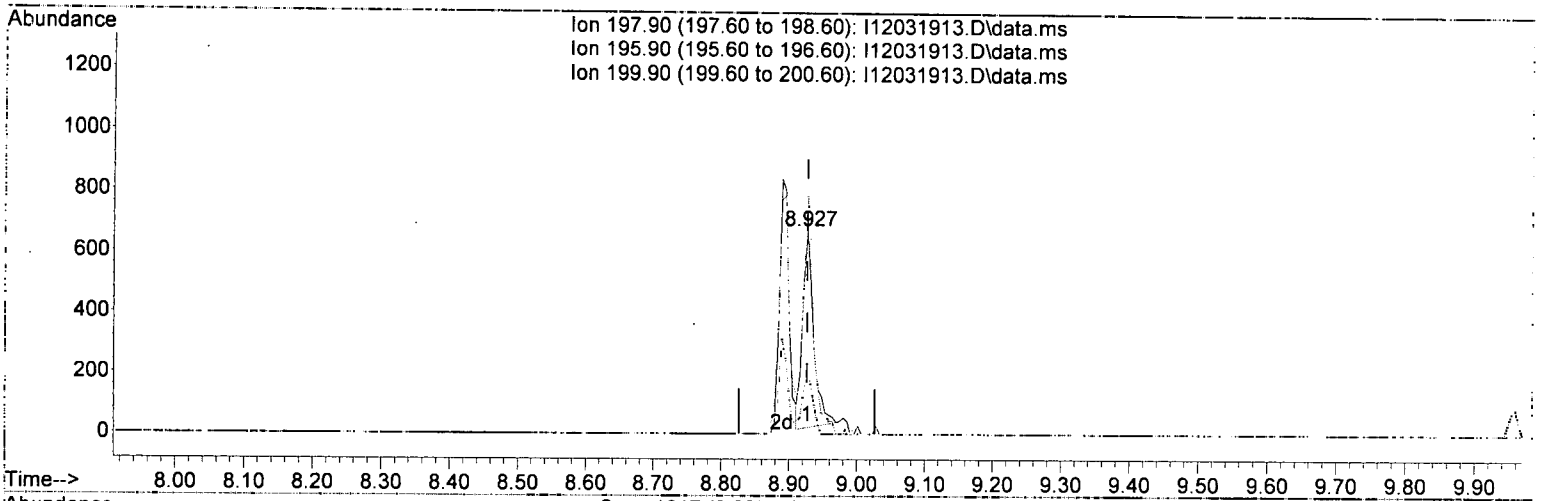
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.322	168	252	76.40	ng/ml#	81
45) Dimethyl phthalate	9.376	163	5537	48.24	ng/ml	97
46) 1,3-Dinitrobenzene	9.403	168	287	15.45	ng/ml	73
47) 2,6-Dinitrotoluene	9.435	165	670	25.76	ng/ml	91
48) 1,2-Dinitrobenzene	9.488	168	286	22.69	ng/ml#	50
49) Acenaphthylene	9.526	152	7740	48.23	ng/ml	98
50) 3-Nitroaniline	9.611	138	626	35.89	ng/ml	95
51) Acenaphthene	9.697	153	5425	51.89	ng/ml	97
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.772	139	136	123.21	ng/ml#	61
54) 2,4-Dinitrotoluene	9.846	165	600	47.84	ng/ml	95
55) Dibenzofuran	9.873	168	7253	49.48	ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	9.953	232	389	43.39	ng/ml	85
57) 2,3,4,6-Tetrachlorophenol	10.002	232	490	47.80	ng/ml	92
58) Diethyl phthalate	10.093	149	4900	47.43	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.087	170	4530	48.03	ng/ml	98
60) Fluorene	10.226	166	5658	49.71	ng/ml	93
61) 4-Chlorophenyl phenyl ...	10.216	204	2650	46.34	ng/ml	97
62) 4-Nitroaniline	10.226	138	552	26.14	ng/ml	93
63) 4,6-Dinitro-2-methylph...	10.264	198	52	145.06	ng/ml	76
65) N-Nitrosodiphenylamine	10.333	169	3867	45.82	ng/ml	97
66) Azobenzene (1,2-DPH)	10.376	77	4633	57.87	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.718	248	1474	44.61	ng/ml	90
69) Hexachlorobenzene	10.793	284	2122	50.23	ng/ml	94
70) Pentachlorophenol (PCP)	10.986	266	205	86.35	ng/ml	81
71) Phenanthrene	11.205	178	8173	54.75	ng/ml	97
72) Anthracene	11.259	178	6645	47.36	ng/ml	97
73) Carbazole	11.414	167	5043	43.24	ng/ml	98
74) Di-n-butyl phthalate	11.761	149	4715	32.13	ng/ml	99
75) Fluoranthene	12.478	202	6606	40.16	ng/ml	96
76) Benzidine	12.633	184	1166	71.30	ng/ml	99
77) Pyrene	12.772	202	7061	42.33	ng/ml	97
80) Butyl benzyl phthalate	13.799	149	1049	76.42	ng/ml	82
81) Bis(2-ethylhexyl) adipate	13.970	129	777	125.36	ng/ml	84
82) 3,3-Dichlorobenzidine	14.922	252	1996	Below Cal		91
83) Benz(a)anthracene	14.965	228	5742	40.35	ng/ml	97
84) Chrysene	15.040	228	6638	49.95	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.136	149	1339	80.03	ng/ml	90
87) Di-n-octyl phthalate	16.810	149	1487	83.02	ng/ml	92
88) Benzo(b)fluoranthene	17.559	252	3980	32.24	ng/ml	96
89) Benzo(k)fluoranthene	17.623	252	4087	40.78	ng/ml	97
90) Benzo(b+k)fluoranthene	17.623	252	8721	81.84	ng/ml	97
91) Benzo(e)pyrene	18.217	252	4620	36.55	ng/ml	92
92) Benzo(a)pyrene	18.335	252	3268	43.65	ng/ml	91
93) Perylene	18.533	252	5321	48.33	ng/ml	97
95) Indeno(1,2,3-cd)pyrene	20.875	276	4903	42.86	ng/ml	71
96) Dibenz(a,h)anthracene	20.945	278	4756	48.36	ng/ml	91
97) Benzo(g,h,i)perylene	21.400	276	4102	36.89	ng/ml	93

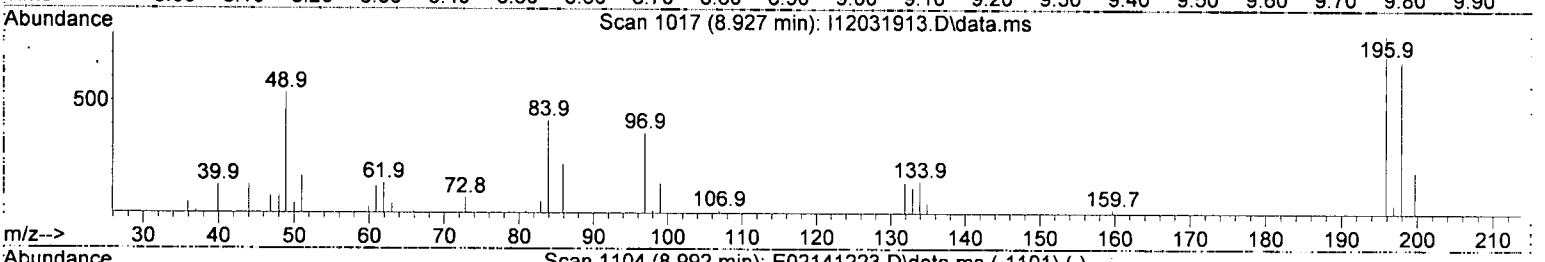
(#) = qualifier out of range (m) = manual integration (+) = signals summed

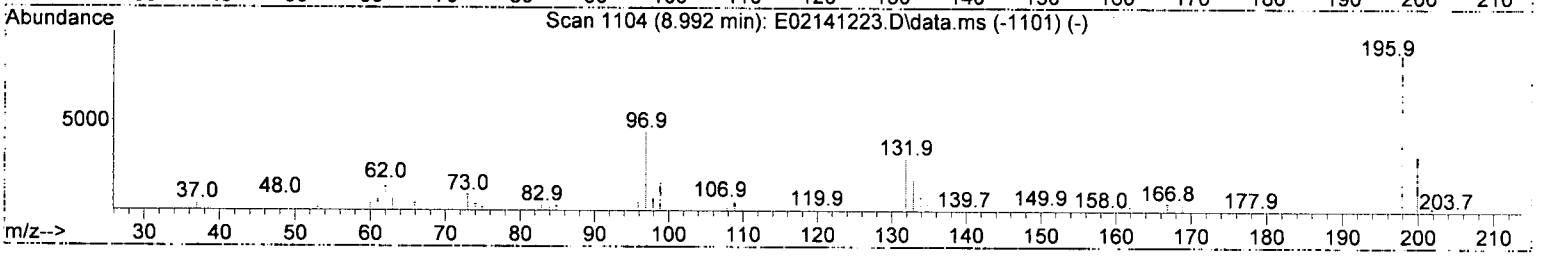
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031913.D
Acq On : 3 Dec 2019 4:38 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL2
Misc : 1x, A19K212@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:46 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I12031913.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.927min (+ 0.000) 50.78 ng/ml

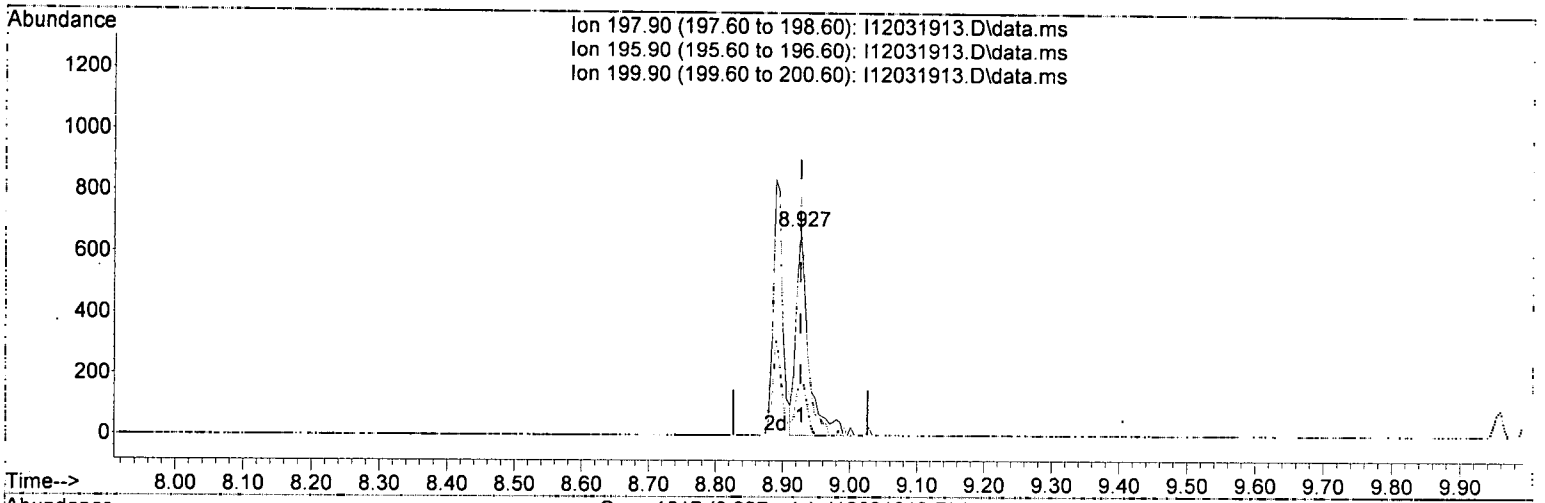
response 739

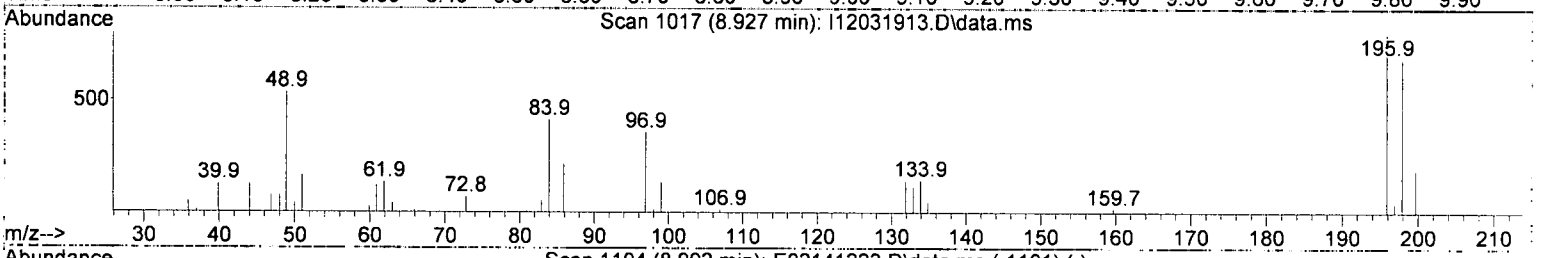
Ion	Exp%	Act%
197.90	100.00	100.00
195.90	103.70	116.34
199.90	30.90	30.01
0.00	0.00	0.00

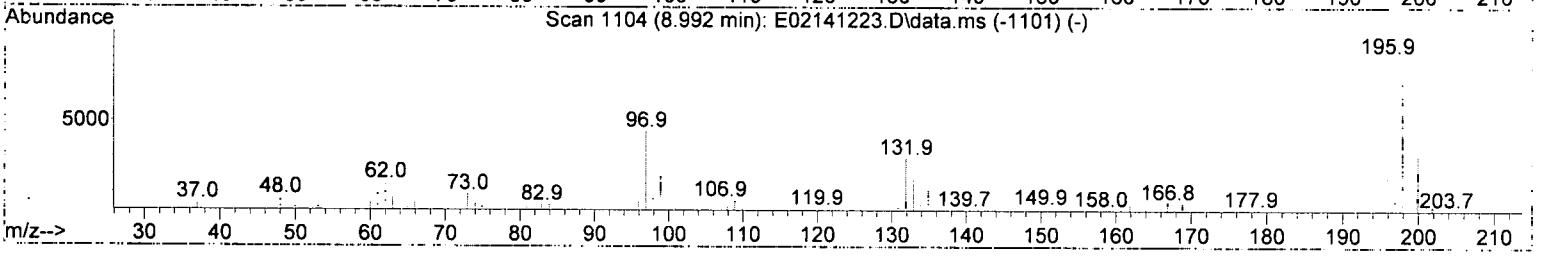
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031913.D
Acq On : 3 Dec 2019 4:38 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL2
Misc : 1x, A19K212@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:46 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I12031913.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.927min (+ 0.000) 55.27 ng/ml m

response 879

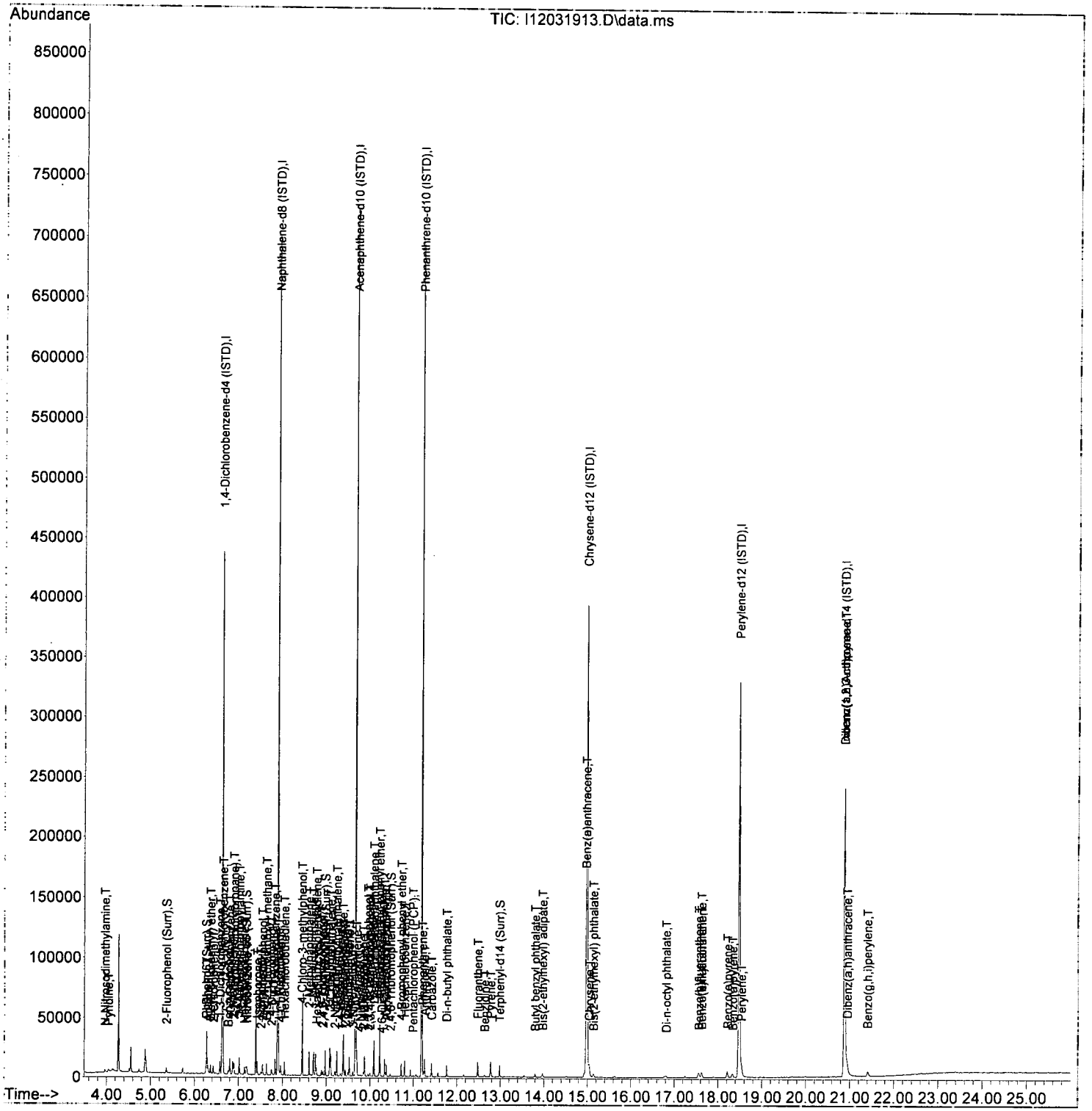
Ion	Exp%	Act%
197.90	100.00	100.00
195.90	103.70	116.34
199.90	30.90	30.01
0.00	0.00	0.00

12/4/19

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031913.D
Acq On : 3 Dec 2019 4:38 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL2
Misc : 1x, A19K212@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:46 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031914.D
Acq On : 3 Dec 2019 5:12 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL3
Misc : 1x, A19K213@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:53 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.627	152	77018	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.889	136	326606	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	160023	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.184	188	271162	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.986	240	260933	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.479	264	246501	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.881	292	197498	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.364	112	4493	99.87	ng/ml	0.00
5) Phenol-d6 (Surr)	6.257	99	6110	103.46	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.167	82	5323	116.99	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.975	172	13259	105.65	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.472	330	1050	85.33	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.981	244	11527	94.88	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.968	74	3863	107.08	ng/ml	96
3) Pyridine	4.027	79	5875	101.17	ng/ml	97
6) Phenol	6.268	94	7079	117.93	ng/ml	95
7) Aniline	6.306	93	7803	189.75	ng/ml	95
8) Bis(2-chloroethyl) ether	6.359	93	6496	117.51	ng/ml	99
9) 2-Chlorophenol	6.423	128	5309	104.59	ng/ml	98
10) 1,3-Dichlorobenzene	6.573	146	6120	102.00	ng/ml	95
11) 1,4-Dichlorobenzene	6.643	146	6240	107.93	ng/ml	100
12) Benzyl alcohol	6.760	108	1740	125.09	ng/ml	97
13) 1,2-Dichlorobenzene	6.798	146	6036	106.21	ng/ml	99
14) 2-Methylphenol	6.862	107	4228	114.88	ng/ml	96
15) 2,2'-Oxybis(1-Chloropr...	6.889	45	8672	151.70	ng/ml	95
16) N-Nitrosodi-n-propylamine	7.017	70	4176	132.66	ng/ml	94
17) 3+4-Methylphenol	7.012	107	5361	120.65	ng/ml	89
18) Hexachloroethane	7.129	201	1645	89.79	ng/ml	86
20) Nitrobenzene	7.188	77	5634	125.90	ng/ml	99
22) Isophorone	7.423	82	11206	107.19	ng/ml	97
23) 2-Nitrophenol	7.509	139	1804	53.88	ng/ml	93
24) 2,4-Dimethylphenol	7.541	122	4258	99.15	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.632	93	7097	111.15	ng/ml	98
26) Benzoic acid	7.541	105	139	777.84	ng/ml#	1
27) 2,4-Dichlorophenol	7.744	162	3184	102.04	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.835	180	5594	97.15	ng/ml	94
29) Naphthalene	7.910	128	18476	111.20	ng/ml	100
30) 4-Chloroaniline	7.958	127	5713	192.49	ng/ml	97
31) Hexachlorobutadiene	8.044	225	2839	91.87	ng/ml	94
32) 4-Chloro-3-methylphenol	8.440	107	3107	137.45	ng/ml	88
33) 2-Methylnaphthalene	8.606	142	12389	103.89	ng/ml	96
34) 1-Methylnaphthalene	8.707	142	12294	107.27	ng/ml	96
36) Hexachlorocyclopentadiene	8.777	237	2263	96.76	ng/ml	96
37) 2,4,6-Trichlorophenol	8.894	196	1979	94.23	ng/ml	89
38) 2,4,5-Trichlorophenol	8.926	198	1904	88.79	ng/ml	94
39) 1,1'-Biphenyl	9.076	154	15045	110.51	ng/ml	99
41) 2-Chloronaphthalene	9.098	162	11271	111.47	ng/ml	98
42) 2-Nitroaniline	9.194	138	1702	55.78	ng/ml	82
43) 2,6-Dimethylnaphthalene	9.237	156	10680	107.03	ng/ml	99

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031914.D
Acq On : 3 Dec 2019 5:12 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL3
Misc : 1x, A19K213@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:53 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

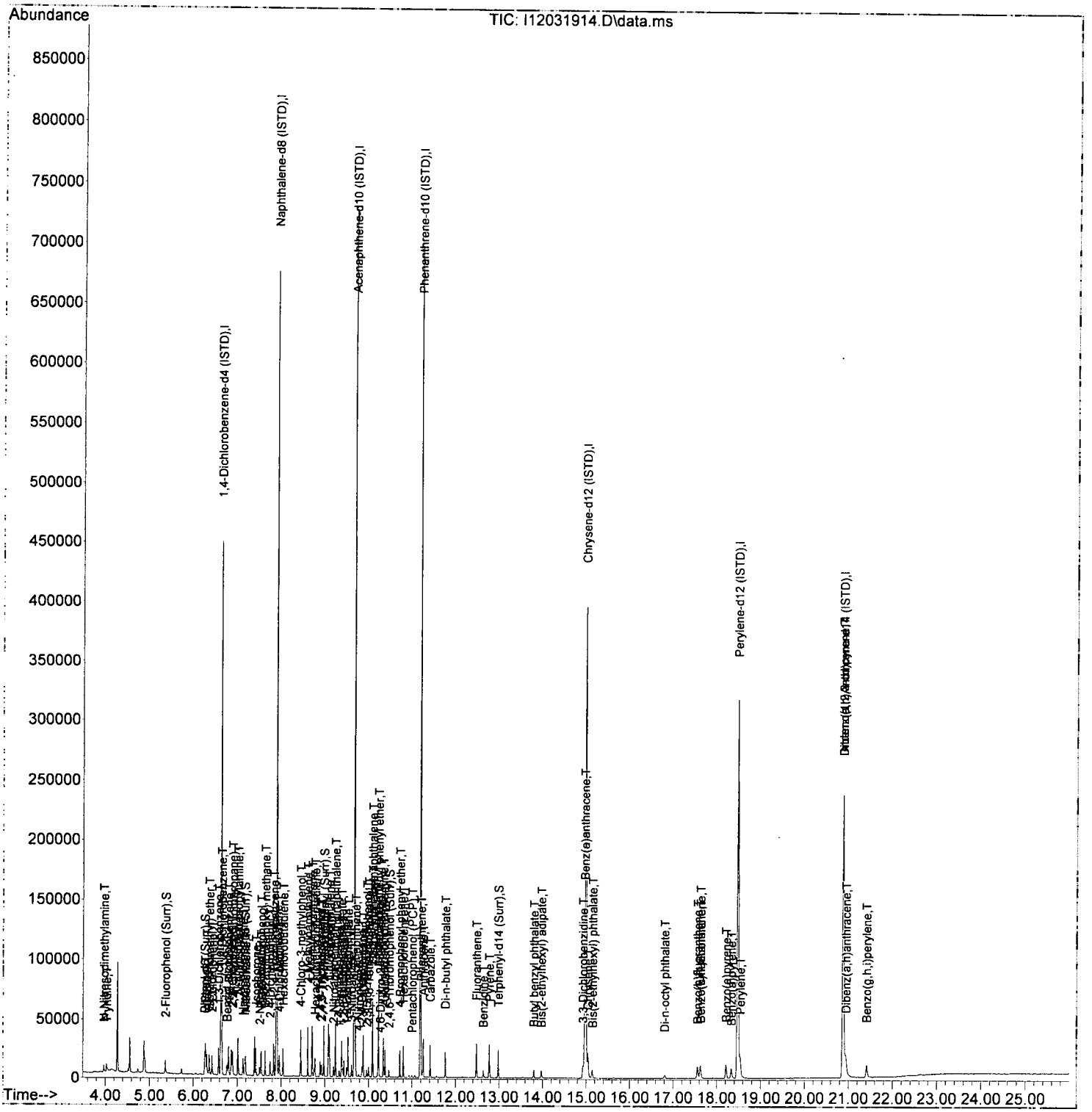
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.322	168	582	96.42	ng/ml#	70
45) Dimethyl phthalate	9.376	163	11562	101.88	ng/ml	99
46) 1,3-Dinitrobenzene	9.402	168	866	47.14	ng/ml	92
47) 2,6-Dinitrotoluene	9.435	165	1827	71.03	ng/ml	96
48) 1,2-Dinitrobenzene	9.493	168	780	62.58	ng/ml	80
49) Acenaphthylene	9.525	152	16908	106.56	ng/ml	99
50) 3-Nitroaniline	9.611	138	1701	113.57	ng/ml	87
51) Acenaphthene	9.702	153	11107	107.44	ng/ml	98
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.772	139	479	139.20	ng/ml	74
54) 2,4-Dinitrotoluene	9.846	165	1539	73.42	ng/ml	96
55) Dibenzofuran	9.873	168	14840	102.38	ng/ml	97
56) 2,3,5,6-Tetrachlorophenol	9.959	232	963	63.01	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.002	232	1304	74.85	ng/ml	95
58) Diethyl phthalate	10.092	149	10642	104.18	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.087	170	9475	101.59	ng/ml	98
60) Fluorene	10.226	166	11451	101.75	ng/ml	95
61) 4-Chlorophenyl phenyl ...	10.221	204	5534	97.88	ng/ml	98
62) 4-Nitroaniline	10.226	138	1311	62.78	ng/ml	89
63) 4,6-Dinitro-2-methylph...	10.264	198	201	153.88	ng/ml	86
65) N-Nitrosodiphenylamine	10.333	169	8677	103.88	ng/ml	98
66) Azobenzene (1,2-DPH)	10.376	77	10213	128.91	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.718	248	3017	92.27	ng/ml	98
69) Hexachlorobenzene	10.793	284	4275	102.26	ng/ml	96
70) Pentachlorophenol (PCP)	10.996	266	438	99.33	ng/ml	74
71) Phenanthrene	11.205	178	16108	109.04	ng/ml	100
72) Anthracene	11.258	178	14351	103.36	ng/ml	96
73) Carbazole	11.414	167	11582	92.84	ng/ml	98
74) Di-n-butyl phthalate	11.761	149	10998	75.73	ng/ml	98
75) Fluoranthene	12.478	202	14475	88.93	ng/ml	98
76) Benzidine	12.633	184	4188	324.62	ng/ml	96
77) Pyrene	12.772	202	15621	94.63	ng/ml	96
80) Butyl benzyl phthalate	13.799	149	2495	98.41	ng/ml	87
81) Bis(2-ethylhexyl) adipate	13.970	129	1789	142.00	ng/ml	91
82) 3,3-Dichlorobenzidine	14.928	252	4805	106.29	ng/ml	96
83) Benz(a)anthracene	14.965	228	12136	85.35	ng/ml	96
84) Chrysene	15.040	228	13394	100.87	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.147	149	3319	101.18	ng/ml	94
87) Di-n-octyl phthalate	16.805	149	3108	93.48	ng/ml	97
88) Benzo(b)fluoranthene	17.559	252	9057	72.86	ng/ml	97
89) Benzo(k)fluoranthene	17.629	252	9950	81.28	ng/ml	98
90) Benzo(b+k)fluoranthene	17.629	252	20058	162.24	ng/ml	98
91) Benzo(e)pyrene	18.217	252	10805	84.89	ng/ml	94
92) Benzo(a)pyrene	18.335	252	7465	74.54	ng/ml	98
93) Perylene	18.538	252	10830	97.68	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.875	276	10373	90.06	ng/ml	91
96) Dibenz(a,h)anthracene	20.945	278	9692	97.89	ng/ml	96
97) Benzo(g,h,i)perylene	21.410	276	9583	85.61	ng/ml	99

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031914.D
Acq On : 3 Dec 2019 5:12 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL3
Misc : 1x, A19K213@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:13:53 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031915.D
Acq On : 3 Dec 2019 5:46 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL4
Misc : 1x, A19K214@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:00 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.627	152	83955	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.889	136	332902	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	160974	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.184	188	280138	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.986	240	279994	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.484	264	269268	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.881	292	217430	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.359	112	10166	198.15	ng/ml	0.00
5) Phenol-d6 (Surr)	6.257	99	13867	215.41	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.167	82	11763	237.17	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.975	172	27050	214.27	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.472	330	2806	174.85	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.981	244	26772	205.36	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.958	74	8304	211.16	ng/ml	94
3) Pyridine	4.006	79	11415	180.33	ng/ml	97
6) Phenol	6.268	94	16464	251.62	ng/ml	97
7) Aniline	6.306	93	17717	403.76	ng/ml	97
8) Bis(2-chloroethyl) ether	6.359	93	13753	228.23	ng/ml	99
9) 2-Chlorophenol	6.423	128	12018	217.20	ng/ml	96
10) 1,3-Dichlorobenzene	6.573	146	13821	211.33	ng/ml	98
11) 1,4-Dichlorobenzene	6.643	146	13571	215.33	ng/ml	97
12) Benzyl alcohol	6.760	108	5100	225.26	ng/ml	93
13) 1,2-Dichlorobenzene	6.798	146	13817	223.04	ng/ml	96
14) 2-Methylphenol	6.862	107	9605	239.42	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.889	45	18847	302.45	ng/ml	96
16) N-Nitrosodi-n-propylamine	7.017	70	9090	264.91	ng/ml	96
17) 3+4-Methylphenol	7.012	107	11818	236.17	ng/ml	98
18) Hexachloroethane	7.135	201	3881	194.34	ng/ml	96
20) Nitrobenzene	7.188	77	12932	265.11	ng/ml	97
22) Isophorone	7.418	82	24749	232.25	ng/ml	97
23) 2-Nitrophenol	7.509	139	4437	130.02	ng/ml	97
24) 2,4-Dimethylphenol	7.541	122	9473	202.90	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.632	93	14981	230.19	ng/ml	98
26) Benzoic acid	7.584	105	633	793.77	ng/ml	74
27) 2,4-Dichlorophenol	7.744	162	7872	203.24	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.835	180	11689	199.16	ng/ml	97
29) Naphthalene	7.910	128	37855	223.53	ng/ml	99
30) 4-Chloroaniline	7.958	127	11829	393.38	ng/ml	99
31) Hexachlorobutadiene	8.044	225	6085	193.19	ng/ml	99
32) 4-Chloro-3-methylphenol	8.440	107	7447	228.21	ng/ml	95
33) 2-Methylnaphthalene	8.605	142	25881	212.93	ng/ml	99
34) 1-Methylnaphthalene	8.707	142	24634	210.88	ng/ml	99
36) Hexachlorocyclopentadiene	8.777	237	5088	185.69	ng/ml	95
37) 2,4,6-Trichlorophenol	8.889	196	4861	181.39	ng/ml	97
38) 2,4,5-Trichlorophenol	8.926	198	4882	184.35	ng/ml	93
39) 1,1'-Biphenyl	9.076	154	30824	225.07	ng/ml	99
41) 2-Chloronaphthalene	9.103	162	22623	222.41	ng/ml	97
42) 2-Nitroaniline	9.199	138	4435	144.48	ng/ml	92
43) 2,6-Dimethylnaphthalene	9.237	156	21960	218.76	ng/ml	99

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031915.D
Acq On : 3 Dec 2019 5:46 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL4
Misc : 1x, A19K214@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:00 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

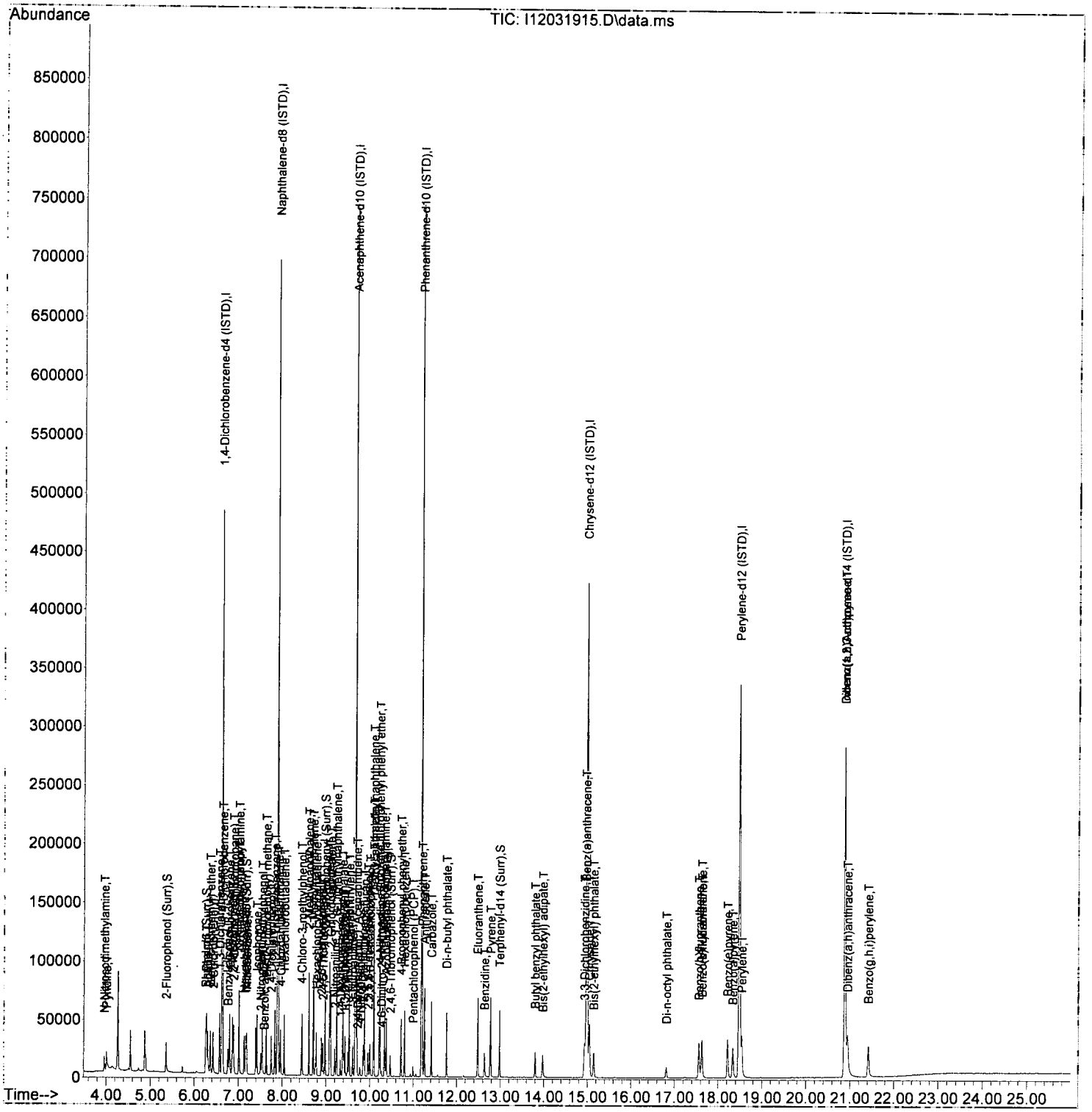
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.322	168	1578	155.72	ng/ml	96
45) Dimethyl phthalate	9.376	163	24457	214.24	ng/ml	100
46) 1,3-Dinitrobenzene	9.408	168	2388	129.21	ng/ml	91
47) 2,6-Dinitrotoluene	9.435	165	4524	174.84	ng/ml	98
48) 1,2-Dinitrobenzene	9.493	168	1939	154.64	ng/ml	83
49) Acenaphthylene	9.525	152	34979	219.14	ng/ml	99
50) 3-Nitroaniline	9.611	138	4329	304.81	ng/ml	100
51) Acenaphthene	9.702	153	22873	219.96	ng/ml	96
52) 2,4-Dinitrophenol	9.718	184	194	207.36	ng/ml	64
53) 4-Nitrophenol	9.771	139	1445	183.65	ng/ml	94
54) 2,4-Dinitrotoluene	9.846	165	4351	148.90	ng/ml	93
55) Dibenzofuran	9.873	168	30987	212.51	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.959	232	3190	138.00	ng/ml	94
57) 2,3,4,6-Tetrachlorophenol	10.001	232	3973	162.23	ng/ml	97
58) Diethyl phthalate	10.092	149	23152	225.30	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.087	170	19994	213.11	ng/ml	98
60) Fluorene	10.226	166	24375	215.30	ng/ml	96
61) 4-Chlorophenyl phenyl ...	10.221	204	11318	198.99	ng/ml	98
62) 4-Nitroaniline	10.231	138	3715	176.84	ng/ml	94
63) 4,6-Dinitro-2-methylph...	10.264	198	779	187.65	ng/ml	97
65) N-Nitrosodiphenylamine	10.333	169	19213	222.65	ng/ml	98
66) Azobenzene (1,2-DPH)	10.376	77	22527	275.23	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.718	248	6693	198.13	ng/ml	98
69) Hexachlorobenzene	10.793	284	8826	204.37	ng/ml	98
70) Pentachlorophenol (PCP)	10.991	266	1488	154.58	ng/ml	93
71) Phenanthrene	11.205	178	33616	220.27	ng/ml	99
72) Anthracene	11.258	178	32114	223.88	ng/ml	98
73) Carbazole	11.414	167	26791	204.11	ng/ml	99
74) Di-n-butyl phthalate	11.761	149	28038	186.89	ng/ml	99
75) Fluoranthene	12.478	202	33612	199.88	ng/ml	99
76) Benzidine	12.633	184	10893	807.54	ng/ml	99
77) Pyrene	12.772	202	35949	210.80	ng/ml	97
80) Butyl benzyl phthalate	13.799	149	7795	170.75	ng/ml	96
81) Bis(2-ethylhexyl) adipate	13.976	129	5653	199.19	ng/ml	98
82) 3,3-Dichlorobenzidine	14.933	252	12293	760.34	ng/ml	99
83) Benz(a)anthracene	14.965	228	29244	191.67	ng/ml	100
84) Chrysene	15.045	228	29363	206.08	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.142	149	10701	172.30	ng/ml	99
87) Di-n-octyl phthalate	16.816	149	8951	126.54	ng/ml	99
88) Benzo(b)fluoranthene	17.559	252	24272	178.75	ng/ml	95
89) Benzo(k)fluoranthene	17.629	252	26053	178.18	ng/ml	96
90) Benzo(b+k)fluoranthene	17.629	252	52531	362.38	ng/ml	96
91) Benzo(e)pyrene	18.217	252	26664	191.77	ng/ml	100
92) Benzo(a)pyrene	18.335	252	21101	162.50	ng/ml	100
93) Perylene	18.538	252	24848	205.16	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.881	276	24305	191.69	ng/ml	99
96) Dibenz(a,h)anthracene	20.945	278	22210	203.76	ng/ml	96
97) Benzo(g,h,i)perylene	21.415	276	24173	196.15	ng/ml	96

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031915.D
Acq On : 3 Dec 2019 5:46 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL4
Misc : 1x, A19K214@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:00 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031916.D
Acq On : 3 Dec 2019 6:20 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL5
Misc : 1x, A19K215@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:08 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

GB 12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.627	152	81192	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.889	136	320013	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	155852	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.184	188	272050	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.987	240	269671	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.485	264	257148	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.881	292	213969	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.354	112	27016	525.34	ng/ml	0.00
5) Phenol-d6 (Surr)	6.258	99	37469	601.86	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.167	82	30295	631.62	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.975	172	65387	534.98	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.472	330	8367	478.50	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.981	244	67248	535.58	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.942	74	21095	554.67	ng/ml	92
3) Pyridine	3.979	79	33858	553.08	ng/ml	93
6) Phenol	6.268	94	43537	688.02	ng/ml	97
7) Aniline	6.300	93	46527	1338.44	ng/ml	99
8) Bis(2-chloroethyl) ether	6.359	93	33605	576.66	ng/ml	97
9) 2-Chlorophenol	6.418	128	31029	579.87	ng/ml	100
10) 1,3-Dichlorobenzene	6.573	146	33584	530.98	ng/ml	98
11) 1,4-Dichlorobenzene	6.643	146	32938	540.41	ng/ml	99
12) Benzyl alcohol	6.755	108	15610	570.12	ng/ml	97
13) 1,2-Dichlorobenzene	6.792	146	32535	543.08	ng/ml	96
14) 2-Methylphenol	6.862	107	24147	622.39	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.889	45	42485	704.98	ng/ml	93
16) N-Nitrosodi-n-propylamine	7.012	70	23607	711.38	ng/ml	99
17) 3+4-Methylphenol	7.012	107	31405	638.94	ng/ml	99
18) Hexachloroethane	7.129	201	9529	493.40	ng/ml	94
20) Nitrobenzene	7.183	77	32003	678.40	ng/ml	98
22) Isophorone	7.418	82	63524	620.13	ng/ml	100
23) 2-Nitrophenol	7.504	139	14203	432.96	ng/ml	97
24) 2,4-Dimethylphenol	7.541	122	25236	543.61	ng/ml	94
25) Bis(2-chloroethoxy) me...	7.632	93	37517	599.69	ng/ml	99
26) Benzoic acid	7.600	105	5088	944.22	ng/ml	96
27) 2,4-Dichlorophenol	7.744	162	22117	534.04	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.835	180	28376	502.95	ng/ml	99
29) Naphthalene	7.910	128	91141	559.86	ng/ml	99
30) 4-Chloroaniline	7.958	127	32068	1199.19	ng/ml	96
31) Hexachlorobutadiene	8.044	225	14186	468.53	ng/ml	99
32) 4-Chloro-3-methylphenol	8.440	107	22351	562.51	ng/ml	98
33) 2-Methylnaphthalene	8.606	142	64287	550.21	ng/ml	98
34) 1-Methylnaphthalene	8.707	142	62032	552.41	ng/ml	99
36) Hexachlorocyclopentadiene	8.777	237	13870	478.48	ng/ml	96
37) 2,4,6-Trichlorophenol	8.889	196	14788	498.43	ng/ml	94
38) 2,4,5-Trichlorophenol	8.927	198	14398	506.53	ng/ml	99
39) 1,1'-Biphenyl	9.076	154	74411	561.20	ng/ml	98
41) 2-Chloronaphthalene	9.103	162	55514	563.70	ng/ml	96
42) 2-Nitroaniline	9.194	138	14324	481.97	ng/ml	95
43) 2,6-Dimethylnaphthalene	9.237	156	53918	554.78	ng/ml	99

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031916.D
Acq On : 3 Dec 2019 6:20 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL5
Misc : 1x, A19K215@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:08 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

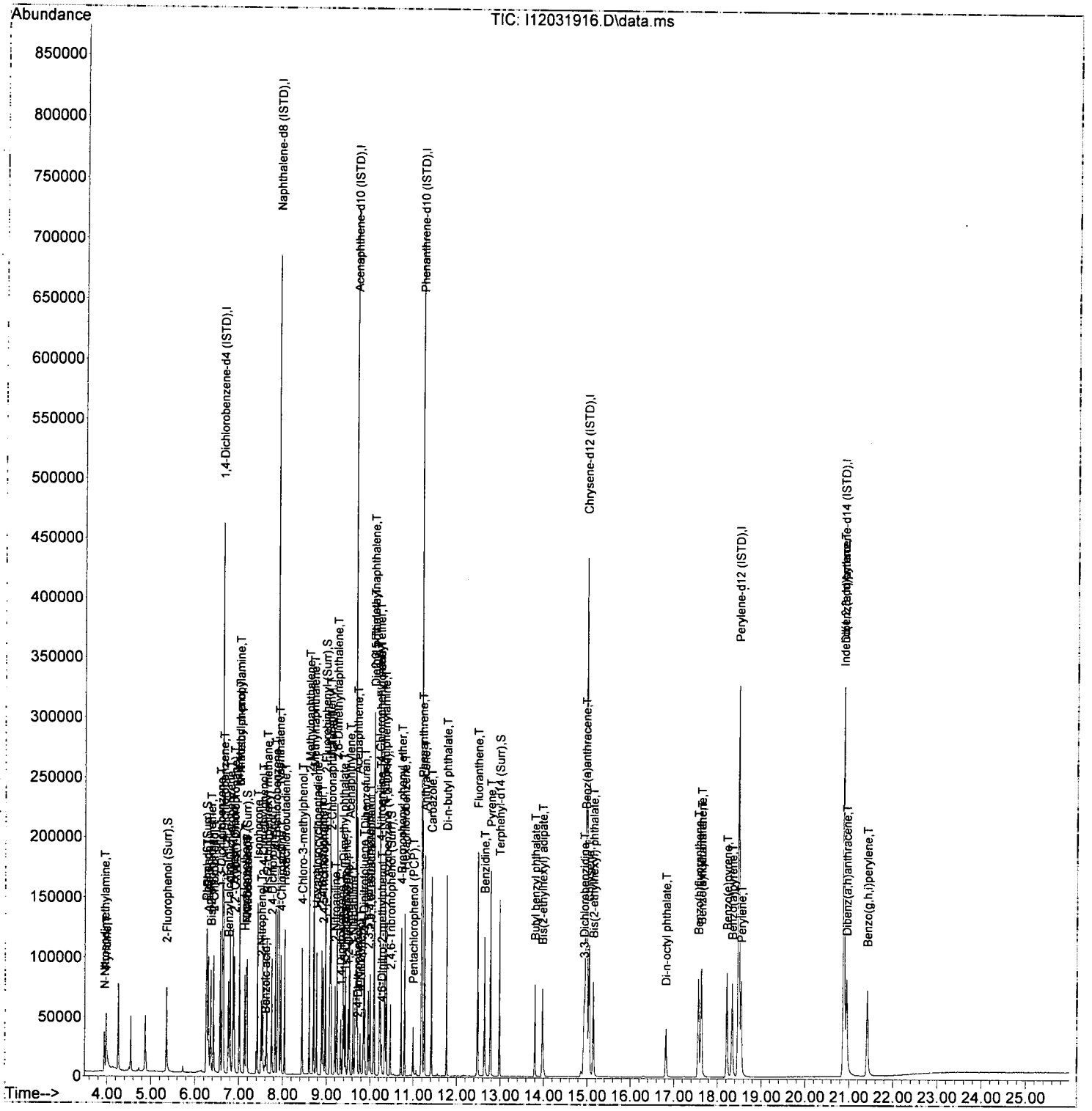
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.328	168	5249	384.47	ng/ml	88
45) Dimethyl phthalate	9.376	163	60250	545.12	ng/ml	99
46) 1,3-Dinitrobenzene	9.408	168	7509	419.65	ng/ml	91
47) 2,6-Dinitrotoluene	9.440	165	13018	519.64	ng/ml	86
48) 1,2-Dinitrobenzene	9.493	168	5867	483.29	ng/ml	86
49) Acenaphthylene	9.526	152	87197	564.24	ng/ml	99
50) 3-Nitroaniline	9.611	138	12379	973.03	ng/ml	95
51) Acenaphthene	9.702	153	54943	545.72	ng/ml	99
52) 2,4-Dinitrophenol	9.718	184	1322	341.78	ng/ml	84
53) 4-Nitrophenol	9.772	139	6508	427.23	ng/ml	96
54) 2,4-Dinitrotoluene	9.846	165	14643	440.74	ng/ml	97
55) Dibenzofuran	9.873	168	74125	525.06	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	9.959	232	10526	398.01	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.002	232	12612	460.39	ng/ml	96
58) Diethyl phthalate	10.093	149	56335	566.22	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.087	170	48060	529.09	ng/ml	94
60) Fluorene	10.226	166	57878	528.04	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.216	204	27746	503.87	ng/ml	98
62) 4-Nitroaniline	10.232	138	10822	532.06	ng/ml	91
63) 4,6-Dinitro-2-methylph...	10.264	198	3544	355.63	ng/ml	95
65) N-Nitrosodiphenylamine	10.333	169	48634	580.36	ng/ml	100
66) Azobenzene (1,2-DPH)	10.381	77	57570	724.30	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.718	248	16943	516.47	ng/ml	97
69) Hexachlorobenzene	10.793	284	21011	500.97	ng/ml	98
70) Pentachlorophenol (PCP)	10.991	266	6056	406.49	ng/ml	95
71) Phenanthrene	11.205	178	80755	544.87	ng/ml	100
72) Anthracene	11.259	178	79918	573.71	ng/ml	98
73) Carbazole	11.414	167	70636	584.11	ng/ml	99
74) Di-n-butyl phthalate	11.761	149	78970	542.02	ng/ml	99
75) Fluoranthene	12.478	202	87684	536.93	ng/ml	100
76) Benzidine	12.633	184	54874	3273.20	ng/ml	96
77) Pyrene	12.772	202	91011	549.54	ng/ml	98
80) Butyl benzyl phthalate	13.799	149	26971	454.19	ng/ml	96
81) Bis(2-ethylhexyl) adipate	13.970	129	21591	456.10	ng/ml	98
82) 3,3-Dichlorobenzidine	14.928	252	27812	2252.29	ng/ml	99
83) Benz(a)anthracene	14.965	228	76462	520.33	ng/ml	97
84) Chrysene	15.045	228	72081	525.25	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.142	149	39213	472.51	ng/ml	100
87) Di-n-octyl phthalate	16.816	149	38790	315.40	ng/ml	98
88) Benzo(b)fluoranthene	17.559	252	69749	537.88	ng/ml	99
89) Benzo(k)fluoranthene	17.629	252	72041	497.45	ng/ml	99
90) Benzo(b+k)fluoranthene	17.629	252	147166	1028.35	ng/ml	99
91) Benzo(e)pyrene	18.217	252	71817	540.86	ng/ml	98
92) Benzo(a)pyrene	18.335	252	63972	477.28	ng/ml	99
93) Perylene	18.543	252	62255	538.25	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.875	276	60260	482.94	ng/ml	97
96) Dibenz(a,h)anthracene	20.945	278	57867	539.48	ng/ml	97
97) Benzo(g,h,i)perylene	21.416	276	66868	551.38	ng/ml	97

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031916.D
Acq On : 3 Dec 2019 6:20 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL5
Misc : 1x, A19K215@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:08 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031917.D
Acq On : 3 Dec 2019 6:54 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL6
Misc : 1x, A19K216@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:15 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.626	152	81140	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.889	136	310642	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	148649	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.184	188	266040	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.986	240	260632	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.484	264	252576	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.881	292	215522	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.359	112	53313	1014.48	ng/ml	0.00
5) Phenol-d6 (Surr)	6.257	99	75331	1210.80	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.167	82	60018	1252.11	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.975	172	118351	1015.24	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.472	330	17115	975.12	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.981	244	127869	1053.70	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.947	74	42239	1111.35	ng/ml	96
3) Pyridine	3.984	79	71621	1170.70	ng/ml	93
6) Phenol	6.273	94	85835	1357.34	ng/ml	96
7) Aniline	6.300	93	90918	Below Cal		98
8) Bis(2-chloroethyl) ether	6.359	93	66252	1137.61	ng/ml	98
9) 2-Chlorophenol	6.423	128	61716	1154.08	ng/ml	96
10) 1,3-Dichlorobenzene	6.573	146	64447	1019.59	ng/ml	99
11) 1,4-Dichlorobenzene	6.643	146	62870	1032.16	ng/ml	100
12) Benzyl alcohol	6.755	108	33704	1153.76	ng/ml	97
13) 1,2-Dichlorobenzene	6.798	146	62351	1041.43	ng/ml	97
14) 2-Methylphenol	6.862	107	47344	1221.09	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.889	45	80267	1332.77	ng/ml	93
16) N-Nitrosodi-n-propylamine	7.017	70	44516	1342.32	ng/ml	95
17) 3+4-Methylphenol	7.012	107	59927	1224.20	ng/ml	98
18) Hexachloroethane	7.135	201	18186	942.26	ng/ml	97
20) Nitrobenzene	7.188	77	61196	1298.07	ng/ml	95
22) Isophorone	7.418	82	118024	1186.93	ng/ml	99
23) 2-Nitrophenol	7.504	139	30876	969.61	ng/ml	98
24) 2,4-Dimethylphenol	7.541	122	48041	1060.59	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.632	93	69778	1149.02	ng/ml	99
26) Benzoic acid	7.621	105	23552	1576.36	ng/ml	96
27) 2,4-Dichlorophenol	7.744	162	43869	1057.79	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.835	180	52938	966.60	ng/ml	98
29) Naphthalene	7.910	128	164864	1043.27	ng/ml	99
30) 4-Chloroaniline	7.958	127	59598	2792.87	ng/ml	96
31) Hexachlorobutadiene	8.044	225	27231	926.50	ng/ml	99
32) 4-Chloro-3-methylphenol	8.440	107	45215	1092.94	ng/ml	96
33) 2-Methylnaphthalene	8.605	142	119447	1053.15	ng/ml	99
34) 1-Methylnaphthalene	8.707	142	111578	1023.61	ng/ml	99
36) Hexachlorocyclopentadiene	8.777	237	28270	997.07	ng/ml	98
37) 2,4,6-Trichlorophenol	8.889	196	29391	1005.17	ng/ml	99
38) 2,4,5-Trichlorophenol	8.926	198	29228	1049.21	ng/ml	99
39) 1,1'-Biphenyl	9.076	154	134132	1060.62	ng/ml	99
41) 2-Chloronaphthalene	9.103	162	98523	1048.90	ng/ml	98
42) 2-Nitroaniline	9.199	138	29886	1054.33	ng/ml	90
43) 2,6-Dimethylnaphthalene	9.237	156	96698	1043.17	ng/ml	98

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031917.D
Acq On : 3 Dec 2019 6:54 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL6
Misc : 1x, A19K216@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:15 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

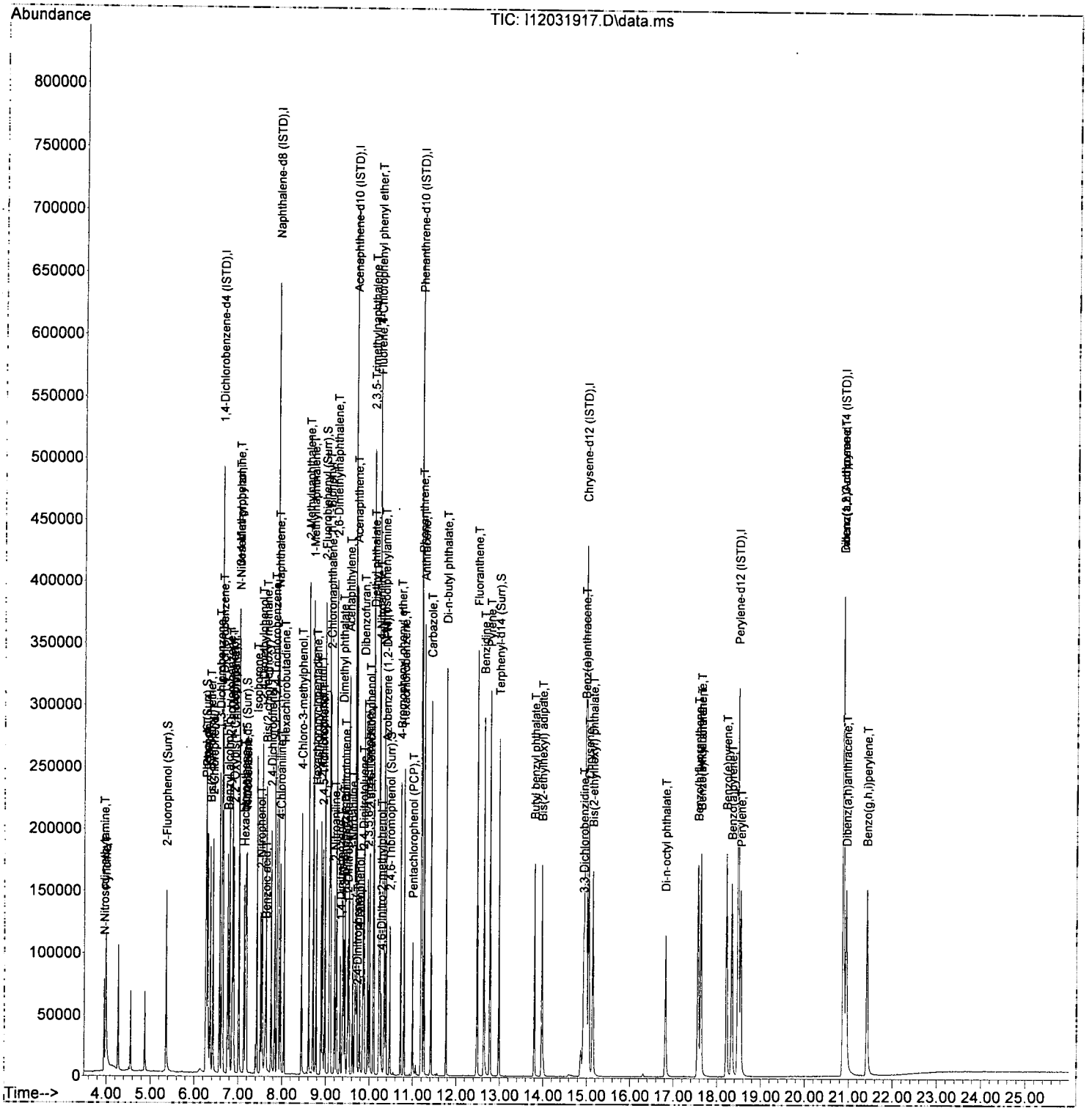
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.328	168	12471	861.22	ng/ml	85
45) Dimethyl phthalate	9.381	163	109754	1041.13	ng/ml	99
46) 1,3-Dinitrobenzene	9.408	168	16032	939.39	ng/ml	93
47) 2,6-Dinitrotoluene	9.440	165	24950	1044.19	ng/ml	87
48) 1,2-Dinitrobenzene	9.493	168	11843	1022.84	ng/ml	90
49) Acenaphthylene	9.525	152	158316	1074.08	ng/ml	99
50) 3-Nitroaniline	9.611	138	24616	2330.07	ng/ml	96
51) Acenaphthene	9.702	153	98670	1027.53	ng/ml	99
52) 2,4-Dinitrophenol	9.718	184	4261	695.24	ng/ml	84
53) 4-Nitrophenol	9.771	139	15067	870.26	ng/ml	96
54) 2,4-Dinitrotoluene	9.852	165	30105	920.21	ng/ml	91
55) Dibenzofuran	9.873	168	135577	1006.89	ng/ml	97
56) 2,3,5,6-Tetrachlorophenol	9.959	232	22504	857.42	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.001	232	24817	919.13	ng/ml	97
58) Diethyl phthalate	10.098	149	101129	1065.70	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.087	170	86205	995.01	ng/ml	93
60) Fluorene	10.226	166	104671	1001.22	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.221	204	49966	951.35	ng/ml	99
62) 4-Nitroaniline	10.231	138	21162	1090.85	ng/ml	96
63) 4,6-Dinitro-2-methylph...	10.264	198	9285	724.22	ng/ml	96
65) N-Nitrosodiphenylamine	10.338	169	89163	1088.04	ng/ml	99
66) Azobenzene (1,2-DPH)	10.381	77	102869	1323.45	ng/ml	92
68) 4-Bromophenyl phenyl e...	10.718	248	31952	995.99	ng/ml	99
69) Hexachlorobenzene	10.793	284	38787	945.70	ng/ml	97
70) Pentachlorophenol (PCP)	10.991	266	14978	905.55	ng/ml	99
71) Phenanthrene	11.205	178	149146	1029.06	ng/ml	99
72) Anthracene	11.258	178	148998	1093.77	ng/ml	99
73) Carbazole	11.414	167	129438	1256.86	ng/ml	99
74) Di-n-butyl phthalate	11.761	149	159941	1122.58	ng/ml	100
75) Fluoranthene	12.478	202	167410	1048.29	ng/ml	99
76) Benzidine	12.633	184	138388	6469.56	ng/ml	97
77) Pyrene	12.772	202	168737	1041.89	ng/ml	99
80) Butyl benzyl phthalate	13.799	149	60095	958.41	ng/ml	96
81) Bis(2-ethylhexyl) adipate	13.970	129	49833	933.44	ng/ml	99
82) 3,3-Dichlorobenzidine	14.928	252	46667	4111.56	ng/ml	98
83) Benz(a)anthracene	14.965	228	143013	1006.98	ng/ml	99
84) Chrysene	15.045	228	135043	1018.18	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.142	149	86095	995.19	ng/ml	100
87) Di-n-octyl phthalate	16.816	149	106646	754.06	ng/ml	97
88) Benzo(b)fluoranthene	17.564	252	141587	1111.64	ng/ml	99
89) Benzo(k)fluoranthene	17.629	252	141965	1001.18	ng/ml	98
90) Benzo(b+k)fluoranthene	17.629	252	291935	2065.74	ng/ml	98
91) Benzo(e)pyrene	18.217	252	141399	1084.17	ng/ml	99
92) Benzo(a)pyrene	18.335	252	127496	959.39	ng/ml	99
93) Perylene	18.543	252	118069	1039.29	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.881	276	120357	957.62	ng/ml	99
96) Dibenz(a,h)anthracene	20.950	278	113808	1053.36	ng/ml	98
97) Benzo(g,h,i)perylene	21.415	276	130758	1070.43	ng/ml	99

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031917.D
Acq On : 3 Dec 2019 6:54 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL6
Misc : 1x, A19K216@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:15 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031918.D
Acq On : 3 Dec 2019 7:28 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL7
Misc : 1x, A19K217@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:23 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

GR 12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.626	152	75585	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.894	136	281885	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	136795	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.183	188	254271	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.992	240	244262	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.484	264	237473	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.881	292	212089	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.359	112	108351	2132.12	ng/ml	0.00
5) Phenol-d6 (Surr)	6.263	99	142632	2461.03	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.167	82	107962	2417.86	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.974	172	210035	1957.84	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.472	330	34168	2031.94	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.981	244	237910	2091.88	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.947	74	80285	2267.62	ng/ml	94
3) Pyridine	3.979	79	138631	2432.56	ng/ml	93
6) Phenol	6.273	94	157741	2677.73	ng/ml	98
7) Aniline	6.300	93	163666	Below Cal		98
8) Bis(2-chloroethyl) ether	6.359	93	117371	2163.50	ng/ml	98
9) 2-Chlorophenol	6.423	128	112266	2253.64	ng/ml	97
10) 1,3-Dichlorobenzene	6.573	146	117219	1990.77	ng/ml	99
11) 1,4-Dichlorobenzene	6.642	146	112952	1990.67	ng/ml	100
12) Benzyl alcohol	6.755	108	67600	2400.63	ng/ml	97
13) 1,2-Dichlorobenzene	6.798	146	109758	1967.99	ng/ml	97
14) 2-Methylphenol	6.862	107	85445	2365.74	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.888	45	135468	2414.65	ng/ml	92
16) N-Nitrosodi-n-propylamine	7.017	70	78452	2539.46	ng/ml	97
17) 3+4-Methylphenol	7.011	107	108523	2419.31	ng/ml	99
18) Hexachloroethane	7.135	201	34553	1921.85	ng/ml	98
20) Nitrobenzene	7.188	77	106719	2430.05	ng/ml	93
22) Isophorone	7.423	82	213192	2362.72	ng/ml	98
23) 2-Nitrophenol	7.504	139	54150	1873.97	ng/ml	99
24) 2,4-Dimethylphenol	7.541	122	87956	2152.67	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.632	93	122646	2225.62	ng/ml	99
26) Benzoic acid	7.653	105	75163	3476.41	ng/ml	95
27) 2,4-Dichlorophenol	7.744	162	82288	2148.97	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.835	180	93155	1874.44	ng/ml	99
29) Naphthalene	7.915	128	288400	2011.19	ng/ml	100
30) 4-Chloroaniline	7.958	127	104722	Below Cal		99
31) Hexachlorobutadiene	8.044	225	48144	1805.15	ng/ml	98
32) 4-Chloro-3-methylphenol	8.440	107	85765	2194.38	ng/ml	96
33) 2-Methylnaphthalene	8.605	142	214169	2080.95	ng/ml	98
34) 1-Methylnaphthalene	8.707	142	196570	1987.29	ng/ml	99
36) Hexachlorocyclopentadiene	8.777	237	53845	2048.91	ng/ml	100
37) 2,4,6-Trichlorophenol	8.894	196	56718	2085.19	ng/ml	97
38) 2,4,5-Trichlorophenol	8.926	198	54610	2109.15	ng/ml	98
39) 1,1'-Biphenyl	9.081	154	234019	2010.81	ng/ml	100
41) 2-Chloronaphthalene	9.103	162	170195	1968.96	ng/ml	100
42) 2-Nitroaniline	9.199	138	58736	2251.66	ng/ml	91
43) 2,6-Dimethylnaphthalene	9.242	156	170221	1995.46	ng/ml	99

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031918.D
Acq On : 3 Dec 2019 7:28 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL7
Misc : 1x, A19K217@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:23 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

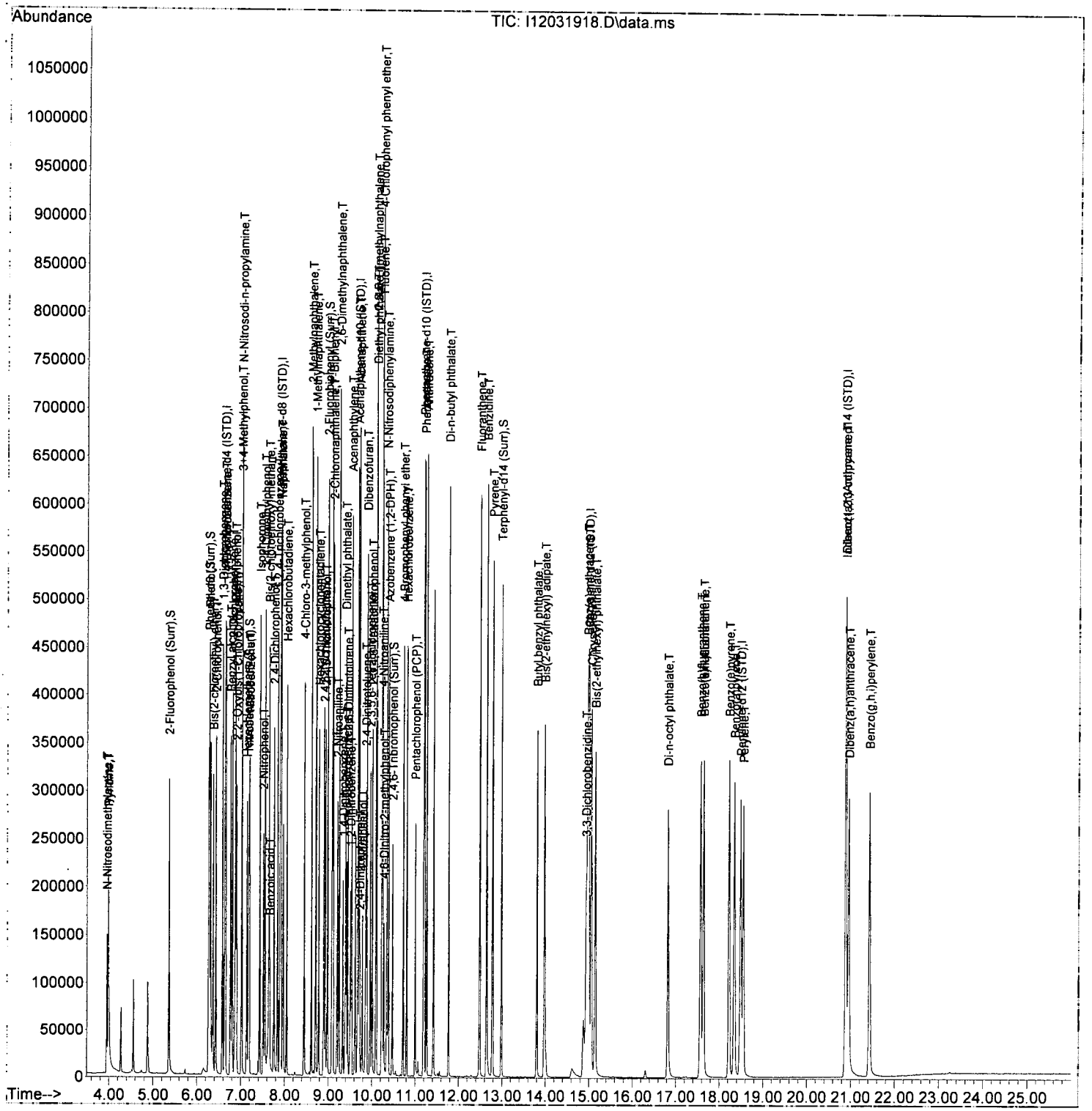
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.327	168	26946	1914.15	ng/ml	88
45)	Dimethyl phthalate	9.386	163	195262	2012.77	ng/ml	99
46)	1,3-Dinitrobenzene	9.408	168	31750	2021.60	ng/ml	92
47)	2,6-Dinitrotoluene	9.440	165	45780	2081.99	ng/ml	92
48)	1,2-Dinitrobenzene	9.499	168	22033	2067.81	ng/ml	88
49)	Acenaphthylene	9.525	152	276910	2041.47	ng/ml	100
50)	3-Nitroaniline	9.616	138	46707	Below Cal		92
51)	Acenaphthene	9.702	153	173177	1959.70	ng/ml	99
52)	2,4-Dinitrophenol	9.718	184	12862	1695.99	ng/ml	93
53)	4-Nitrophenol	9.777	139	33445	1935.07	ng/ml	93
54)	2,4-Dinitrotoluene	9.852	165	59132	1960.94	ng/ml	93
55)	Dibenzofuran	9.878	168	238007	1920.79	ng/ml	96
56)	2,3,5,6-Tetrachlorophenol	9.959	232	45542	1863.48	ng/ml	96
57)	2,3,4,6-Tetrachlorophenol	10.001	232	49283	1962.17	ng/ml	96
58)	Diethyl phthalate	10.098	149	177170	2028.82	ng/ml	100
59)	2,3,5-Trimethylnaphtha...	10.087	170	153262	1922.29	ng/ml	97
60)	Fluorene	10.226	166	181772	1889.38	ng/ml	99
61)	4-Chlorophenyl phenyl ...	10.221	204	90397	1870.29	ng/ml	100
62)	4-Nitroaniline	10.237	138	40971	2294.96	ng/ml	94
63)	4,6-Dinitro-2-methylph...	10.269	198	22787	1664.54	ng/ml	94
65)	N-Nitrosodiphenylamine	10.338	169	158972	2029.70	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.381	77	183471	2469.68	ng/ml	95
68)	4-Bromophenyl phenyl e...	10.718	248	59875	1952.78	ng/ml	99
69)	Hexachlorobenzene	10.798	284	71021	1811.78	ng/ml	96
70)	Pentachlorophenol (PCP)	10.991	266	33560	1984.48	ng/ml	98
71)	Phenanthrene	11.210	178	269481	1945.39	ng/ml	100
72)	Anthracene	11.258	178	270521	2077.77	ng/ml	99
73)	Carbazole	11.419	167	236632	Below Cal		98
74)	Di-n-butyl phthalate	11.761	149	304858	2238.74	ng/ml	99
75)	Fluoranthene	12.483	202	314125	2058.04	ng/ml	100
76)	Benzidine	12.638	184	297903	10955.20	ng/ml	98
77)	Pyrene	12.772	202	304683	1968.38	ng/ml	99
80)	Butyl benzyl phthalate	13.799	149	131363	2104.97	ng/ml	96
81)	Bis(2-ethylhexyl) adipate	13.975	129	110181	2052.12	ng/ml	98
82)	3,3-Dichlorobenzidine	14.933	252	85387	8094.59	ng/ml	98
83)	Benz(a)anthracene	14.965	228	270284	2030.65	ng/ml	98
84)	Chrysene	15.050	228	249591	2007.96	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.141	149	176928	2129.95	ng/ml	99
87)	Di-n-octyl phthalate	16.816	149	266541	1904.91	ng/ml	97
88)	Benzo(b)fluoranthene	17.570	252	282074	2355.49	ng/ml	99
89)	Benzo(k)fluoranthene	17.634	252	269127	2076.42	ng/ml	99
90)	Benzo(b+k)fluoranthene	17.634	252	565512	4273.42	ng/ml	99
91)	Benzo(e)pyrene	18.222	252	275483	2246.59	ng/ml	98
92)	Benzo(a)pyrene	18.345	252	250773	2038.62	ng/ml	98
93)	Perylene	18.548	252	224877	2105.35	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	20.886	276	238903	1931.60	ng/ml	99
96)	Dibenz(a,h)anthracene	20.955	278	222804	2095.57	ng/ml	98
97)	Benzo(g,h,i)perylene	21.421	276	257095	2138.73	ng/ml	99

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031918.D
Acq On : 3 Dec 2019 7:28 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL7
Misc : 1x, A19K217@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:23 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031919.D
Acq On : 3 Dec 2019 8:02 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL8
Misc : 1x, A19K218@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:31 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.627	152	68360	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.894	136	259116	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	127790	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.184	188	242431	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.997	240	218440	2000.00	ng/ml	0.01
86) Perylene-d12 (ISTD)	18.490	264	219521	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.897	292	202306	2000.00	ng/ml	0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.359	112	200194	4110.09	ng/ml	0.00
5) Phenol-d6 (Surr)	6.263	99	268309	5118.80	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.172	82	192378	4763.75	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.980	172	353301	3525.37	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.472	330	65706	4183.11	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.986	244	420934	4138.68	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.947	74	153919	4806.85	ng/ml	96
3) Pyridine	3.974	79	253805	4924.22	ng/ml	96
6) Phenol	6.279	94	280072	5256.85	ng/ml	99
7) Aniline	6.306	93	276528	Below Cal		99
8) Bis(2-chloroethyl) ether	6.364	93	220646	4497.02	ng/ml	96
9) 2-Chlorophenol	6.423	128	200851	4458.05	ng/ml	97
10) 1,3-Dichlorobenzene	6.573	146	206523	3878.16	ng/ml	99
11) 1,4-Dichlorobenzene	6.643	146	196929	3837.49	ng/ml	99
12) Benzyl alcohol	6.760	108	126371	4860.71	ng/ml	98
13) 1,2-Dichlorobenzene	6.798	146	189553	3757.95	ng/ml	98
14) 2-Methylphenol	6.867	107	148793	4555.08	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.889	45	233716	4606.16	ng/ml	90
16) N-Nitrosodi-n-propylamine	7.022	70	133289	4770.52	ng/ml	95
17) 3+4-Methylphenol	7.017	107	186013	4763.55	ng/ml	99
18) Hexachloroethane	7.135	201	61522	3783.53	ng/ml	99
20) Nitrobenzene	7.194	77	186102	4685.52	ng/ml	93
22) Isophorone	7.429	82	375433	4526.39	ng/ml	97
23) 2-Nitrophenol	7.509	139	102512	3859.38	ng/ml	96
24) 2,4-Dimethylphenol	7.547	122	154105	4182.71	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.637	93	212599	4196.98	ng/ml	98
26) Benzoic acid	7.696	105	187586	7500.47	ng/ml	96
27) 2,4-Dichlorophenol	7.750	162	146333	4112.73	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.835	180	159886	3499.89	ng/ml	98
29) Naphthalene	7.916	128	480003	3641.50	ng/ml	98
30) 4-Chloroaniline	7.964	127	175197	Below Cal		98
31) Hexachlorobutadiene	8.044	225	86790	3540.13	ng/ml	99
32) 4-Chloro-3-methylphenol	8.440	107	159539	4316.51	ng/ml	98
33) 2-Methylnaphthalene	8.611	142	365323	3861.53	ng/ml	99
34) 1-Methylnaphthalene	8.713	142	333327	3666.00	ng/ml	100
36) Hexachlorocyclopentadiene	8.777	237	101731	4167.43	ng/ml	99
37) 2,4,6-Trichlorophenol	8.894	196	103786	4106.21	ng/ml	99
38) 2,4,5-Trichlorophenol	8.927	198	101134	4181.41	ng/ml	98
39) 1,1'-Biphenyl	9.082	154	393452	3618.97	ng/ml	98
41) 2-Chloronaphthalene	9.103	162	288950	3578.37	ng/ml	99
42) 2-Nitroaniline	9.205	138	109829	4507.02	ng/ml	88
43) 2,6-Dimethylnaphthalene	9.242	156	284384	3568.69	ng/ml	96

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031919.D
Acq On : 3 Dec 2019 8:02 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL8
Misc : 1x, A19K218@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:31 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

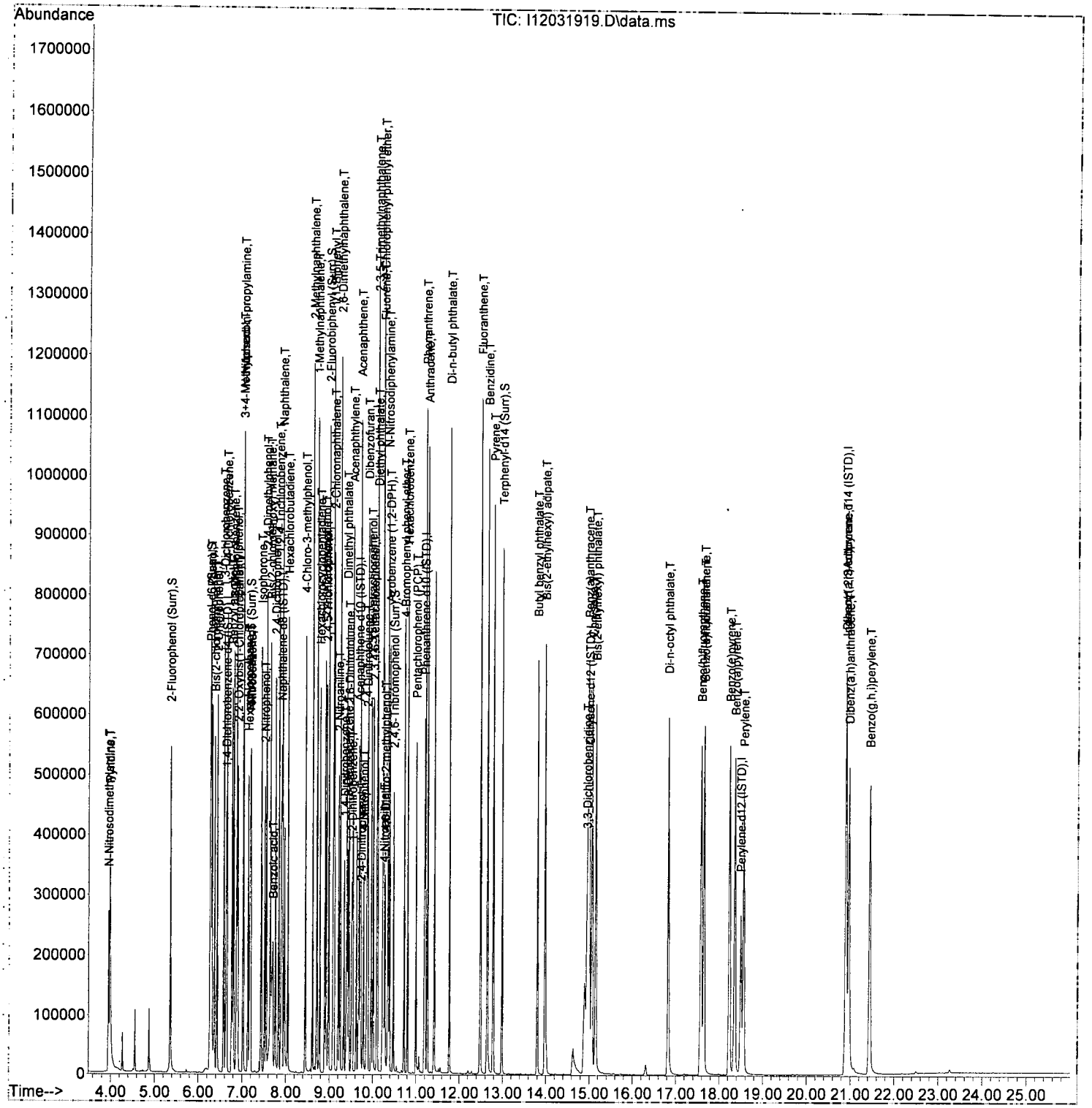
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.333	168	52480	3831.98	ng/ml	82
45) Dimethyl phthalate	9.392	163	337370	3722.68	ng/ml	99
46) 1,3-Dinitrobenzene	9.413	168	58815	4008.78	ng/ml	92
47) 2,6-Dinitrotoluene	9.445	165	82704	4026.27	ng/ml	92
48) 1,2-Dinitrobenzene	9.509	168	41107	4129.78	ng/ml#	76
49) Acenaphthylene	9.531	152	464682	3667.19	ng/ml	100
50) 3-Nitroaniline	9.622	138	77930	Below Cal		95
51) Acenaphthene	9.707	153	296440	3590.95	ng/ml	100
52) 2,4-Dinitrophenol	9.723	184	32374	3615.09	ng/ml	90
53) 4-Nitrophenol	9.782	139	65917	3957.16	ng/ml	93
54) 2,4-Dinitrotoluene	9.857	165	109996	4009.15	ng/ml	93
55) Dibenzofuran	9.879	168	402377	3476.13	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.959	232	85335	3762.71	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	10.007	232	89845	3855.39	ng/ml	96
58) Diethyl phthalate	10.103	149	293319	3595.56	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.092	170	258901	3476.10	ng/ml	97
60) Fluorene	10.232	166	300618	3344.89	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.221	204	154914	3431.00	ng/ml	98
62) 4-Nitroaniline	10.248	138	72956	4374.55	ng/ml	97
63) 4,6-Dinitro-2-methylph...	10.274	198	48951	3514.58	ng/ml	96
65) N-Nitrosodiphenylamine	10.344	169	272217	3645.31	ng/ml	99
66) Azobenzene (1,2-DPH)	10.387	77	304430	4298.03	ng/ml	89
68) 4-Bromophenyl phenyl e...	10.724	248	110191	3769.31	ng/ml	98
69) Hexachlorobenzene	10.799	284	126260	3378.26	ng/ml	97
70) Pentachlorophenol (PCP)	10.991	266	70387	4121.32	ng/ml	97
71) Phenanthrene	11.210	178	462405	3501.15	ng/ml	98
72) Anthracene	11.264	178	459537	3701.91	ng/ml	99
73) Carbazole	11.419	167	389068	Below Cal		99
74) Di-n-butyl phthalate	11.767	149	533571	4109.67	ng/ml	99
75) Fluoranthene	12.483	202	553812	3805.59	ng/ml	99
76) Benzidine	12.644	184	540514	16171.97	ng/ml	99
77) Pyrene	12.778	202	526068	3564.61	ng/ml	99
80) Butyl benzyl phthalate	13.799	149	256309	4324.59	ng/ml	97
81) Bis(2-ethylhexyl) adipate	13.976	129	217064	4399.22	ng/ml	99
82) 3,3-Dichlorobenzidine	14.944	252	126011	13053.24	ng/ml	99
83) Benz(a)anthracene	14.976	228	477652	4012.83	ng/ml	97
84) Chrysene	15.061	228	442427	3980.07	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.147	149	328020	4460.93	ng/ml	99
87) Di-n-octyl phthalate	16.821	149	575101	4467.09	ng/ml	97
88) Benzo(b)fluoranthene	17.581	252	529474	4783.00	ng/ml	99
89) Benzo(k)fluoranthene	17.650	252	471682	4221.53	ng/ml	99
90) Benzo(b+k)fluoranthene	17.650	252	1027057	8523.95	ng/ml	99
91) Benzo(e)pyrene	18.238	252	501602	4425.13	ng/ml	99
92) Benzo(a)pyrene	18.361	252	454160	4199.61	ng/ml	98
93) Perylene	18.559	252	402426	4075.71	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.902	276	465463	3945.39	ng/ml	100
96) Dibenz(a,h)anthracene	20.966	278	412814	4070.46	ng/ml	98
97) Benzo(g,h,i)perylene	21.437	276	476116	4152.27	ng/ml	98

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031919.D
Acq On : 3 Dec 2019 8:02 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL8
Misc : 1x, A19K218@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:31 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031920.D
Acq On : 3 Dec 2019 8:36 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL9
Misc : 1x, A19K219@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:39 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.626	152	69018	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.894	136	252672	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.675	162	126900	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.189	188	244923	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.008	240	206845	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.506	264	214795	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	20.918	292	201906	2000.00	ng/ml	0.04
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.359	112	318044	6122.52	ng/ml	0.00
5) Phenol-d6 (Surr)	6.268	99	393576	7437.06	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.172	82	274563	6734.03	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.980	172	484354	4866.96	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.477	330	100016	6483.20	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.991	244	600621	6236.42	ng/ml	0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.952	74	244412	7560.16	ng/ml	96
3) Pyridine	3.974	79	396777	7624.71	ng/ml	94
6) Phenol	6.284	94	395390	7350.57	ng/ml	98
7) Aniline	6.306	93	400577	Below Cal		97
8) Bis(2-chloroethyl) ether	6.364	93	304655	6150.02	ng/ml	97
9) 2-Chlorophenol	6.423	128	290434	6384.95	ng/ml	98
10) 1,3-Dichlorobenzene	6.573	146	303755	5649.63	ng/ml	98
11) 1,4-Dichlorobenzene	6.643	146	284898	5498.79	ng/ml	98
12) Benzyl alcohol	6.766	108	180424	6811.86	ng/ml	97
13) 1,2-Dichlorobenzene	6.798	146	269994	5301.69	ng/ml	99
14) 2-Methylphenol	6.867	107	207314	6286.11	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.894	45	319137	6229.70	ng/ml	86
16) N-Nitrosodi-n-propylamine	7.033	70	183872	6518.19	ng/ml	92
17) 3+4-Methylphenol	7.022	107	254837	6683.03	ng/ml	98
18) Hexachloroethane	7.135	201	95333	5806.98	ng/ml	99
20) Nitrobenzene	7.193	77	260146	6487.29	ng/ml	94
22) Isophorone	7.434	82	541874	6699.69	ng/ml	98
23) 2-Nitrophenol	7.509	139	152907	5903.47	ng/ml	96
24) 2,4-Dimethylphenol	7.552	122	217024	6168.62	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.637	93	294291	5957.85	ng/ml	98
26) Benzoic acid	7.552	105	7552	1093.50	ng/ml#	1
27) 2,4-Dichlorophenol	7.755	162	208408	5971.07	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.835	180	225381	5059.40	ng/ml	98
29) Naphthalene	7.915	128	653583	5084.80	ng/ml	97
30) 4-Chloroaniline	7.964	127	227873	Below Cal		98
31) Hexachlorobutadiene	8.044	225	126095	5274.53	ng/ml	100
32) 4-Chloro-3-methylphenol	8.445	107	232146	6334.22	ng/ml	96
33) 2-Methylnaphthalene	8.611	142	502226	5444.01	ng/ml	98
34) 1-Methylnaphthalene	8.712	142	454977	5131.55	ng/ml	99
36) Hexachlorocyclopentadiene	8.777	237	149931	6245.99	ng/ml	99
37) 2,4,6-Trichlorophenol	8.894	196	150184	6045.90	ng/ml	99
38) 2,4,5-Trichlorophenol	8.932	198	146612	6129.02	ng/ml	99
39) 1,1'-Biphenyl	9.087	154	533040	4937.29	ng/ml	98
41) 2-Chloronaphthalene	9.108	162	393007	4901.16	ng/ml	98
42) 2-Nitroaniline	9.210	138	160094	6615.80	ng/ml	88
43) 2,6-Dimethylnaphthalene	9.247	156	389841	4926.37	ng/ml	96

see NJ

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031920.D
Acq On : 3 Dec 2019 8:36 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL9
Misc : 1x, A19K219@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:39 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

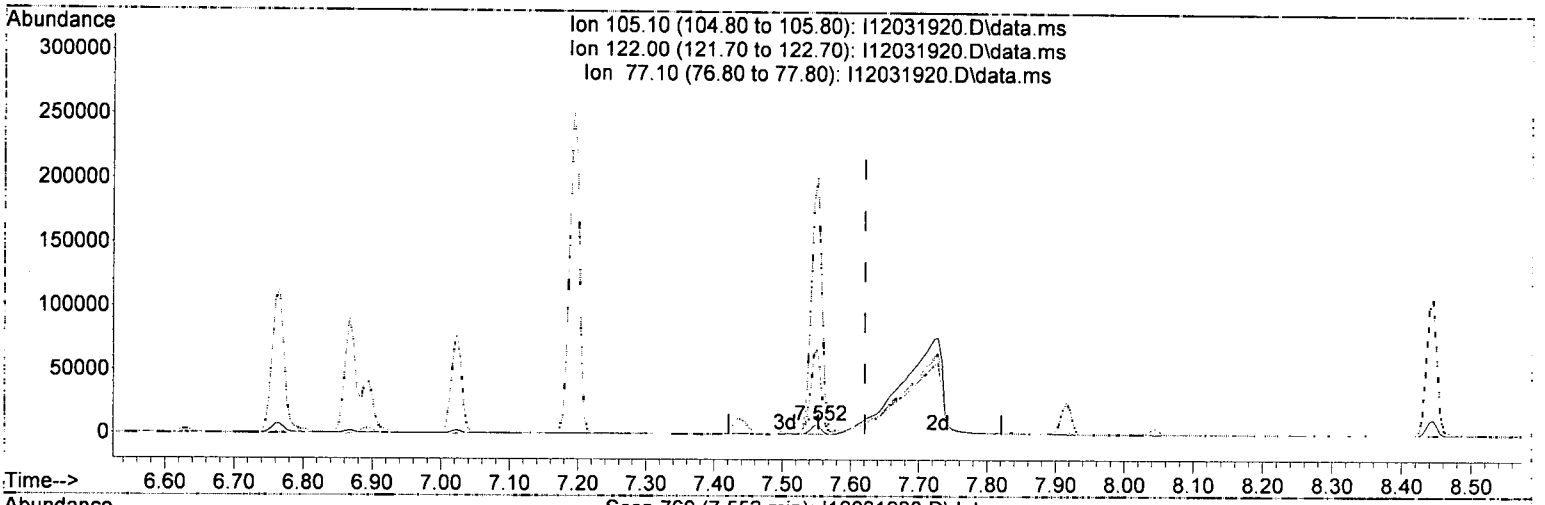
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.338	168	81003	5783.32	ng/ml	80
45)	Dimethyl phthalate	9.397	163	473072	5256.68	ng/ml	98
46)	1,3-Dinitrobenzene	9.424	168	86942	5967.46	ng/ml	89
47)	2,6-Dinitrotoluene	9.451	165	118901	5829.04	ng/ml	90
48)	1,2-Dinitrobenzene	9.515	168	59297	5999.01	ng/ml	81
49)	Acenaphthylene	9.531	152	624405	4962.26	ng/ml	99
50)	3-Nitroaniline	9.627	138	102695	Below Cal		96
51)	Acenaphthene	9.707	153	406943	4964.11	ng/ml	98
52)	2,4-Dinitrophenol	9.729	184	56948	5461.39	ng/ml	88
53)	4-Nitrophenol	9.788	139	101931	6104.16	ng/ml	94
54)	2,4-Dinitrotoluene	9.862	165	159707	6060.88	ng/ml	93
55)	Dibenzofuran	9.884	168	553828	4818.07	ng/ml	98
56)	2,3,5,6-Tetrachlorophenol	9.964	232	128655	5789.56	ng/ml	96
57)	2,3,4,6-Tetrachlorophenol	10.007	232	131822	5768.05	ng/ml	97
58)	Diethyl phthalate	10.108	149	398303	4916.71	ng/ml	97
59)	2,3,5-Trimethylnaphtha...	10.092	170	353106	4774.18	ng/ml	94
60)	Fluorene	10.231	166	410765	4602.52	ng/ml	99
61)	4-Chlorophenyl phenyl ...	10.226	204	220999	4928.96	ng/ml	100
62)	4-Nitroaniline	10.253	138	104811	6328.70	ng/ml	97
63)	4,6-Dinitro-2-methylph...	10.285	198	78166	5372.26	ng/ml	87
65)	N-Nitrosodiphenylamine	10.349	169	374468	4963.55	ng/ml	100
66)	Azobenzene (1,2-DPH)	10.387	77	418126	5843.16	ng/ml	90
68)	4-Bromophenyl phenyl e...	10.724	248	163449	5534.22	ng/ml	99
69)	Hexachlorobenzene	10.804	284	183555	4861.30	ng/ml	97
70)	Pentachlorophenol (PCP)	10.996	266	111309	6191.44	ng/ml	98
71)	Phenanthrene	11.216	178	653492	4897.64	ng/ml	97
72)	Anthracene	11.264	178	632566	5043.94	ng/ml	98
73)	Carbazole	11.424	167	500765	Below Cal		98
74)	Di-n-butyl phthalate	11.767	149	747267	5697.03	ng/ml	97
75)	Fluoranthene	12.489	202	774023	5264.68	ng/ml	98
76)	Benzidine	12.649	184	707393	18812.67	ng/ml	98
77)	Pyrene	12.783	202	736750	4941.38	ng/ml	98
80)	Butyl benzyl phthalate	13.810	149	380099	6466.18	ng/ml	93
81)	Bis(2-ethylhexyl) adipate	13.981	129	315678	6717.42	ng/ml	99
82)	3,3-Dichlorobenzidine	14.949	252	152911	16391.28	ng/ml	99
83)	Benz(a)anthracene	14.981	228	671286	5955.71	ng/ml	97
84)	Chrysene	15.072	228	625029	5937.95	ng/ml	98
85)	Bis(2-ethylhexyl) phth...	15.152	149	466925	6862.36	ng/ml	97
87)	Di-n-octyl phthalate	16.832	149	848830	6878.84	ng/ml	97
88)	Benzo(b)fluoranthene	17.597	252	771504	7122.72	ng/ml	99
89)	Benzo(k)fluoranthene	17.666	252	662984	6615.76	ng/ml	98
90)	Benzo(b+k)fluoranthene	17.666	252	1472100	12695.69	ng/ml	98
91)	Benzo(e)pyrene	18.254	252	717478	6468.85	ng/ml	98
92)	Benzo(a)pyrene	18.377	252	645759	6480.40	ng/ml	100
93)	Perylene	18.581	252	577170	5974.11	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	20.923	276	698647	5933.66	ng/ml	99
96)	Dibenz(a,h)anthracene	20.993	278	604383	5971.18	ng/ml	98
97)	Benzo(g,h,i)perylene	21.469	276	694573	6069.46	ng/ml	99

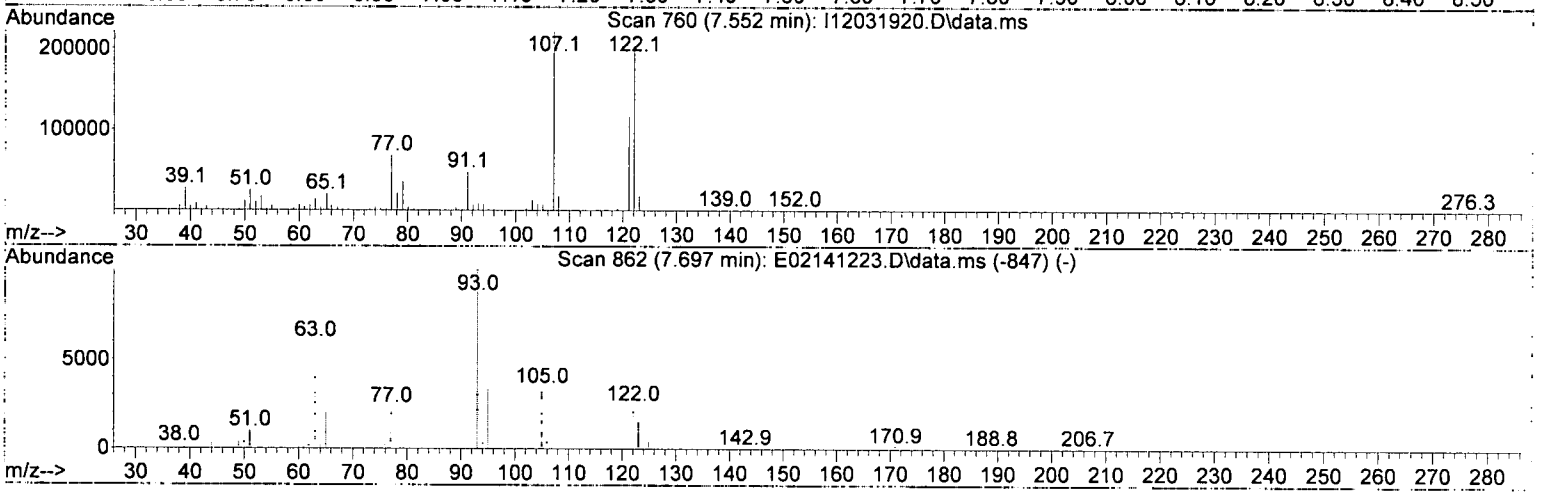
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031920.D
Acq On : 3 Dec 2019 8:36 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL9
Misc : 1x, A19K219@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:39 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I12031920.D\data.ms

(26) Benzoic acid (T)

7.552min (-0.070) 1093.50 ng/ml

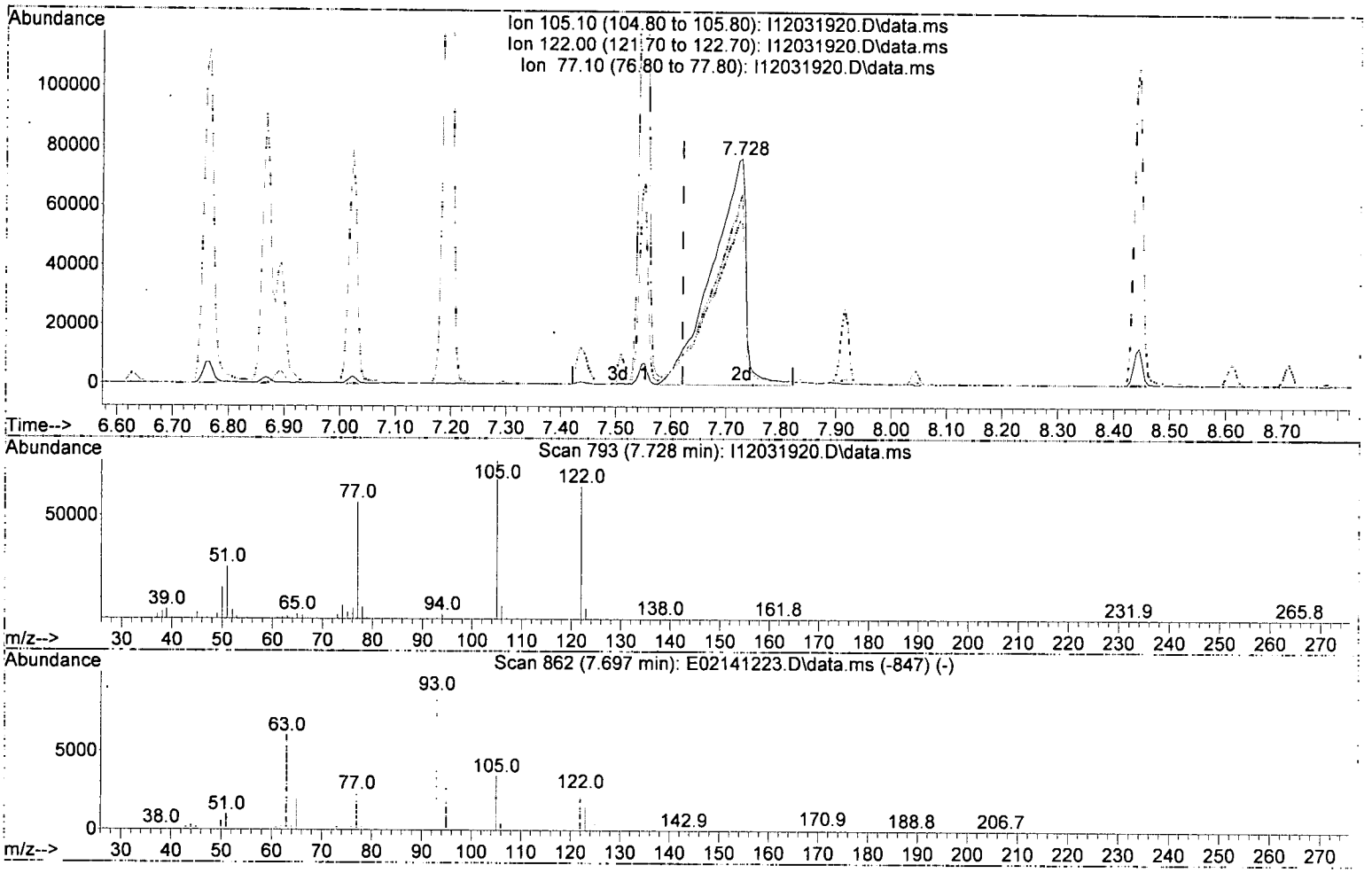
response 7552

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	2782.92#
77.10	77.80	939.54#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031920.D
Acq On : 3 Dec 2019 8:36 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL9
Misc : 1x, A19K219@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:39 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I12031920.D\data.ms

(26) Benzoic acid (T)

7.728min (+ 0.107) 11813.95 ng/ml m

12/11/19

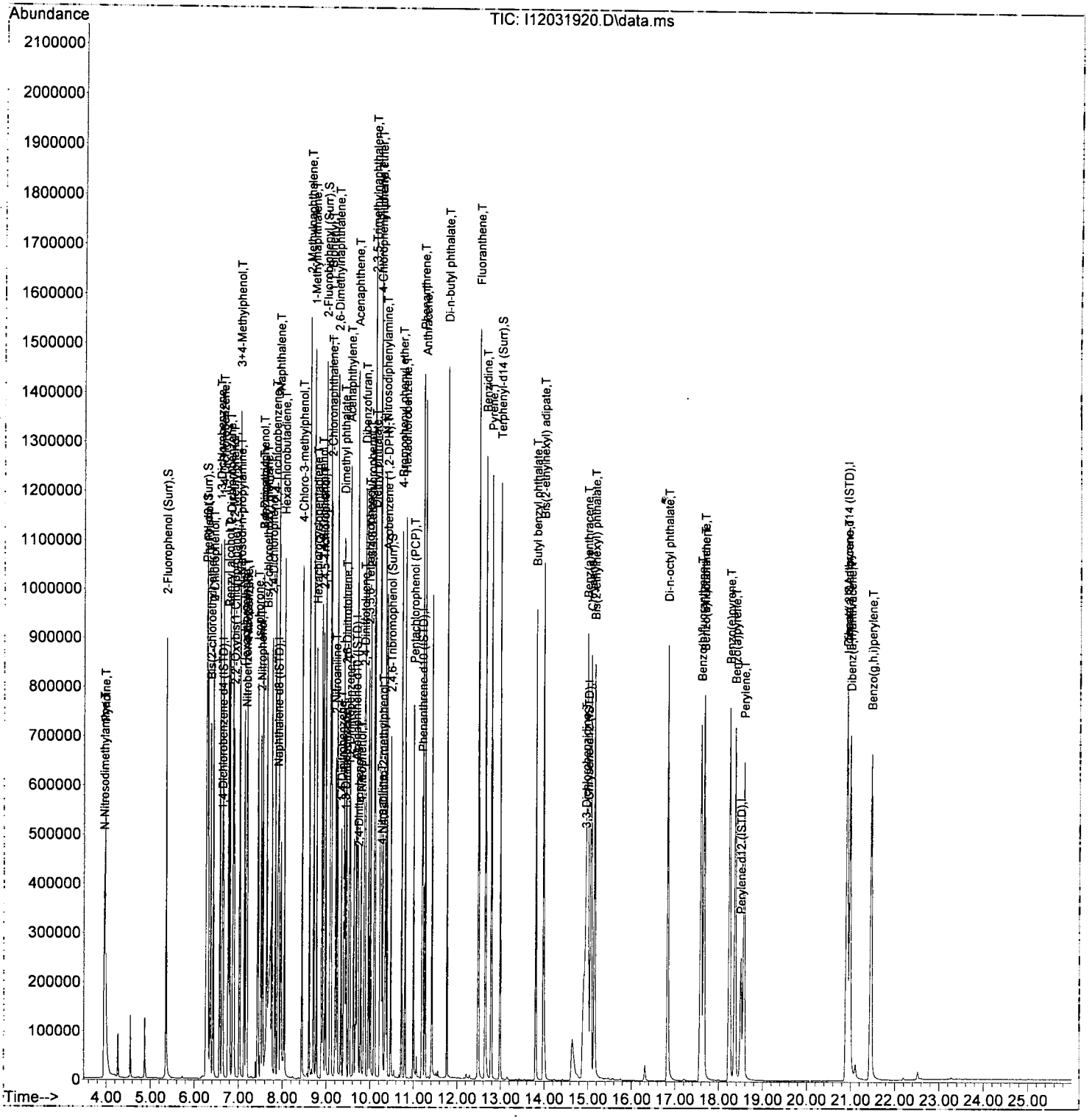
response 327041

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	83.87
77.10	77.80	73.87
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031920.D
Acq On : 3 Dec 2019 8:36 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CAL9
Misc : 1x, A19K219@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:39 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031921.D
Acq On : 3 Dec 2019 9:10 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CALA
Misc : 1x, A19K220@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:46 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.627	152	66064	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.894	136	240133	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.675	162	122459	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.189	188	237781	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.013	240	193280	2000.00	ng/ml	0.03
86) Perylene-d12 (ISTD)	18.506	264	201932	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	20.918	292	193681	2000.00	ng/ml	0.04
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.359	112	395455	7645.93	ng/ml	0.00
5) Phenol-d6 (Surr)	6.274	99	479889	9473.51	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.178	82	331420	8491.99	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	8.980	172	576096	5998.75	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.478	330	127228	8754.67	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.991	244	723275	8037.05	ng/ml	0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.958	74	306026	9889.27	ng/ml	95
3) Pyridine	3.979	79	488420	9805.46	ng/ml	96
6) Phenol	6.290	94	466321	9056.87	ng/ml	93
7) Aniline	6.306	93	479598	Below Cal		96
8) Bis(2-chloroethyl) ether	6.370	93	363767	7671.66	ng/ml	96
9) 2-Chlorophenol	6.423	128	351884	8081.78	ng/ml	97
10) 1,3-Dichlorobenzene	6.573	146	369308	7176.01	ng/ml	97
11) 1,4-Dichlorobenzene	6.643	146	343825	6932.86	ng/ml	99
12) Benzyl alcohol	6.766	108	218745	8571.34	ng/ml	98
13) 1,2-Dichlorobenzene	6.798	146	323930	6645.21	ng/ml	99
14) 2-Methylphenol	6.867	107	249183	7893.50	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.894	45	371752	7581.25	ng/ml	85
16) N-Nitrosodi-n-propylamine	7.033	70	219865	8142.63	ng/ml	94
17) 3+4-Methylphenol	7.028	107	300974	8525.35	ng/ml	96
18) Hexachloroethane	7.135	201	117991	7508.50	ng/ml	96
20) Nitrobenzene	7.199	77	307605	8013.77	ng/ml	91
22) Isophorone	7.440	82	665888	8662.90	ng/ml	96
23) 2-Nitrophenol	7.509	139	185322	7528.56	ng/ml	96
24) 2,4-Dimethylphenol	7.552	122	262222	8002.38	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.643	93	349639	7447.96	ng/ml	97
26) Benzoic acid	7.552	105	9107	1178.78	ng/ml#	1
27) 2,4-Dichlorophenol	7.755	162	246195	7394.24	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.835	180	271812	6420.30	ng/ml	98
29) Naphthalene	7.916	128	761715	6235.50	ng/ml	96
30) 4-Chloroaniline	7.964	127	300670	Below Cal		98
31) Hexachlorobutadiene	8.044	225	155277	6834.37	ng/ml	98
32) 4-Chloro-3-methylphenol	8.445	107	286207	8115.09	ng/ml	96
33) 2-Methylnaphthalene	8.611	142	590164	6731.28	ng/ml	99
34) 1-Methylnaphthalene	8.713	142	547369	6495.98	ng/ml	98
36) Hexachlorocyclopentadiene	8.777	237	188518	8223.37	ng/ml	99
37) 2,4,6-Trichlorophenol	8.894	196	191296	8079.97	ng/ml	98
38) 2,4,5-Trichlorophenol	8.932	198	175850	7647.82	ng/ml	99
39) 1,1'-Biphenyl	9.087	154	625310	6001.99	ng/ml	97
41) 2-Chloronaphthalene	9.108	162	465897	6020.87	ng/ml	96
42) 2-Nitroaniline	9.210	138	200120	8569.76	ng/ml	89
43) 2,6-Dimethylnaphthalene	9.247	156	465388	6094.32	ng/ml	95

see MZ

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031921.D
Acq On : 3 Dec 2019 9:10 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CALA
Misc : 1x, A19K220@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:46 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

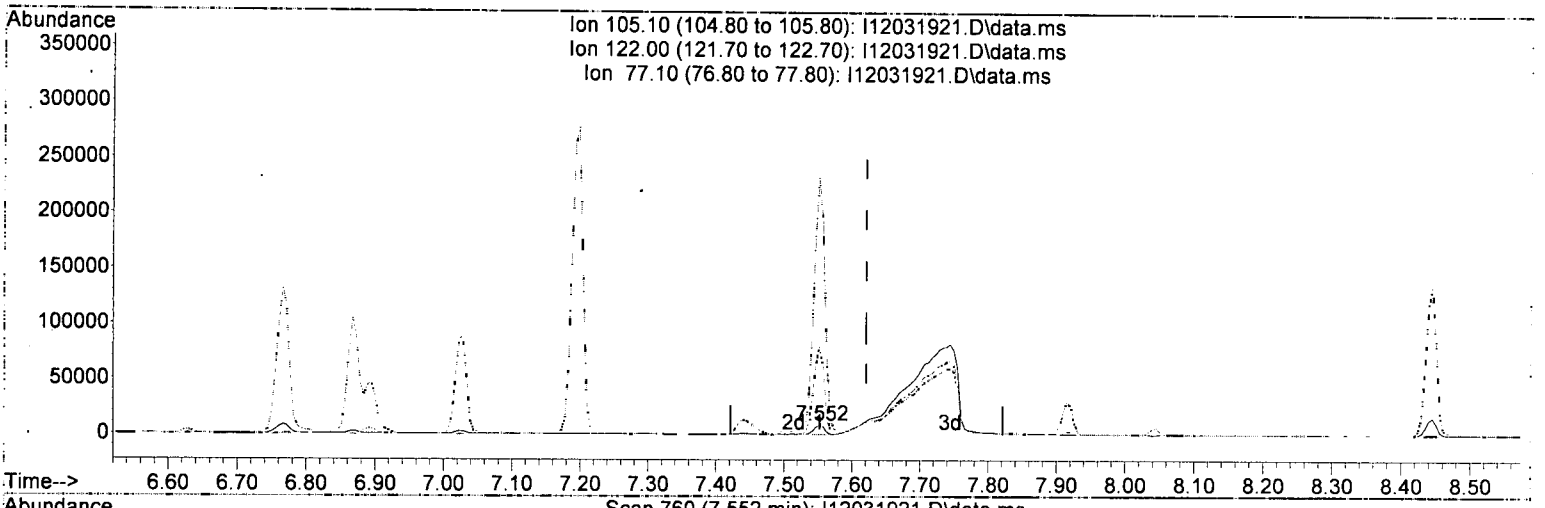
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.338	168	102409	7412.40 ng/ml	83
45) Dimethyl phthalate	9.403	163	566278	6520.56 ng/ml	99
46) 1,3-Dinitrobenzene	9.424	168	107208	7625.31 ng/ml	92
47) 2,6-Dinitrotoluene	9.456	165	147404	7488.44 ng/ml	85
48) 1,2-Dinitrobenzene	9.520	168	71730	7520.01 ng/ml	84
49) Acenaphthylene	9.531	152	720035	5929.77 ng/ml	97
50) 3-Nitroaniline	9.627	138	129027	Below Cal	94
51) Acenaphthene	9.707	153	490886	6205.25 ng/ml	98
52) 2,4-Dinitrophenol	9.734	184	77359	6915.04 ng/ml	86
53) 4-Nitrophenol	9.793	139	129793	8025.75 ng/ml	93
54) 2,4-Dinitrotoluene	9.868	165	194090	7880.39 ng/ml	93
55) Dibenzofuran	9.884	168	656214	5915.81 ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.964	232	162823	7701.78 ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.007	232	165998	7631.01 ng/ml	96
58) Diethyl phthalate	10.109	149	470201	6014.73 ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.098	170	422363	5917.67 ng/ml	96
60) Fluorene	10.237	166	481267	5588.03 ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.226	204	266759	6165.31 ng/ml	99
62) 4-Nitroaniline	10.258	138	130990	8196.28 ng/ml	96
63) 4,6-Dinitro-2-methylph...	10.285	198	99419	6846.36 ng/ml	93
65) N-Nitrosodiphenylamine	10.349	169	449608	6138.52 ng/ml	99
66) Azobenzene (1,2-DPH)	10.387	77	492851	7094.29 ng/ml	89
68) 4-Bromophenyl phenyl e...	10.724	248	202383	7058.31 ng/ml	99
69) Hexachlorobenzene	10.804	284	226619	6182.09 ng/ml	96
70) Pentachlorophenol (PCP)	10.996	266	143057	7943.68 ng/ml	97
71) Phenanthrene	11.216	178	779684	6018.91 ng/ml	97
72) Anthracene	11.269	178	762087	6259.23 ng/ml	97
73) Carbazole	11.424	167	575598	Below Cal	98
74) Di-n-butyl phthalate	11.767	149	881700	6923.83 ng/ml	96
75) Fluoranthene	12.489	202	930387	6518.30 ng/ml	99
76) Benzidine	12.655	184	875986	21636.03 ng/ml	98
77) Pyrene	12.788	202	882836	6099.03 ng/ml	97
80) Butyl benzyl phthalate	13.810	149	466464	8203.93 ng/ml	93
81) Bis(2-ethylhexyl) adipate	13.986	129	385486	8768.81 ng/ml	99
82) 3,3-Dichlorobenzidine	14.954	252	189164	21053.85 ng/ml	100
83) Benz(a)anthracene	14.987	228	816781	7755.14 ng/ml	97
84) Chrysene	15.077	228	751720	7642.77 ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.158	149	556986	8965.93 ng/ml	96
87) Di-n-octyl phthalate	16.837	149	1053413	9306.36 ng/ml	97
88) Benzo(b)fluoranthene	17.602	252	934117	9173.35 ng/ml	99
89) Benzo(k)fluoranthene	17.672	252	815308	9898.79 ng/ml	98
90) Benzo(b+k)fluoranthene	17.672	252	1795348	16748.81 ng/ml	98
91) Benzo(e)pyrene	18.265	252	874278	8384.69 ng/ml	99
92) Benzo(a)pyrene	18.383	252	786876	9036.83 ng/ml	99
93) Perylene	18.586	252	707152	7785.76 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.934	276	876084	7756.62 ng/ml	99
96) Dibenz(a,h)anthracene	20.998	278	747087	7694.52 ng/ml	98
97) Benzo(g,h,i)perylene	21.480	276	856246	7799.97 ng/ml	97

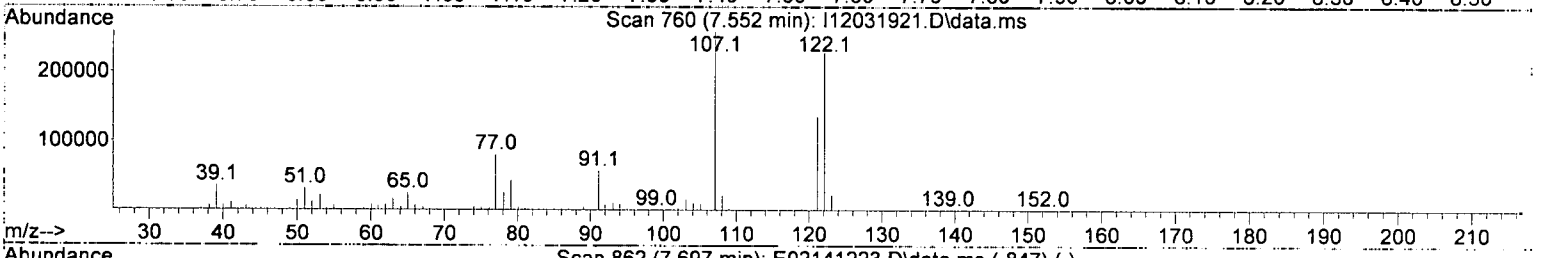
(#) = qualifier out of range (m) = manual integration (+) = signals summed

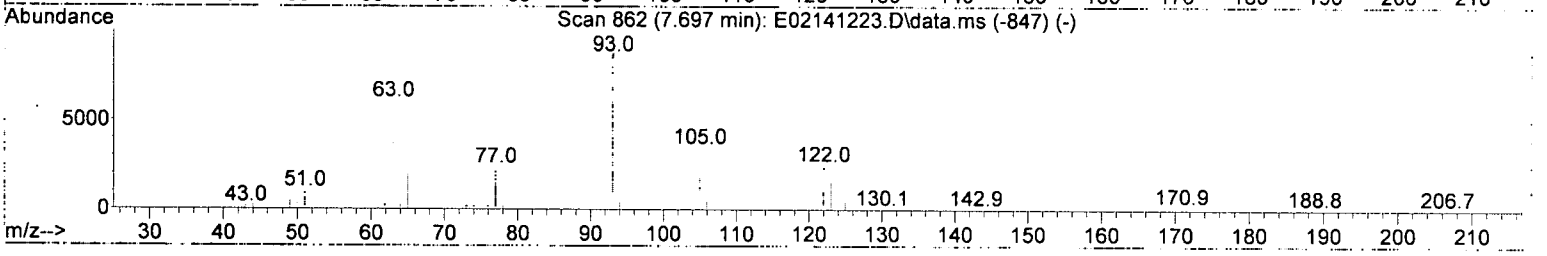
Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031921.D
Acq On : 3 Dec 2019 9:10 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CALA
Misc : 1x, A19K220@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:46 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I12031921.D\data.ms

(26) Benzoic acid (T)

7.552min (-0.069) 1178.78 ng/ml

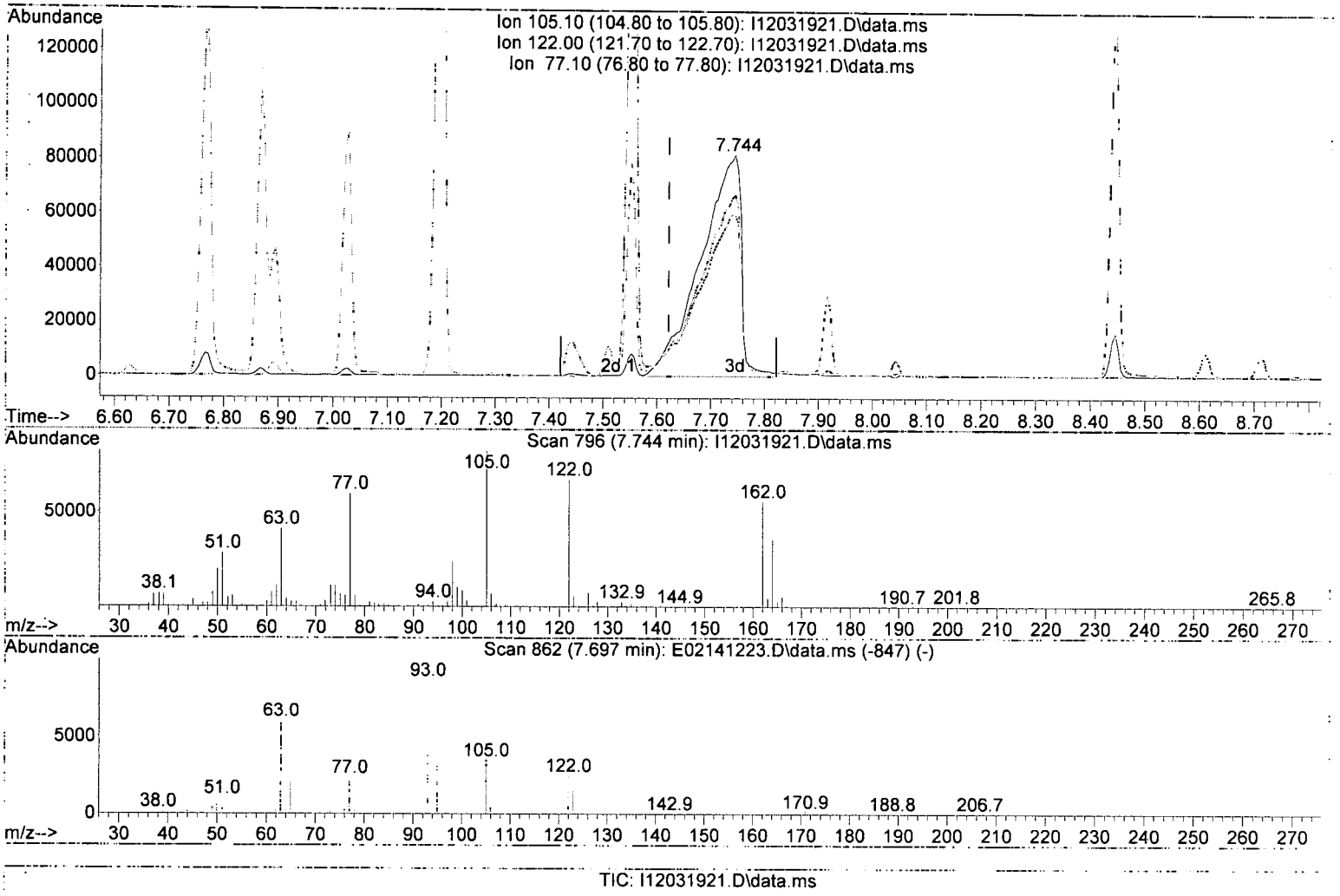
response 9107

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	2791.62#
77.10	77.80	970.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031921.D
Acq On : 3 Dec 2019 9:10 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CALA
Misc : 1x, A19K220@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:46 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I12031921.D\data.ms

(26) Benzoic acid (T)

7.744min (+ 0.123) 15012.09 ng/ml m

12/4/19

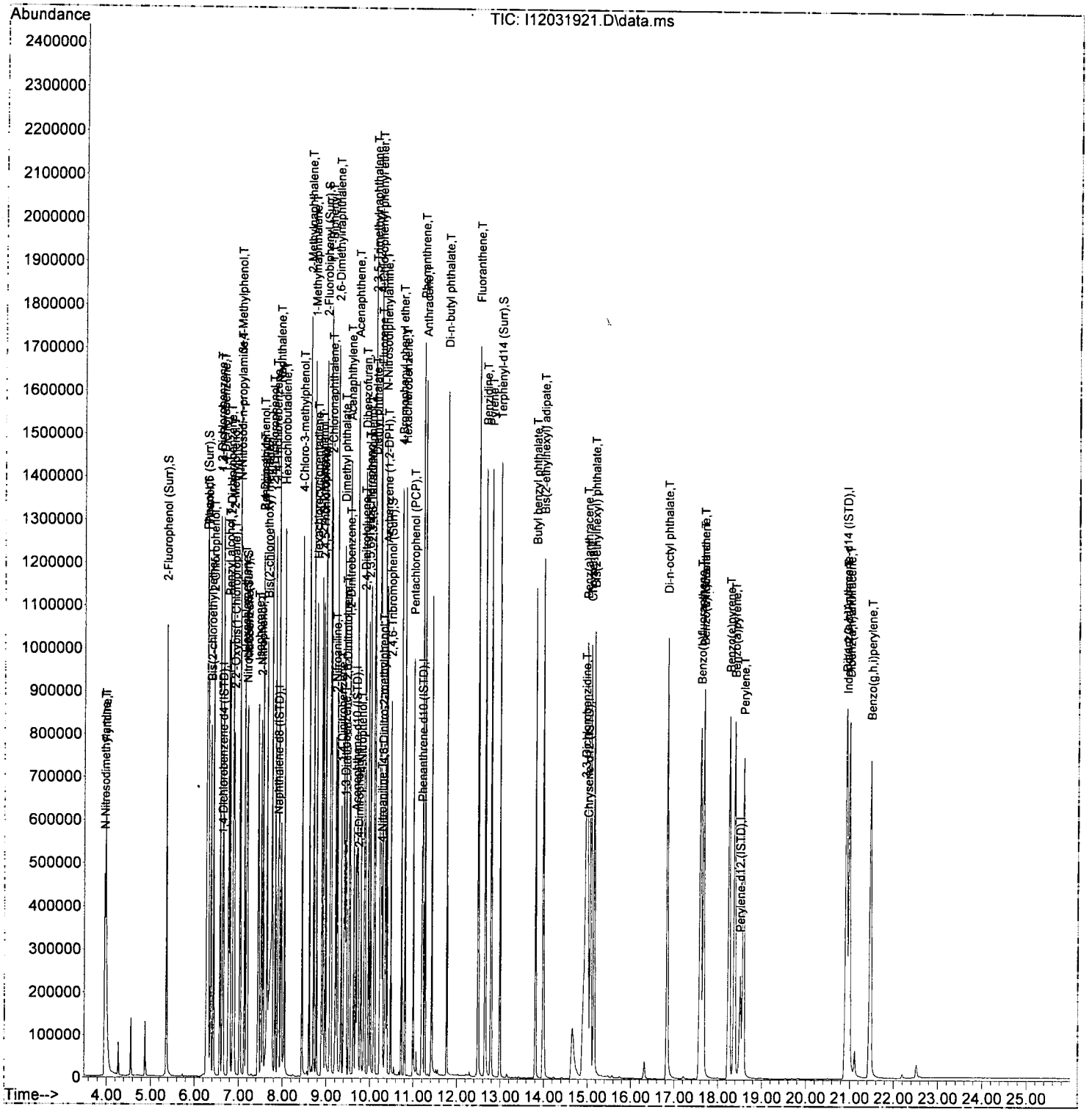
response 425227

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	81.86
77.10	77.80	72.77
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031921.D
Acq On : 3 Dec 2019 9:10 pm
Operator : JK /AMS /DTH
Sample : 9L03048-CALA
Misc : 1x, A19K220@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:14:46 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031923.D
Acq On : 3 Dec 2019 10:18 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:15:06 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

12/4/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.621	152	79269	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.889	136	305935	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	147732	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.183	188	264239	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.992	240	260057	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.490	264	255903	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.897	292	219828	2000.00	ng/ml	0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.353	112	53422	1039.57	ng/ml	0.00
5) Phenol-d6 (Surr)	6.257	99	72916	1199.65	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.167	82	58881	1257.38	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.974	172	121110	1045.35	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.467	330	17610	1009.55	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.981	244	129835	1072.27	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.941	74	39903	1074.66	ng/ml	95
3) Pyridine	3.979	79	58545	979.55	ng/ml	95
6) Phenol	6.268	94	83015	1343.73	ng/ml	96
7) Aniline	6.300	93	87696	Below Cal		99
8) Bis(2-chloroethyl) ether	6.354	93	63943	1123.88	ng/ml	97
9) 2-Chlorophenol	6.418	128	59687	1142.48	ng/ml	97
10) 1,3-Dichlorobenzene	6.568	146	62863	1018.01	ng/ml	99
11) 1,4-Dichlorobenzene	6.637	146	60548	1017.50	ng/ml	99
12) Benzyl alcohol	6.755	108	31788	1116.24	ng/ml	94
13) 1,2-Dichlorobenzene	6.792	146	59625	1019.41	ng/ml	97
14) 2-Methylphenol	6.856	107	46867	1237.31	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.888	45	73682	1252.31	ng/ml	91
16) N-Nitrosodi-n-propylamine	7.012	70	43328	1337.33	ng/ml	96
17) 3+4-Methylphenol	7.006	107	59692	1248.51	ng/ml	98
18) Hexachloroethane	7.129	201	18547	983.65	ng/ml	95
20) Nitrobenzene	7.183	77	59586	1293.75	ng/ml	96
22) Isophorone	7.418	82	114777	1172.03	ng/ml	98
23) 2-Nitrophenol	7.504	139	31071	990.75	ng/ml	95
24) 2,4-Dimethylphenol	7.536	122	45354	1016.69	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.632	93	69064	1154.76	ng/ml	99
26) Benzoic acid	7.616	105	23605	1590.28	ng/ml	94
27) 2,4-Dichlorophenol	7.739	162	44608	1091.09	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.830	180	52151	966.88	ng/ml	99
29) Naphthalene	7.910	128	162807	1046.10	ng/ml	99
30) 4-Chloroaniline	7.953	127	60348	2924.19	ng/ml	97
31) Hexachlorobutadiene	8.038	225	27302	943.21	ng/ml	99
32) 4-Chloro-3-methylphenol	8.434	107	44422	1090.48	ng/ml	98
33) 2-Methylnaphthalene	8.605	142	118904	1064.50	ng/ml	98
34) 1-Methylnaphthalene	8.707	142	112003	1043.32	ng/ml	99
36) Hexachlorocyclopentadiene	8.777	237	28362	1006.34	ng/ml	98
37) 2,4,6-Trichlorophenol	8.889	196	29702	1021.64	ng/ml	96
38) 2,4,5-Trichlorophenol	8.921	198	29713	1072.70	ng/ml	98
39) 1,1'-Biphenyl	9.076	154	131132	1043.34	ng/ml	100
41) 2-Chloronaphthalene	9.097	162	96488	1033.61	ng/ml	99
42) 2-Nitroaniline	9.194	138	30197	1071.91	ng/ml	94
43) 2,6-Dimethylnaphthalene	9.237	156	94716	1028.13	ng/ml	98

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031923.D
Acq On : 3 Dec 2019 10:18 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:15:06 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9

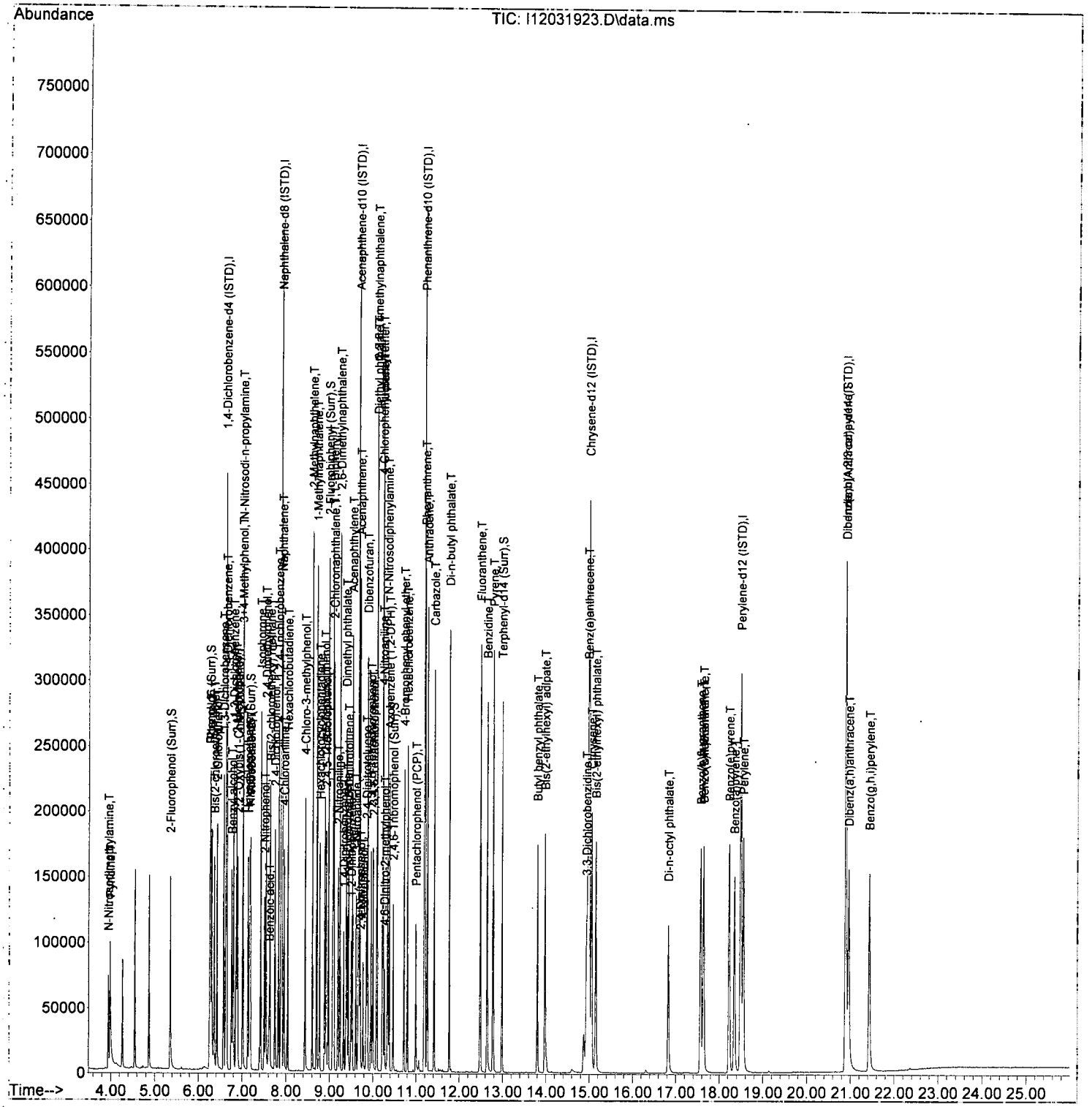
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.322	168	13485	930.84	ng/ml	91
45) Dimethyl phthalate	9.376	163	110201	1051.86	ng/ml	100
46) 1,3-Dinitrobenzene	9.402	168	16623	980.07	ng/ml	96
47) 2,6-Dinitrotoluene	9.434	165	25208	1061.54	ng/ml	93
48) 1,2-Dinitrobenzene	9.493	168	11492	998.69	ng/ml	81
49) Acenaphthylene	9.520	152	156719	1069.85	ng/ml	99
50) 3-Nitroaniline	9.611	138	24218	2298.99	ng/ml	93
51) Acenaphthene	9.702	153	97367	1020.25	ng/ml	99
52) 2,4-Dinitrophenol	9.713	184	4566	732.95	ng/ml	94
53) 4-Nitrophenol	9.771	139	15907	917.21	ng/ml	92
54) 2,4-Dinitrotoluene	9.846	165	30634	941.75	ng/ml	92
55) Dibenzofuran	9.873	168	132714	991.75	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	9.953	232	22778	872.79	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	10.001	232	24828	925.08	ng/ml	94
58) Diethyl phthalate	10.092	149	100808	1068.92	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.087	170	84787	984.71	ng/ml	96
60) Fluorene	10.226	166	103069	992.01	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.215	204	49922	956.41	ng/ml	98
62) 4-Nitroaniline	10.231	138	21123	1095.60	ng/ml	95
63) 4,6-Dinitro-2-methylph...	10.263	198	11253	850.12	ng/ml	95
65) N-Nitrosodiphenylamine	10.333	169	86917	1067.86	ng/ml	98
66) Azobenzene (1,2-DPH)	10.376	77	100124	1296.92	ng/ml	98
68) 4-Bromophenyl phenyl e...	10.718	248	31866	1000.08	ng/ml	99
69) Hexachlorobenzene	10.793	284	39223	962.85	ng/ml	95
70) Pentachlorophenol (PCP)	10.991	266	15555	942.83	ng/ml	98
71) Phenanthrene	11.205	178	146817	1019.90	ng/ml	100
72) Anthracene	11.258	178	147123	1087.37	ng/ml	99
73) Carbazole	11.413	167	129315	1267.18	ng/ml	99
74) Di-n-butyl phthalate	11.761	149	161605	1141.99	ng/ml	100
75) Fluoranthene	12.478	202	166323	1048.58	ng/ml	99
76) Benzidine	12.633	184	137318	6465.31	ng/ml	98
77) Pyrene	12.772	202	169847	1055.89	ng/ml	99
80) Butyl benzyl phthalate	13.799	149	61785	985.18	ng/ml	97
81) Bis(2-ethylhexyl) adipate	13.975	129	52072	972.27	ng/ml	99
82) 3,3-Dichlorobenzidine	14.933	252	49016	4338.54	ng/ml	99
83) Benz(a)anthracene	14.970	228	149572	1055.49	ng/ml	99
84) Chrysene	15.051	228	133946	1012.15	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.147	149	89562	1035.19	ng/ml	100
87) Di-n-octyl phthalate	16.826	149	113940	791.45	ng/ml	97
88) Benzo(b)fluoranthene	17.570	252	139171	1078.46	ng/ml	100
89) Benzo(k)fluoranthene	17.634	252	143016	995.37	ng/ml	99
90) Benzo(b+k)fluoranthene	17.634	252	291066	2032.86	ng/ml	99
91) Benzo(e)pyrene	18.228	252	141737	1072.63	ng/ml	99
92) Benzo(a)pyrene	18.345	252	120272	893.20	ng/ml	99
93) Perylene	18.549	252	138430	1202.67	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.891	276	121312	946.31	ng/ml	99
96) Dibenz(a,h)anthracene	20.961	278	115452	1047.65	ng/ml	99
97) Benzo(g,h,i)perylene	21.431	276	132703	1065.07	ng/ml	95

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031923.D
Acq On : 3 Dec 2019 10:18 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 04 09:15:06 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 09:13:14 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031923.D
Acq On : 3 Dec 2019 10:18 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 05 10:40:53 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 12/5/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.621	152	79269	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.889	136	305935	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.670	162	147732	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.183	188	264239	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.992	240	260057	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.490	264	255903	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.897	292	219828	2000.00	ng/ml	0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.353	112	53322	1011.11	ng/ml	0.00
5) Phenol-d6 (Surr)	6.257	99	72916	1064.29	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.167	82	58881	1088.32	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.974	172	121110	1082.43	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.467	330	17610	1067.33	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.981	244	129835	1088.64	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.941	74	39903	978.30	ng/ml	95
3) Pyridine	3.979	79	58545	891.86	ng/ml	95
6) Phenol	6.268	94	83015	1089.72	ng/ml	96
7) Aniline	6.300	93	87696	1109.00	ng/ml	99
8) Bis(2-chloroethyl) ether	6.354	93	63943	1010.66	ng/ml	97
9) 2-Chlorophenol	6.418	128	59687	1077.44	ng/ml	97
10) 1,3-Dichlorobenzene	6.568	146	62863	1028.92	ng/ml	99
11) 1,4-Dichlorobenzene	6.637	146	60548	1012.67	ng/ml	99
12) Benzyl alcohol	6.755	108	31788	910.32	ng/ml	94
13) 1,2-Dichlorobenzene	6.792	146	59625	1010.03	ng/ml	97
14) 2-Methylphenol	6.856	107	46867	1105.42	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.888	45	73682	930.42	ng/ml	91
16) N-Nitrosodi-n-propylamine	7.012	70	43328	1074.08	ng/ml	96
17) 3+4-Methylphenol	7.006	107	59692	1135.28	ng/ml	98
18) Hexachloroethane	7.129	201	18547	1062.55	ng/ml	95
20) Nitrobenzene	7.183	77	59586	1081.64	ng/ml	96
22) Isophorone	7.418	82	114777	1052.38	ng/ml	98
23) 2-Nitrophenol	7.504	139	31071	1120.12	ng/ml	95
24) 2,4-Dimethylphenol	7.536	122	45354	1034.07	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.632	93	69064	1074.55	ng/ml	99
26) Benzoic acid	7.616	105	23605	1833.57	ng/ml	94
27) 2,4-Dichlorophenol	7.739	162	44608	1107.92	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.830	180	52151	1041.04	ng/ml	99
29) Naphthalene	7.910	128	162807	1036.07	ng/ml	99
30) 4-Chloroaniline	7.953	127	60348	1158.18	ng/ml	97
31) Hexachlorobutadiene	8.038	225	27302	1059.73	ng/ml	99
32) 4-Chloro-3-methylphenol	8.434	107	44422	1027.52	ng/ml	98
33) 2-Methylnaphthalene	8.605	142	118904	1063.27	ng/ml	98
34) 1-Methylnaphthalene	8.707	142	112003	1060.10	ng/ml	99
36) Hexachlorocyclopentadiene	8.777	237	28362	1088.26	ng/ml	98
37) 2,4,6-Trichlorophenol	8.889	196	29702	1055.26	ng/ml	96
38) 2,4,5-Trichlorophenol	8.921	198	29713	1075.38	ng/ml	98
39) 1,1'-Biphenyl	9.076	154	131132	1047.37	ng/ml	100
41) 2-Chloronaphthalene	9.097	162	96488	1041.95	ng/ml	99
42) 2-Nitroaniline	9.194	138	30197	1046.92	ng/ml	94
43) 2,6-Dimethylnaphthalene	9.237	156	94716	1053.05	ng/ml	98

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031923.D
Acq On : 3 Dec 2019 10:18 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 05 10:40:53 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9

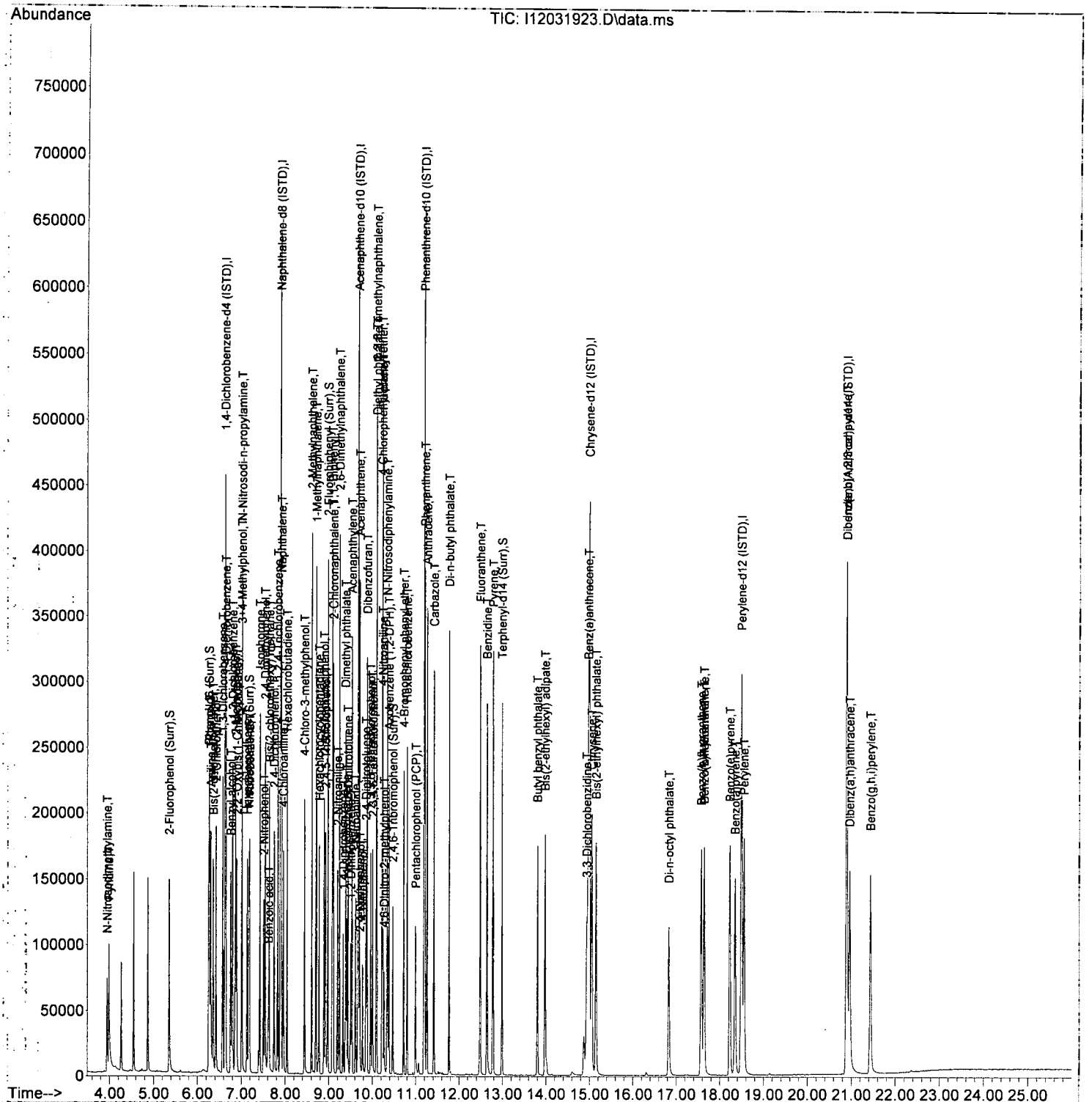
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.322	168	13485	1090.82	ng/ml	91
45)	Dimethyl phthalate	9.376	163	110201	1088.45	ng/ml	100
46)	1,3-Dinitrobenzene	9.402	168	16623	1074.38	ng/ml	96
47)	2,6-Dinitrotoluene	9.434	165	25208	1114.03	ng/ml	93
48)	1,2-Dinitrobenzene	9.493	168	11492	1032.79	ng/ml	81
49)	Acenaphthylene	9.520	152	156719	1103.97	ng/ml	99
50)	3-Nitroaniline	9.611	138	24218	1135.49	ng/ml	93
51)	Acenaphthene	9.702	153	97367	1030.66	ng/ml	99
52)	2,4-Dinitrophenol	9.713	184	4566	955.98	ng/ml	94
53)	4-Nitrophenol	9.771	139	15907	1059.91	ng/ml	92
54)	2,4-Dinitrotoluene	9.846	165	30634	1022.74	ng/ml	92
55)	Dibenzofuran	9.873	168	132714	1047.17	ng/ml	96
56)	2,3,5,6-Tetrachlorophenol	9.953	232	22778	1080.96	ng/ml	98
57)	2,3,4,6-Tetrachlorophenol	10.001	232	24828	1035.28	ng/ml	94
58)	Diethyl phthalate	10.092	149	100808	1101.27	ng/ml	99
59)	2,3,5-Trimethylnaphtha...	10.087	170	84787	1053.87	ng/ml	96
60)	Fluorene	10.226	166	103069	1068.61	ng/ml	100
61)	4-Chlorophenyl phenyl ...	10.215	204	49922	1037.34	ng/ml	98
62)	4-Nitroaniline	10.231	138	21123	1042.06	ng/ml	95
63)	4,6-Dinitro-2-methylph...	10.263	198	11253	1106.99	ng/ml	95
65)	N-Nitrosodiphenylamine	10.333	169	86917	1090.95	ng/ml	98
66)	Azobenzene (1,2-DPH)	10.376	77	100124	1073.25	ng/ml	98
68)	4-Bromophenyl phenyl e...	10.718	248	31866	1062.82	ng/ml	99
69)	Hexachlorobenzene	10.793	284	39223	1038.12	ng/ml	95
70)	Pentachlorophenol (PCP)	10.991	266	15555	1056.57	ng/ml	98
71)	Phenanthrene	11.205	178	146817	1025.26	ng/ml	100
72)	Anthracene	11.258	178	147123	1108.13	ng/ml	99
73)	Carbazole	11.413	167	129315	1035.05	ng/ml	99
74)	Di-n-butyl phthalate	11.761	149	161605	1162.30	ng/ml	100
75)	Fluoranthene	12.478	202	166323	1138.43	ng/ml	99
76)	Benzidine	12.633	184	137318	2100.06	ng/ml	98
77)	Pyrene	12.772	202	169847	1146.41	ng/ml	99
80)	Butyl benzyl phthalate	13.799	149	61785	1016.17	ng/ml	97
81)	Bis(2-ethylhexyl) adipate	13.975	129	52072	1037.94	ng/ml	99
82)	3,3-Dichlorobenzidine	14.933	252	49016	2020.17	ng/ml	99
83)	Benz(a)anthracene	14.970	228	149572	1106.06	ng/ml	99
84)	Chrysene	15.051	228	133946	1013.82	ng/ml	100
85)	Bis(2-ethylhexyl) phth...	15.147	149	89562	1047.98	ng/ml	100
87)	Di-n-octyl phthalate	16.826	149	113765	1032.51	ng/ml	97
88)	Benzo(b)fluoranthene	17.570	252	139171	1066.79	ng/ml	100
89)	Benzo(k)fluoranthene	17.634	252	143016	1090.33	ng/ml	99
90)	Benzo(b+k)fluoranthene	17.634	252	291066	2138.05	ng/ml	99
91)	Benzo(e)pyrene	18.228	252	141737	1089.73	ng/ml	99
92)	Benzo(a)pyrene	18.345	252	120272	1046.68	ng/ml	99
93)	Perylene	18.549	252	138430	1191.02	ng/ml	100
95)	Indeno(1,2,3-cd)pyrene	20.891	276	121312	1002.66	ng/ml	99
96)	Dibenz(a,h)anthracene	20.961	278	115452	1042.60	ng/ml	99
97)	Benzo(g,h,i)perylene	21.431	276	132703	1114.56	ng/ml	95

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-12\9L03048\
Data File : I12031923.D
Acq On : 3 Dec 2019 10:18 pm
Operator : JK /AMS /DTH
Sample : 9L03048-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Dec 05 10:40:53 2019
Quant Method : T:\methods\SV9_120319.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Wed Dec 04 10:57:36 2019
Response via : Initial Calibration
InstName : SV-GCMS9



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

Total Metals by EPA 6020A (ICPMS)
Benchsheet Data and Analysis (Including Calibration)

Batch 0010756
Sequence 0A24028

APEX LABORATORIES

Ag (Silver) - 6020 - Total
As (Arsenic) - 6020 - Total
Ba (Barium) - 6020 - Total
Cd (Cadmium) - 6020 - Total
Cr (Chromium) - 6020 - Total
Hg (Mercury) - 6020 - Total
Pb (Lead) - 6020 - Total
Se (Selenium) - 6020 - Total

PREPARATION BENCH SHEET

0010756

Apex Laboratories

BATCH #: 0010756 (Sediment)

Prep Method: EPA 3051A

Lab Number	Due	Prepared	Initial (g)	Final (mL)	Client	ClientID / Sample	Extraction Comments
0010756-BLK1		01/24/20 10:03	0.5	50	QC Sample		
0010756-BS1		01/24/20 10:03	0.5	50	QC Sample		
Spike 1: 2500 uL of A20A135 Spike 2: 250 uL of A19L301							
A0A0538-01	01/27/20	01/24/20 10:03	0.5	50	Anchor QEA, LLC	PDI-WC-011420-01	
☐ Ag (Silver) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ Ba (Barium) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total							
A0A0538-02	01/27/20	01/24/20 10:03	0.5	50	Anchor QEA, LLC	PDI-WC-011420-03	
☐ Ag (Silver) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ Ba (Barium) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total							
A0A0539-01	01/27/20	01/24/20 10:03	0.5	50	Anchor QEA, LLC	PDI-WC-011420-02	
☐ Ag (Silver) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ Ba (Barium) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total							
A0A0539-02	01/27/20	01/24/20 10:03	0.5	50	Anchor QEA, LLC	PDI-WC-011420-04	
☐ Ag (Silver) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ Ba (Barium) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total							
0010756-DUP1		01/24/20 10:03	0.5	50	QC Sample		
Source: A0A0539-02							
0010756-MS1		01/24/20 10:03	0.5	50	QC Sample		
Source: A0A0539-02 Spike 1: 2500 uL of A20A135 Spike 2: 250 uL of A19L301							

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L213	11/30/23	Metals Prep Balance 2
A17E426	05/31/20	Mars-4 Microwave
A19L077	12/05/21	Conc. HCl - Omnitrace
A19L079	07/10/20	30% hydrogen peroxide
~~A20A077~~ A19L207	~~07/04/20~~ 12/16/20	~~Conc. HNO3 - Omnitrace~~ Conc. HNO3 Omnitrace

MJG 1/24/20

Analyte Spike(s)

Std ID	Exp. Date	Description
A19L301	06/20/20	Hg Spiking Standard
A20A135	02/29/20	**Combo Spike** A+B+C

MJG 1/24/20

A) A20A127 1250 µL
B) A19L159 625 µL
C) A19L006 625 µL

MJG 1/24/20

Digestion time and temperature achieved?
Initials: MJG YES

MJG 1/24/20
Prepared By: Date

Reviewed By: 01/24/20 Date

Batch #: 0010756

If observed weight loss < 0.2g Digestion is within control limits

If observed weight loss > 0.2g Enter data in to electronic VWW. Acceptance limit 1.0% sample loss.

Date: 01/24/20 Prepared by: MJG

#	Mars Tube ID	Sample ID	Pre-digestion Vessel + Sample Wt. (g)	Post-digestion Vessel + Sample Wt. (g)	Sample Wt. Loss (%)* *Formula only used if sample loss >0.2g*
1	S5	0010756-BLK1	183.42	183.40	n/a
2	S25	0010756-BS1	181.31	181.29	n/a
3	S52	A0A0538-01	184.48	184.46	n/a
4	S65	A0A0538-02	184.83	184.81	n/a
5	S95	A0A0539-01	185.90	185.88	n/a
6	S81	A0A0539-02	184.51	184.49	n/a
7	S9	0010756-DUP1	184.03	184.01	n/a
8	S103	0010756-MS1	181.26	181.25	n/a
9					n/a
10					n/a
11					n/a
12					n/a
13					n/a
14					n/a
15					n/a
16					n/a
17					n/a
18					n/a
19					n/a
20					n/a
21					n/a
22					n/a
23					n/a
24					n/a
25					n/a

*Example Calculation: (Pre(g) – Post(g))/(Post(g) – 159.32g) This represents the mean weight of the empty digestion vessels. By factoring in the mean digestion vessel weight, we observe weight loss from only the sample, rather than as a percentage of the sample+vessel weight.

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: 0A24028 Instrument: ICPMS6

Date: 01/24/20 09:48 Calibration: UNASSIGNED

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A24028-CAL1	Water	QC	QC			A20A220	A20A190
2	0A24028-CAL2	Water	QC	QC			A20A220	A20A191
3	0A24028-CAL3	Water	QC	QC			A20A220	A20A192
4	0A24028-CAL4	Water	QC	QC			A20A220	A20A193
5	0A24028-CAL7	Water	QC	QC			A20A220	A20A196
6	0A24028-CAL8	Water	QC	QC			A20A220	A20A197
7	0A24028-CAL9	Water	QC	QC			A20A220	A20A198
8	0A24028-CAL6	Water	QC	QC			A20A220	A20A195
9	0A24028-CAL5	Water	QC	QC			A20A220	A20A194
10	0A24028-ICV1	Water	QC	QC			A20A220	A20A138
11	0A24028-ICB1	Water	QC	QC			A20A220	
12	0A24028-CRL1	Water	QC	QC			A20A220	A20A190
13	0A24028-CRL2	Water	QC	QC			A20A220	A20A191
14	0A24028-CRL3	Water	QC	QC			A20A220	A20A192
15	0A24028-IFA1	Water	QC	QC			A20A220	A20A253
16	0A24028-IFB1	Water	QC	QC			A20A220	A20A254
17	0010746-BS1	Soil	QC	QC		0010746	A20A220	
18	0010746-BLK1	Soil	QC	QC		0010746	A20A220	
19	0010707-BLK2	Soil	QC	QC		0010707	A20A220	
20	A0A0788-01	Soil	Pb (Lead) - 6020 - Total		01/24/20	0010746	A20A220	
21	0010746-DUP1	Soil	QC	QC		0010746	A20A220	
22	0010746-MS1	Soil	QC	QC		0010746	A20A220	
23	0010745-BLK1	Soil	QC	QC		0010745	A20A220	
24	0010745-BS1	Soil	QC	QC		0010745	A20A220	
25	A0A0060-12	Soil	Ag (Silver) - 6020 - TCLP	(QC Source)		0010745	A20A220	
26	"	Soil	As (Arsenic) - 6020 - TCLP	(QC Source)		0010745	A20A220	
27	"	Soil	Ba (Barium) - 6020 - TCLP	(QC Source)		0010745	A20A220	
28	"	Soil	Cd (Cadmium) - 6020 - TCLP	(QC Source)		0010745	A20A220	
29	"	Soil	Cr (Chromium) - 6020 - TCLP	(QC Source)		0010745	A20A220	
30	"	Soil	Hg (Mercury) - 6020 - TCLP	(QC Source)		0010745	A20A220	
31	"	Soil	Pb (Lead) - 6020 - TCLP	"	01/27/20	0010745	A20A220	
32	"	Soil	Se (Selenium) - 6020 - TCLP	(QC Source)		0010745	A20A220	
33	0A24028-CCV1	Water	QC	QC			A20A220	A20A138
34	0A24028-CCB1	Water	QC	QC			A20A220	
35	0A24028-CRL4	Water	QC	QC			A20A220	A20A190
36	0A24028-CRL5	Water	QC	QC			A20A220	A20A191
37	0A24028-CRL6	Water	QC	QC			A20A220	A20A192
38	0010745-MS1	Soil	QC	QC		0010745	A20A220	
39	A0A0736-01	Soil	Ag (Silver) - 6020 - TCLP		01/28/20	0010745	A20A220	
40	"	Soil	As (Arsenic) - 6020 - TCLP	"	01/28/20	0010745	A20A220	
41	"	Soil	Ba (Barium) - 6020 - TCLP	"	01/28/20	0010745	A20A220	
42	"	Soil	Cd (Cadmium) - 6020 - TCLP	"	01/28/20	0010745	A20A220	
43	"	Soil	Cr (Chromium) - 6020 - TCLP	"	01/28/20	0010745	A20A220	
44	"	Soil	Hg (Mercury) - 6020 - TCLP	"	01/28/20	0010745	A20A220	
45	"	Soil	Pb (Lead) - 6020 - TCLP	"	01/28/20	0010745	A20A220	
46	"	Soil	Se (Selenium) - 6020 - TCLP	"	01/28/20	0010745	A20A220	
47	0010745-MS2	Soil	QC	QC		0010745	A20A220	
48	0010756-BLK1	Sediment	QC	QC		0010756	A20A220	
49	0010756-BS1	Sediment	QC	QC		0010756	A20A220	
50	A0A0538-01	Sediment	Ag (Silver) - 6020 - Total	Anchor QEA, LLC	01/27/20	0010756	A20A220	
51	"	Sediment	As (Arsenic) - 6020 - Total	"	01/27/20	0010756	A20A220	

Sequence: 0A24028 Instrument: ICPMS6

Date: 01/24/20 09:48 Calibration: UNASSIGNED

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
52	"	Sediment	Ba (Barium) - 6020 - Total	"	01/27/20	0010756	A20A220	
53	"	Sediment	Cd (Cadmium) - 6020 - Total	"	01/27/20	0010756	A20A220	
54	"	Sediment	Cr (Chromium) - 6020 - Total	"	01/27/20	0010756	A20A220	
55	"	Sediment	Hg (Mercury) - 6020 - Total	"	01/27/20	0010756	A20A220	
56	"	Sediment	Pb (Lead) - 6020 - Total	"	01/27/20	0010756	A20A220	
57	"	Sediment	Se (Selenium) - 6020 - Total	"	01/27/20	0010756	A20A220	
58	A0A0538-02	Sediment	Ag (Silver) - 6020 - Total	Anchor QEA, LLC	01/27/20	0010756	A20A220	
59	"	Sediment	As (Arsenic) - 6020 - Total	"	01/27/20	0010756	A20A220	
60	"	Sediment	Ba (Barium) - 6020 - Total	"	01/27/20	0010756	A20A220	
61	"	Sediment	Cd (Cadmium) - 6020 - Total	"	01/27/20	0010756	A20A220	
62	"	Sediment	Cr (Chromium) - 6020 - Total	"	01/27/20	0010756	A20A220	
63	"	Sediment	Hg (Mercury) - 6020 - Total	"	01/27/20	0010756	A20A220	
64	"	Sediment	Pb (Lead) - 6020 - Total	"	01/27/20	0010756	A20A220	
65	"	Sediment	Se (Selenium) - 6020 - Total	"	01/27/20	0010756	A20A220	
66	A0A0539-01	Sediment	Ag (Silver) - 6020 - Total	Anchor QEA, LLC	01/27/20	0010756	A20A220	
67	"	Sediment	As (Arsenic) - 6020 - Total	"	01/27/20	0010756	A20A220	
68	"	Sediment	Ba (Barium) - 6020 - Total	"	01/27/20	0010756	A20A220	
69	"	Sediment	Cd (Cadmium) - 6020 - Total	"	01/27/20	0010756	A20A220	
70	"	Sediment	Cr (Chromium) - 6020 - Total	"	01/27/20	0010756	A20A220	
71	"	Sediment	Hg (Mercury) - 6020 - Total	"	01/27/20	0010756	A20A220	
72	"	Sediment	Pb (Lead) - 6020 - Total	"	01/27/20	0010756	A20A220	
73	"	Sediment	Se (Selenium) - 6020 - Total	"	01/27/20	0010756	A20A220	
74	A0A0539-02	Sediment	Ag (Silver) - 6020 - Total	Anchor QEA, LLC	01/27/20	0010756	A20A220	
75	"	Sediment	As (Arsenic) - 6020 - Total	"	01/27/20	0010756	A20A220	
76	"	Sediment	Ba (Barium) - 6020 - Total	"	01/27/20	0010756	A20A220	
77	"	Sediment	Cd (Cadmium) - 6020 - Total	"	01/27/20	0010756	A20A220	
78	"	Sediment	Cr (Chromium) - 6020 - Total	"	01/27/20	0010756	A20A220	
79	"	Sediment	Hg (Mercury) - 6020 - Total	"	01/27/20	0010756	A20A220	
80	"	Sediment	Pb (Lead) - 6020 - Total	"	01/27/20	0010756	A20A220	
81	"	Sediment	Se (Selenium) - 6020 - Total	"	01/27/20	0010756	A20A220	
82	0010756-DUP1	Sediment	QC	QC		0010756	A20A220	
83	0A24028-CCV2	Water	QC	QC			A20A220	A20A138
84	0A24028-CCB2	Water	QC	QC			A20A220	
85	0A24028-CCV3	Water	QC	QC			A20A220	A20A138
86	0010756-BLK2	Sediment	QC	QC		0010756	A20A220	
87	0010756-MS1	Sediment	QC	QC		0010756	A20A220	
88	0010751-BLK1	Soil	QC	QC		0010751	A20A220	
89	0010751-BLK2	Soil	QC	QC		0010751	A20A220	
90	0010751-BS1	Soil	QC	QC		0010751	A20A220	
91	A0A0626-02	Soil	Ag (Silver) - 6020 - Total		01/27/20	0010751	A20A220	
92	"	Soil	As (Arsenic) - 6020 - Total	"	01/27/20	0010751	A20A220	
93	"	Soil	Ba (Barium) - 6020 - Total	"	01/27/20	0010751	A20A220	
94	"	Soil	Cd (Cadmium) - 6020 - Total	"	01/27/20	0010751	A20A220	
95	"	Soil	Cr (Chromium) - 6020 - Total	"	01/27/20	0010751	A20A220	
96	"	Soil	Hg (Mercury) - 6020 - Total	"	01/27/20	0010751	A20A220	
97	"	Soil	Pb (Lead) - 6020 - Total	"	01/27/20	0010751	A20A220	
98	"	Soil	Se (Selenium) - 6020 - Total	"	01/27/20	0010751	A20A220	
99	0010751-DUP1	Soil	QC	QC		0010751	A20A220	
100	0010751-DUP2	Soil	QC	QC		0010751	A20A220	
101	0A24028-CCV4	Water	QC	QC			A20A220	A20A138
102	0A24028-CCB3	Water	QC	QC			A20A220	
103	0010751-MS1	Soil	QC	QC		0010751	A20A220	
104	A0A0626-04	Soil	Ag (Silver) - 6020 - Total		01/27/20	0010751	A20A220	
105	"	Soil	As (Arsenic) - 6020 - Total	"	01/27/20	0010751	A20A220	
106	"	Soil	Ba (Barium) - 6020 - Total	"	01/27/20	0010751	A20A220	

Sequence: 0A24028 Instrument: ICPMS6

Date: 01/24/20 09:48 Calibration: UNASSIGNED

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
107	"	Soil	Cd (Cadmium) - 6020 - Total	"	01/27/20	0010751	A20A220	
108	"	Soil	Cr (Chromium) - 6020 - Total	"	01/27/20	0010751	A20A220	
109	"	Soil	Hg (Mercury) - 6020 - Total	"	01/27/20	0010751	A20A220	
110	"	Soil	Pb (Lead) - 6020 - Total	"	01/27/20	0010751	A20A220	
111	"	Soil	Se (Selenium) - 6020 - Total	"	01/27/20	0010751	A20A220	
112	A0A0626-02RE1	Soil	Ag (Silver) - 6020 - Total		01/27/20	0010751	A20A220	
113	"	Soil	As (Arsenic) - 6020 - Total	"	01/27/20	0010751	A20A220	
114	"	Soil	Ba (Barium) - 6020 - Total	"	01/27/20	0010751	A20A220	
115	"	Soil	Cd (Cadmium) - 6020 - Total	"	01/27/20	0010751	A20A220	
116	"	Soil	Cr (Chromium) - 6020 - Total	"	01/27/20	0010751	A20A220	
117	"	Soil	Hg (Mercury) - 6020 - Total	"	01/27/20	0010751	A20A220	
118	"	Soil	Pb (Lead) - 6020 - Total	"	01/27/20	0010751	A20A220	
119	"	Soil	Se (Selenium) - 6020 - Total	"	01/27/20	0010751	A20A220	
120	A0A0626-06	Soil	Ag (Silver) - 6020 - Total		01/27/20	0010751	A20A220	
121	"	Soil	As (Arsenic) - 6020 - Total	"	01/27/20	0010751	A20A220	
122	"	Soil	Ba (Barium) - 6020 - Total	"	01/27/20	0010751	A20A220	
123	"	Soil	Cd (Cadmium) - 6020 - Total	"	01/27/20	0010751	A20A220	
124	"	Soil	Cr (Chromium) - 6020 - Total	"	01/27/20	0010751	A20A220	
125	"	Soil	Hg (Mercury) - 6020 - Total	"	01/27/20	0010751	A20A220	
126	"	Soil	Pb (Lead) - 6020 - Total	"	01/27/20	0010751	A20A220	
127	"	Soil	Se (Selenium) - 6020 - Total	"	01/27/20	0010751	A20A220	
128	A0A0721-06	Soil	Ag (Silver) - 6020 - Total		01/27/20	0010751	A20A220	
129	"	Soil	As (Arsenic) - 6020 - Total	"	01/27/20	0010751	A20A220	
130	"	Soil	Ba (Barium) - 6020 - Total	"	01/27/20	0010751	A20A220	
131	"	Soil	Cd (Cadmium) - 6020 - Total	"	01/27/20	0010751	A20A220	
132	"	Soil	Cr (Chromium) - 6020 - Total	"	01/27/20	0010751	A20A220	
133	"	Soil	Hg (Mercury) - 6020 - Total	"	01/27/20	0010751	A20A220	
134	"	Soil	Pb (Lead) - 6020 - Total	"	01/27/20	0010751	A20A220	
135	"	Soil	Se (Selenium) - 6020 - Total	"	01/27/20	0010751	A20A220	
136	A0A0721-08	Soil	Ag (Silver) - 6020 - Total		01/27/20	0010751	A20A220	
137	"	Soil	As (Arsenic) - 6020 - Total	"	01/27/20	0010751	A20A220	
138	"	Soil	Ba (Barium) - 6020 - Total	"	01/27/20	0010751	A20A220	
139	"	Soil	Cd (Cadmium) - 6020 - Total	"	01/27/20	0010751	A20A220	
140	"	Soil	Cr (Chromium) - 6020 - Total	"	01/27/20	0010751	A20A220	
141	"	Soil	Hg (Mercury) - 6020 - Total	"	01/27/20	0010751	A20A220	
142	"	Soil	Pb (Lead) - 6020 - Total	"	01/27/20	0010751	A20A220	
143	"	Soil	Se (Selenium) - 6020 - Total	"	01/27/20	0010751	A20A220	
144	A0A0801-01	Soil	Pb (Lead) - 6020 - Total		01/27/20	0010751	A20A220	
145	A0A0801-02	Soil	Pb (Lead) - 6020 - Total		01/27/20	0010751	A20A220	
146	A0A0801-03	Soil	Pb (Lead) - 6020 - Total		01/27/20	0010751	A20A220	
147	A0A0801-04	Soil	Pb (Lead) - 6020 - Total		01/27/20	0010751	A20A220	
148	0A24028-CCV5	Water	QC	QC			A20A220	A20A138
149	0A24028-CCB4	Water	QC	QC			A20A220	
150	A0A0801-05	Soil	Pb (Lead) - 6020 - Total		01/27/20	0010751	A20A220	
151	A0A0801-06	Soil	Pb (Lead) - 6020 - Total		01/27/20	0010751	A20A220	
152	A0A0801-07	Soil	Pb (Lead) - 6020 - Total		01/27/20	0010751	A20A220	
153	A0A0801-08	Soil	Pb (Lead) - 6020 - Total		01/27/20	0010751	A20A220	
154	0A24028-CCV6	Water	QC	QC			A20A220	A20A138
155	0A24028-CCB5	Water	QC	QC			A20A220	
156	0A24028-CCV7	Water	QC	QC			A20A220	A20A138
157	0A24028-CCB6	Water	QC	QC			A20A220	
158	0A24028-CRL7	Water	QC	QC			A20A220	A20A190
159	0A24028-CRL8	Water	QC	QC			A20A220	A20A191
160	0A24028-CRL9	Water	QC	QC			A20A220	A20A192
161	0A24028-CRLA	Water	QC	QC			A20A220	A20A193

Sequence: 0A24028 Instrument: ICPMS6

Date: 01/24/20 09:48 Calibration: UNASSIGNED

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
162	A0A0488-01RE1	Water	Ca (Calcium) - 200.8 - Total		01/28/20	0010706	A20A220	
163	A0A0488-04RE1	Water	Ca (Calcium) - 200.8 - Total		01/28/20	0010706	A20A220	
164	0010782-BLK1	Water	QC	QC		0010782	A20A220	
165	0010782-BS1	Water	QC	QC		0010782	A20A220	
166	A0A0448-01	Water	Cu (Copper) - 6020 - Dissolved		01/27/20	0010782	A20A220	
167	0010782-DUP1	Water	QC	QC		0010782	A20A220	
168	0010782-MS1	Water	QC	QC		0010782	A20A220	
169	0010770-BLK1	Water	QC	QC		0010770	A20A220	
170	0010770-BS1	Water	QC	QC		0010770	A20A220	
171	A0A0496-01	Water	Cd (Cadmium) - 200.8 - Total		01/28/20	0010770	A20A220	
172	"	Water	Cr (Chromium) - 200.8 - Total	"	01/28/20	0010770	A20A220	
173	"	Water	Cu (Copper) - 200.8 - Total	"	01/28/20	0010770	A20A220	
174	"	Water	Ni (Nickel) - 200.8 - Total	"	01/28/20	0010770	A20A220	
175	"	Water	Pb (Lead) - 200.8 - Total	"	01/28/20	0010770	A20A220	
176	"	Water	Zn (Zinc) - 200.8 - Total	"	01/28/20	0010770	A20A220	
177	0A24028-CCV8	Water	QC	QC			A20A220	A20A138
178	0A24028-CCB7	Water	QC	QC			A20A220	
179	A0A0498-02	Water	As (Arsenic) - 200.8 - Total		01/28/20	0010770	A20A220	
180	"	Water	Cr (Chromium) - 200.8 - Total	"	01/28/20	0010770	A20A220	
181	"	Water	Cu (Copper) - 200.8 - Total	"	01/28/20	0010770	A20A220	
182	"	Water	Fe (Iron) - 200.8 - Total	"	01/28/20	0010770	A20A220	
183	"	Water	Ni (Nickel) - 200.8 - Total	"	01/28/20	0010770	A20A220	
184	"	Water	Pb (Lead) - 200.8 - Total	"	01/28/20	0010770	A20A220	
185	"	Water	Zn (Zinc) - 200.8 - Total	"	01/28/20	0010770	A20A220	
186	A0A0510-01	Water	Cr (Chromium) - 200.8 - Total		01/28/20	0010770	A20A220	
187	"	Water	Cu (Copper) - 200.8 - Total	"	01/28/20	0010770	A20A220	
188	"	Water	Ni (Nickel) - 200.8 - Total	"	01/28/20	0010770	A20A220	
189	"	Water	Zn (Zinc) - 200.8 - Total	"	01/28/20	0010770	A20A220	
190	A0A0513-01	Water	Ag (Silver) - 200.8 - Total	(QC Source)		0010770	A20A220	
191	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		0010770	A20A220	
192	"	Water	Cd (Cadmium) - 200.8 - Total	(QC Source)		0010770	A20A220	
193	"	Water	Cr (Chromium) - 200.8 - Total	"	01/28/20	0010770	A20A220	
194	"	Water	Cu (Copper) - 200.8 - Total	"	01/28/20	0010770	A20A220	
195	"	Water	Fe (Iron) - 200.8 - Total	(QC Source)		0010770	A20A220	
196	"	Water	Ni (Nickel) - 200.8 - Total	"	01/28/20	0010770	A20A220	
197	"	Water	Pb (Lead) - 200.8 - Total	(QC Source)		0010770	A20A220	
198	"	Water	Zn (Zinc) - 200.8 - Total	"	01/28/20	0010770	A20A220	
199	0010770-DUP1	Water	QC	QC		0010770	A20A220	
200	0010770-MS1	Water	QC	QC		0010770	A20A220	
201	A0A0705-01	Water	As (Arsenic) - 200.8 - Total		01/27/20	0010770	A20A220	
202	A0A0717-01	Water	Zn (Zinc) - 200.8 - Total		01/28/20	0010770	A20A220	
203	A0A0719-01	Water	Ag (Silver) - 200.8 - Total		01/28/20	0010770	A20A220	
204	A0A0719-02	Water	Ag (Silver) - 200.8 - Total		01/28/20	0010770	A20A220	
205	A0A0719-03	Water	Ag (Silver) - 200.8 - Total		01/28/20	0010770	A20A220	
206	0A24028-CCV9	Water	QC	QC			A20A220	A20A138
207	0A24028-CCB8	Water	QC	QC			A20A220	
208	0A24028-CRLB	Water	QC	QC			A20A220	A20A190
209	0A24028-CRLC	Water	QC	QC			A20A220	A20A191
210	0A24028-CRLD	Water	QC	QC			A20A220	A20A192
211	0A24028-CRLE	Water	QC	QC			A20A220	A20A193
212	A0A0719-04	Water	Ag (Silver) - 200.8 - Total		01/28/20	0010770	A20A220	
213	A0A0828-01	Water	Ag (Silver) - 200.8 - Total		01/27/20	0010770	A20A220	
214	A0A0828-02	Water	Ag (Silver) - 200.8 - Total		01/27/20	0010770	A20A220	
215	A0A0828-03	Water	Ag (Silver) - 200.8 - Total		01/27/20	0010770	A20A220	
216	A0A0828-04	Water	Ag (Silver) - 200.8 - Total		01/27/20	0010770	A20A220	

Sequence: 0A24028 Instrument: ICPMS6

Date: 01/24/20 09:48 Calibration: UNASSIGNED

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
217	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		0010770	A20A220	
218	"	Water	Cd (Cadmium) - 200.8 - Total	(QC Source)		0010770	A20A220	
219	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		0010770	A20A220	
220	"	Water	Cu (Copper) - 200.8 - Total	(QC Source)		0010770	A20A220	
221	"	Water	Fe (Iron) - 200.8 - Total	(QC Source)		0010770	A20A220	
222	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		0010770	A20A220	
223	"	Water	Pb (Lead) - 200.8 - Total	(QC Source)		0010770	A20A220	
224	"	Water	Zn (Zinc) - 200.8 - Total	(QC Source)		0010770	A20A220	
225	0010770-MS2	Water	QC	QC		0010770	A20A220	
226	A0A0371-01RE1	Water	Fe (Iron) - 200.8 - Total		01/21/20	0010531	A20A220	
227	A0A0561-01RE2	Water	Mo (Molybdenum) - 200.8 - Total		01/23/20	0010643	A20A220	
228	0A24028-CCVA	Water	QC	QC			A20A220	A20A138
229	0A24028-CCB9	Water	QC	QC			A20A220	
230	0A24028-CRLF	Water	QC	QC			A20A220	A20A190
231	0A24028-CRLG	Water	QC	QC			A20A220	A20A191
232	0A24028-CRLH	Water	QC	QC			A20A220	A20A192
233	0A24028-CRLI	Water	QC	QC			A20A220	A20A193

Data Entered By: VB 01/27/20 Comments:

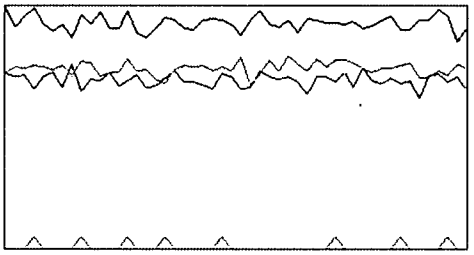
Data Reviewed By: DG 01/27/20

Standard Tune Check Report ICPMS6

Operator Name	ICPMS Analyst
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\0A24028.b
Acq. Date-Time	01/24/2020 10:43:07
Report Comment	0A24028 General Multi-Mode Tune Report Std ID A20A067
Instrument Name	ICPMS6 JP17412047

[No Gas]

Sensitivity



Sampling Period [sec]	0.413
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
7	5000	3484	34836.49	5000.00	
89	20000	14912	149119.18	10000.00	
205	10000	9311	93108.51	10000.00	
102	20	0			

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
7	0.23	0.20 - 1.00	
89	1.00	1.00 - 1.00	
205	0.62	0.50 - 1.50	
102		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
7	4.102	5.000	
89	3.523	5.000	
205	3.480	5.000	
102	231.455		

Mass	Background	Background (Required)	Background (Flag)
7	0.300	6.900	
89	0.600	4.600	
205	0.800	11.500	
102	0.300		

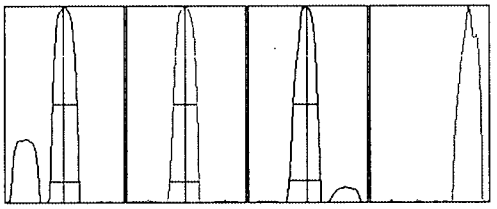
Oxide/Doubly Charged Ratio

Oxide	156 / 140 1.262 % ✓
Doubly Charged	69 / 138 2.820 % ✓

Resolution/Axis

Integration Time [sec]	0.1

Standard Tune Check Report ICPMS6



Acquisition Time [sec]	30.12
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	3528.31	7.00	6.90 - 7.10	
89	14753.65	89.00	88.90 - 89.10	
205	9146.02	205.00	204.90 - 205.10	
102	0.00	101.65	-	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.62	0.728	0.900	
89	0.61	0.735	0.900	
205	0.62	0.780	0.900	
102	0.18	0.175		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.95 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.5 V	Deflect	13.0 V
Extract 2	-160.0 V	Cell Entrance	-40 V	Plate Bias	-35 V
Omega Bias	-125 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.9 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	120 V		

QP Parameters

Mass Gain	128	Axis Gain	0.9993	QP Bias	-3.1 V
Mass Offset	126	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	-0.4 mm	Torch V	0.8 mm		

EM

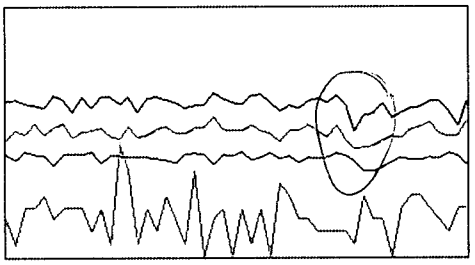
Discriminator	4.6 mV	Analog HV	2134 V	Pulse HV	1053 V

[He]

Sensitivity

Sampling Period [sec]	0.412

Standard Tune Check Report ICPMS6



Integration Time [sec] 0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
59	5000	1990	19901.70	1000.00	
89	5000	2512	25121.28	2000.00	
205	10000	6139	61392.94	1000.00	
75	20	3			

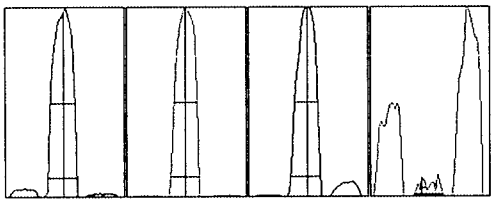
Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
59		-	
89		-	
205		-	
75		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
59	4.783	5.000	
89	5.472	5.000	Fail
205	5.160	5.000	Fail
75	59.011		

See EPA tune for RSD
JR 01/24/20

Mass	Background	Background (Required)	Background (Flag)
59			
89			
205			
75			

Resolution/Axis



Integration Time [sec] 0.1
Acquisition Time [sec] 29.92
Y Axis Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
59	2024.50	59.00	58.90 - 59.10	
89	2607.52	89.00	88.90 - 89.10	
205	6138.03	205.00	204.90 - 205.10	
75	4.25	74.80	-	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
59	0.63	0.731	0.900	
89	0.59	0.713	0.900	

Standard Tune Check Report ICPMS6

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
205	0.59	0.755	0.900	
75	0.16	0.718		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.95 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.5 V	Deflect	2.0 V
Extract 2	-160.0 V	Cell Entrance	-40 V	Plate Bias	-50 V
Omega Bias	-125 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	120 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9993	QP Bias	-13.0 V
Mass Offset	126	Axis Offset	0.04		

Hardware Settings

Torch

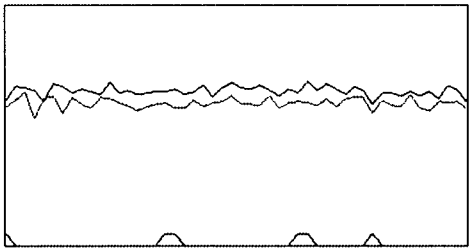
Torch H	-0.4 mm	Torch V	0.8 mm

EM

Discriminator	4.6 mV	Analog HV	2134 V	Pulse HV	1053 V

[HEHe]

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
59	2000	1294	12937.19	1000.00	
89	5000	2979	29787.08	2000.00	
78	20	0			

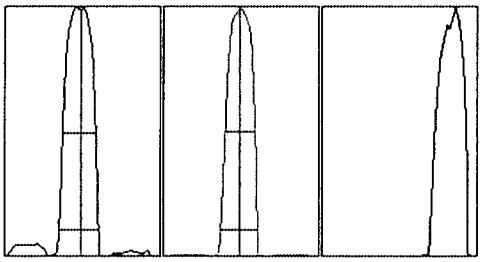
Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
59		-	
89		-	
78		-	

Standard Tune Check Report ICPMS6

Mass	RSD%	RSD% (Required)	RSD% (Flag)
59	3.324	5.000	
89	3.864	5.000	
78	273.551		

Mass	Background	Background (Required)	Background (Flag)
59			
89			
78			

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.14
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
59	1258.60	59.00	58.90 - 59.10	
89	3007.81	89.00	88.90 - 89.10	
78			-	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
59	0.65	0.765	0.900	
89	0.59	0.717	0.900	
78				

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.95 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.5 V	Deflect	-80.0 V
Extract 2	-160.0 V	Cell Entrance	-130 V	Plate Bias	-150 V
Omega Bias	-125 V	Cell Exit	-150 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.9 V
He Flow	9.5 mL/min	OctP Bias	-100.0 V		
H2 Flow	---	OctP RF	120 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9993	QP Bias	-96.1 V
Mass Offset	126	Axis Offset	0.04		

Hardware Settings

Torch

Standard Tune Check Report ICPMS6

Torch H	-0.4 mm	Torch V	0.8 mm		

EM

Discriminator	4.6 mV	Analog HV	2134 V	Pulse HV	1053 V

EPA Tune Check Report ICPMS6

Operator Name	ICPMS Analyst
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\0A24028.b
Acq. Date-Time	01/24/2020 11:03:39
Report Comment	0A24028 EPA Multi-Mode Tune Report Std ID A20A067
Instrument Name	ICPMS6 JP17412047

[No Gas]

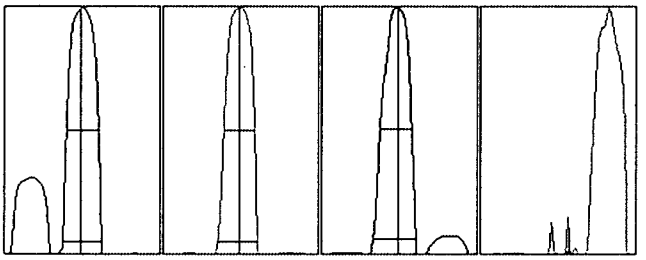
Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
7	1.00	2092	20916.17	5000.00	1.008		5.000	
89	1.00	8396	83958.33	10000.00	0.798		5.000	
205	1.00	5023	50230.11	10000.00	2.288		5.000	
102		2	24.14		197.220			

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2058	2086	2096	2106	2112
89	8286	8388	8410	8459	8436
205	4879	4982	5144	4972	5138
102	0	1	11	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Ht	Axis	Axis (Req)	Axis (Flag)	W-50%	W-5%	W-X% (Req)	W-5% (Flag)
7	3440.66	7.00	6.90 - 7.10		0.63	0.741	0.900	
89	14198.43	89.00	88.90 - 89.10		0.61	0.765	0.900	
205	8529.84	205.00	204.90 - 205.10		0.62	0.817	0.900	
102	1.40	102.25	-		0.13	0.581		

Integration Time [sec] 0.1
Acquisition Time [sec] 135.3
Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.95 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min

EPA Tune Check Report ICPMS6

RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.5 V	Deflect	13.0 V
Extract 2	-160.0 V	Cell Entrance	-40 V	Plate Bias	-35 V
Omega Bias	-125 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.9 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	120 V		

QP Parameters

Mass Gain	128	Axis Gain	0.9993	QP Bias	-3.1 V
Mass Offset	126	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	-0.4 mm	Torch V	0.8 mm		

EM

Discriminator	4.6 mV	Analog HV	2134 V	Pulse HV	1053 V

[He]

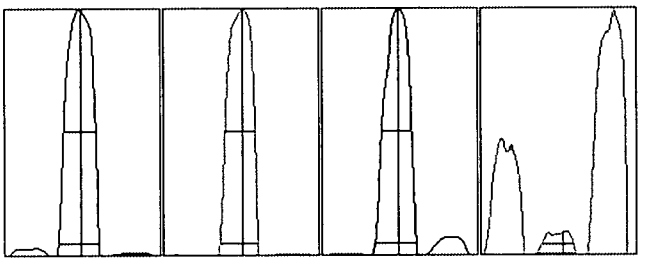
Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
59	1.00	1209	12091.36	1000.00	1.360		5.000	
89	1.00	1467	14674.61	2000.00	1.332		5.000	
205	1.00	3266	32662.10	1000.00	0.475		5.000	
75		2	23.70		6.258			

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1194	1210	1234	1213	1195
89	1459	1490	1480	1468	1440
205	3269	3281	3279	3243	3259
75	2	2	2	2	3

Integration Time [sec] 0.1

Resolution/Axis



EPA Tune Check Report ICPMS6

Mass	Peak Ht	Axis	Axis (Req)	Axis (Flag)	W-50%	W-5%	W-X% (Req)	W-5% (Flag)
59	2005.78	59.00	58.90 - 59.10		0.63	0.777	0.900	
89	2565.17	89.05	88.90 - 89.10		0.59	0.732	0.900	
205	5889.90	205.00	204.90 - 205.10		0.59	0.786	0.900	
75	4.15	75.10	-		0.60	0.737		

Integration Time [sec]	0.1
Acquisition Time [sec]	134.8
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.95 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.5 V	Deflect	2.0 V
Extract 2	-160.0 V	Cell Entrance	-40 V	Plate Bias	-50 V
Omega Bias	-125 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	120 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9993	QP Bias	-13.0 V
Mass Offset	126	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	-0.4 mm	Torch V	0.8 mm

EM

Discriminator	4.6 mV	Analog HV	2134 V	Pulse HV	1053 V

[HEHe]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
59	1.00	772	7723.63	1000.00	1.084		5.000	
89	1.00	1650	16501.02	2000.00	0.702		5.000	
78		0	1.70		16.109			

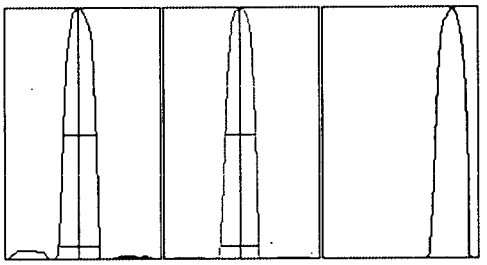
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	774	783	768	775	761
89	1656	1661	1641	1658	1635

EPA Tune Check Report ICPMS6

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
78	0	0	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Ht	Axis	Axis (Req)	Axis (Flag)	W-50%	W-5%	W-X% (Req)	W-5% (Flag)
59	1253.57	58.95	58.90 - 59.10		0.64	0.784	0.900	
89	2866.05	89.00	88.90 - 89.10		0.60	0.736	0.900	
78			-					

Integration Time [sec] 0.1
Acquisition Time [sec] 100.35
Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.95 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.5 V	Deflect	-80.0 V
Extract 2	-160.0 V	Cell Entrance	-130 V	Plate Bias	-150 V
Omega Bias	-125 V	Cell Exit	-150 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.9 V
He Flow	9.5 mL/min	OctP Bias	-100.0 V		
H2 Flow	---	OctP RF	120 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9993	QP Bias	-96.1 V
Mass Offset	126	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	-0.4 mm	Torch V	0.8 mm		

EM

Discriminator	4.6 mV	Analog HV	2134 V	Pulse HV	1053 V

Sample Report ICPMS6

Sample Name	**rinse**	**Sample Type**	Rinse
File Name	001RINS.d	**Vial #**	1
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 11:50:55	**Sample QC Pass/Fail**	Pass
Comment	rinse - stabilize I.S.	**ISTD Ref FileName**	---

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1333865	2.7	0		70	120	
Sc	45	He	397051	0.8	0		70	120	
Ge	74	No Gas	2073492	0.5	0		70	120	
Ge	74	He	336143	0.3	0		70	120	
Ge	74	HEHe	296355	1.1	0		70	120	
Rh	103	No Gas	2007616	2.1	0		70	120	
Rh	103	He	952371	1.1	0		70	120	
Tb	159	No Gas	3327644	2.1	0		70	120	
Tb	159	He	1908480	0.5	0		70	120	
Bi	209	No Gas	1683847	1.9	0		70	120	

Sample Report ICPMS6

Sample Name	rinse	**Sample Type**	Rinse
File Name	002RINS.d	**Vial #**	1
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 11:55:40	**Sample QC Pass/Fail**	Pass
Comment	rinse - stabilize I.S.	**ISTD Ref FileName**	---

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1333123	4.2	0		70	120	
Sc	45	He	382236	0.9	0		70	120	
Ge	74	No Gas	2036115	4.6	0		70	120	
Ge	74	He	325328	0.1	0		70	120	
Ge	74	HEHe	293246	0.2	0		70	120	
Rh	103	No Gas	2008024	5.6	0		70	120	
Rh	103	He	932343	1.0	0		70	120	
Tb	159	No Gas	3342562	4.2	0		70	120	
Tb	159	He	1860156	0.9	0		70	120	
Bi	209	No Gas	1695979	5.2	0		70	120	

Sample Report ICPMS6

Sample Name	rinse	**Sample Type**	Rinse
File Name	003RINS.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:00:24	**Sample QC Pass/Fail**	Pass
Comment	rinse - stabilize I.S.	**ISTD Ref FileName**	---

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1213525	14.8	0		70	120	
Sc	45	He	386846	2.2	0		70	120	
Ge	74	No Gas	1850280	16.1	0		70	120	
Ge	74	He	331600	2.5	0		70	120	
Ge	74	HEHe	289675	1.5	0		70	120	
Rh	103	No Gas	1809609	15.2	0		70	120	
Rh	103	He	956507	2.5	0		70	120	
Tb	159	No Gas	3080327	14.3	0		70	120	
Tb	159	He	1896704	2.9	0		70	120	
Bi	209	No Gas	1558439	16.3	0		70	120	

Calibration Blank Report ICPMS6

Sample Name	**0A24028-CAL0**	**Sample Type**	CalBlk
File Name	004CALB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:05:09	**Sample QC Pass/Fail**	Fail
Comment	Cal Blank	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Be	9	6	No Gas	23	24.7
Na	23	45	He	6593	3.4
Mg	24	45	He	441	14.2
Al	27	45	He	98	7.8
K	39	45	He	30422	0.7
Ca	44	45	He	848	5.7
Ti	47	45	He	4	114.6
V	51	74	He	2294	2.4
Cr	52	74	He	16462	1.2
Mn	55	74	He	258	4.5
Fe	56	74	He	77260	1.0
Co	59	74	He	149	16.8
Ni	60	74	He	1479	5.5
Cu	65	74	He	554	2.1
Cu	65	74	No Gas	1881	6.4
Zn	66	74	He	79	10.6
As	75	74	He	64	6.6
Se	78	74	HEHe	2	59.9
Mo	95	103	He	1208	6.4
[Cd]	106	103	No Gas	16	65.5
[Cd]	108	103	No Gas	23	14.3
Ag	109	103	No Gas	31	59.0
Cd	111	103	He	3	100.1
Cd	111	103	No Gas	1	422.0
Sb	123	103	No Gas	230	12.6
Ba	138	159	He	408	10.4
W	186	159	No Gas	127	16.4
Hg	201	159	No Gas	8	41.6
Tl	205	159	No Gas	282	7.6
Pb	208	159	No Gas	961	1.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1305097	1.6
Ge	74	No Gas	1989219	1.0
Rh	103	No Gas	1924055	1.3
Tb	159	No Gas	3266295	2.5
Bi	209	No Gas	1636705	1.2
Sc	45	He	385078	0.9
Ge	74	He	329957	1.1
Rh	103	He	951367	1.1
Tb	159	He	1829197	1.7
Ge	74	HEHe	290827	0.6

Cr in Cal blank used to make curve. counts confirmed to be in Curve Cal blank from 2 prior shots See Blank 782 (file 106) & Blank 770 (file 111) for approximate total effect of contamination from true value. Soil, Sediment & TCLP Batches were diluted using same diluant so the impact is negated see Blanks & Blank spikes. in addition Cr recovery is > 10x the possible deflection from value. so those batches are all left as reportable

JB 01/25/20

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL1**	**Sample Type**	CalStd
File Name	005CALS.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:10:08	**Sample QC Pass/Fail**	Fail
Comment	A20A190 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.188	ug/l	1729	3.6	3	0.3000	
Na	23	45	He	9.303	ug/l	26029	2.8	3	0.2001	
Mg	24	45	He	9.359	ug/l	11172	3.9	3	0.2001	
Al	27	45	He	9.394	ug/l	5373	2.0	3	0.2001	
K	39	45	He	9.169	ug/l	40945	0.4	3	0.2001	
Ca	44	45	He	9.924	ug/l	1463	2.1	3	0.2001	
Ti	47	45	He	0.203	ug/l	80	26.0	3	0.3000	RSD Warning
V	51	74	He	0.177	ug/l	4116	3.5	3	0.3000	
Cr	52	74	He	0.193	ug/l	18754	2.3	3	0.3000	
Mn	55	74	He	0.186	ug/l	1839	3.8	3	0.3000	
Fe	56	74	He	9.397	ug/l	182996	1.0	3	0.3000	
Co	59	74	He	0.193	ug/l	3643	2.0	3	0.3000	
Ni	60	74	He	0.186	ug/l	2310	4.0	3	0.3000	
Cu	65	74	He	0.196	ug/l	1718	6.2	3	0.3000	
Cu	65	74	No Gas	0.187	ug/l	5083	3.5	3	0.3000	
Zn	66	74	He	0.181	ug/l	484	7.8	3	0.3000	
As	75	74	He	0.19	ug/l	366	3.6	3	2.0001	
Se	78	74	HEHe	0.194	ug/l	50	10.7	3	3.0000	
Mo	95	103	He	0.192	ug/l	2705	2.7	3	0.3000	
[Cd]	106	103	No Gas	0.166	ug/l	186	12.0	3	0.3000	
[Cd]	108	103	No Gas	0.162	ug/l	146	11.8	3	0.3000	
Ag	109	103	No Gas	0.184	ug/l	8929	0.6	3	0.3000	
Cd	111	103	He	0.173	ug/l	756	3.8	3	0.3000	
Cd	111	103	No Gas	0.184	ug/l	2009	9.4	3	0.3000	
Sb	123	103	No Gas	0.182	ug/l	5698	1.4	3	0.3000	
Ba	138	159	He	0.172	ug/l	5462	3.4	3	0.3000	
W	186	159	No Gas	0	ug/l	120	46.4	3	0.0999	RSD Warning
Hg	201	159	No Gas	8.444	ng/l	48	13.1	3	2.0001	
Tl	205	159	No Gas	0.178	ug/l	15306	1.2	3	0.3000	
Pb	208	159	No Gas	0.183	ug/l	21909	0.8	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1328828	2.3	3	1305096.65	101.82	70	120	
Sc	45	He	379385	0.7	3	385078.04	98.52	70	120	
Ge	74	No Gas	2023765	2.9	3	1989219.35	101.74	70	120	
Ge	74	He	327584	0.9	3	329956.68	99.28	70	120	
Ge	74	HEHe	288440	0.8	3	290827.29	99.18	70	120	
Rh	103	No Gas	1943137	3.4	3	1924055.37	100.99	70	120	
Rh	103	He	949342	0.4	3	951366.82	99.79	70	120	
Tb	159	No Gas	3281565	2.5	3	3266294.67	100.47	70	120	
Tb	159	He	1816191	1.6	3	1829197.42	99.29	70	120	
Bi	209	No Gas	1654495	1.6	3	1636705.1	101.09	70	120	

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL2**	**Sample Type**	CalStd
File Name	006CALS.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:15:06	**Sample QC Pass/Fail**	Fail
Comment	A20A191 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.889	ug/l	8068	1.4	3	0.3000	
Na	23	45	He	46.428	ug/l	105448	0.2	3	0.2001	
Mg	24	45	He	46.714	ug/l	54791	0.6	3	0.2001	
Al	27	45	He	46.32	ug/l	26483	1.0	3	0.2001	
K	39	45	He	47.861	ug/l	88477	0.5	3	0.2001	
Ca	44	45	He	49.599	ug/l	4025	1.5	3	0.2001	
Ti	47	45	He	0.952	ug/l	363	17.2	3	0.3000	RSD Warning
V	51	74	He	0.9	ug/l	11645	2.3	3	0.3000	
Cr	52	74	He	0.919	ug/l	27852	1.8	3	0.3000	
Mn	55	74	He	0.952	ug/l	8386	2.4	3	0.3000	
Fe	56	74	He	46.649	ug/l	605556	0.2	3	0.3000	
Co	59	74	He	0.971	ug/l	17780	0.8	3	0.3000	
Ni	60	74	He	0.999	ug/l	6000	3.7	3	0.3000	
Cu	65	74	He	1.022	ug/l	6668	0.3	3	0.3000	
Cu	65	74	No Gas	0.97	ug/l	18225	1.0	3	0.3000	
Zn	66	74	He	1.026	ug/l	2387	2.5	3	0.3000	
As	75	74	He	0.933	ug/l	1555	2.6	3	2.0001	
Se	78	74	HEHe	0.975	ug/l	244	3.6	3	3.0000	
Mo	95	103	He	0.889	ug/l	8248	1.9	3	0.3000	
[Cd]	106	103	No Gas	0.889	ug/l	927	9.5	3	0.3000	
[Cd]	108	103	No Gas	0.903	ug/l	708	4.6	3	0.3000	
Ag	109	103	No Gas	0.899	ug/l	43752	1.3	3	0.3000	
Cd	111	103	He	0.873	ug/l	3832	5.4	3	0.3000	
Cd	111	103	No Gas	0.906	ug/l	9969	2.1	3	0.3000	
Sb	123	103	No Gas	0.891	ug/l	27113	2.0	3	0.3000	
Ba	138	159	He	0.905	ug/l	27508	1.0	3	0.3000	
W	186	159	No Gas	0	ug/l	120	44.1	3	0.0999	RSD Warning
Hg	201	159	No Gas	35.855	ng/l	179	4.1	3	2.0001	
Tl	205	159	No Gas	0.896	ug/l	76043	0.3	3	0.3000	
Pb	208	159	No Gas	0.909	ug/l	105314	1.1	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1323578	0.9	3	1305096.65	101.42	70	120	
Sc	45	He	384724	1.0	3	385078.04	99.91	70	120	
Ge	74	No Gas	2011675	1.9	3	1989219.35	101.13	70	120	
Ge	74	He	328265	0.9	3	329956.68	99.49	70	120	
Ge	74	HEHe	289347	1.0	3	290827.29	99.49	70	120	
Rh	103	No Gas	1955200	2.8	3	1924055.37	101.62	70	120	
Rh	103	He	959476	0.5	3	951366.82	100.85	70	120	
Tb	159	No Gas	3294781	4.2	3	3266294.67	100.87	70	120	
Tb	159	He	1852271	1.1	3	1829197.42	101.26	70	120	
Bi	209	No Gas	1670571	2.2	3	1636705.1	102.07	70	120	

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL3**	**Sample Type**	CalStd
File Name	007CALS.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:20:02	**Sample QC Pass/Fail**	Fail
Comment	A20A192 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	1.819	ug/l	16487	0.4	3	0.3000	
Na	23	45	He	103.31	ug/l	199765	1.0	3	0.2001	
Mg	24	45	He	104.546	ug/l	107629	0.9	3	0.2001	
Al	27	45	He	103.011	ug/l	51909	1.2	3	0.2001	
K	39	45	He	105.989	ug/l	140297	0.4	3	0.2001	
Ca	44	45	He	103.687	ug/l	6618	1.1	3	0.2001	
Ti	47	45	He	1.915	ug/l	644	7.0	3	0.3000	
V	51	74	He	2.047	ug/l	21080	2.0	3	0.3000	
Cr	52	74	He	2.167	ug/l	38726	0.7	3	0.3000	
Mn	55	74	He	2.019	ug/l	15603	1.1	3	0.3000	
Fe	56	74	He	104.926	ug/l	1129119	1.3	3	0.3000	
Co	59	74	He	2.151	ug/l	34894	1.9	3	0.3000	
Ni	60	74	He	2.217	ug/l	10262	2.1	3	0.3000	
Cu	65	74	He	2.222	ug/l	12347	1.7	3	0.3000	
Cu	65	74	No Gas	1.962	ug/l	34336	0.9	3	0.3000	
Zn	66	74	He	2.167	ug/l	4405	3.2	3	0.3000	
As	75	74	He	2.102	ug/l	3051	2.0	3	2.0001	
Se	78	74	HEHe	1.798	ug/l	460	2.9	3	3.0000	
Mo	95	103	He	2.03	ug/l	15145	2.8	3	0.3000	
[Cd]	106	103	No Gas	1.849	ug/l	1911	1.2	3	0.3000	
[Cd]	108	103	No Gas	1.763	ug/l	1361	4.5	3	0.3000	
Ag	109	103	No Gas	1.804	ug/l	87900	0.7	3	0.3000	
Cd	111	103	He	1.982	ug/l	7641	2.2	3	0.3000	
Cd	111	103	No Gas	1.842	ug/l	20278	1.8	3	0.3000	
Sb	123	103	No Gas	1.782	ug/l	54074	1.0	3	0.3000	
Ba	138	159	He	2.073	ug/l	55163	0.6	3	0.3000	
W	186	159	No Gas	0	ug/l	123	23.4	3	0.0999	RSD Warning
Hg	201	159	No Gas	70.08	ng/l	348	5.3	3	2.0001	
Tl	205	159	No Gas	1.739	ug/l	149211	1.5	3	0.3000	
Pb	208	159	No Gas	1.784	ug/l	208650	1.0	3	0.3000	

MR JMO 1/25/20

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1323677	0.7	3	1305096.65	101.42	70	120	
Sc	45	He	344663	14.4	3	385078.04	89.5	70	120	
Ge	74	No Gas	1977793	0.6	3	1989219.35	99.43	70	120	
Ge	74	He	297634	15.0	3	329956.68	90.2	70	120	
Ge	74	HEHe	296660	0.9	3	290827.29	102.01	70	120	
Rh	103	No Gas	1956893	3.2	3	1924055.37	101.71	70	120	
Rh	103	He	855933	14.0	3	951366.82	89.97	70	120	
Tb	159	No Gas	3334826	1.5	3	3266294.67	102.1	70	120	
Tb	159	He	1659066	14.3	3	1829197.42	90.7	70	120	
Bi	209	No Gas	1670694	0.4	3	1636705.1	102.08	70	120	

Analyst Noticed Dip in He mode only. Reshot for Better RSD in He Mode

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL3**	**Sample Type**	CalStd
File Name	008CALS.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:25:23	**Sample QC Pass/Fail**	Fail
Comment	A20A192 - JPB 01/24 He Mode reshot for better RSD.	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	1.816	ug/l	16683	1.7	3	0.3000	
Na	23	45	He	89.255	ug/l	197585	0.8	3	0.2001	
Mg	24	45	He	89.163	ug/l	104688	0.2	3	0.2001	
Al	27	45	He	90.451	ug/l	51878	0.5	3	0.2001	
K	39	45	He	89.13	ug/l	139231	0.4	3	0.2001	
Ca	44	45	He	87.522	ug/l	6485	3.2	3	0.2001	
Ti	47	45	He	1.724	ug/l	657	3.7	3	0.3000	
V	51	74	He	1.724	ug/l	20509	1.6	3	0.3000	
Cr	52	74	He	1.77	ug/l	39040	1.2	3	0.3000	
Mn	55	74	He	1.779	ug/l	15672	1.9	3	0.3000	
Fe	56	74	He	89.509	ug/l	1106916	1.1	3	0.3000	
Co	59	74	He	1.831	ug/l	33861	1.3	3	0.3000	
Ni	60	74	He	1.89	ug/l	10184	2.1	3	0.3000	
Cu	65	74	He	1.902	ug/l	12101	2.0	3	0.3000	
Cu	65	74	No Gas	1.906	ug/l	33948	2.3	3	0.3000	
Zn	66	74	He	1.863	ug/l	4331	3.7	3	0.3000	
As	75	74	He	1.836	ug/l	3042	0.1	3	2.0001	
Se	78	74	HEHe	1.801	ug/l	459	2.5	3	3.0000	
Mo	95	103	He	1.768	ug/l	15121	1.8	3	0.3000	
[Cd]	106	103	No Gas	1.739	ug/l	1798	5.1	3	0.3000	
[Cd]	108	103	No Gas	1.812	ug/l	1397	1.5	3	0.3000	
Ag	109	103	No Gas	1.776	ug/l	86510	1.7	3	0.3000	
Cd	111	103	He	1.762	ug/l	7691	2.7	3	0.3000	
Cd	111	103	No Gas	1.825	ug/l	20075	1.9	3	0.3000	
Sb	123	103	No Gas	1.754	ug/l	53203	0.2	3	0.3000	
Ba	138	159	He	1.791	ug/l	53866	1.0	3	0.3000	
W	186	159	No Gas	0.001	ug/l	150	24.0	3	0.0999	RSD Warning
Hg	201	159	No Gas	72.224	ng/l	352	6.2	3	2.0001	
Tl	205	159	No Gas	1.784	ug/l	150671	1.1	3	0.3000	
Pb	208	159	No Gas	1.786	ug/l	205599	1.6	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1343250	3.7	3	1305096.65	102.92	70	120	
Sc	45	He	386648	1.7	3	385078.04	100.41	70	120	
Ge	74	No Gas	2010053	1.5	3	1989219.35	101.05	70	120	
Ge	74	He	333063	2.4	3	329956.68	100.94	70	120	
Ge	74	HEHe	295987	2.4	3	290827.29	101.77	70	120	
Rh	103	No Gas	1955478	1.6	3	1924055.37	101.63	70	120	
Rh	103	He	954544	1.4	3	951366.82	100.33	70	120	
Tb	159	No Gas	3283291	1.6	3	3266294.67	100.52	70	120	
Tb	159	He	1846701	1.3	3	1829197.42	100.96	70	120	
Bi	209	No Gas	1636816	1.6	3	1636705.1	100.01	70	120	

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL4**	**Sample Type**	CalStd
File Name	009CALS.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:30:20	**Sample QC Pass/Fail**	Fail
Comment	A20A193 -JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	3.653	ug/l	33690	1.0	3	0.3000	
Na	23	45	He	178.115	ug/l	392601	1.0	3	0.2001	
Mg	24	45	He	180.752	ug/l	214395	0.7	3	0.2001	
Al	27	45	He	179.345	ug/l	104048	1.1	3	0.2001	
K	39	45	He	178.721	ug/l	251601	0.5	3	0.2001	
Ca	44	45	He	178.556	ug/l	12506	1.9	3	0.2001	
Ti	47	45	He	3.257	ug/l	1253	6.3	3	0.3000	
V	51	74	He	3.533	ug/l	39715	0.5	3	0.3000	
Cr	52	74	He	3.518	ug/l	61358	1.0	3	0.3000	
Mn	55	74	He	3.623	ug/l	31731	1.7	3	0.3000	
Fe	56	74	He	178.879	ug/l	2139865	1.0	3	0.3000	
Co	59	74	He	3.758	ug/l	69519	0.9	3	0.3000	
Ni	60	74	He	3.845	ug/l	19222	1.8	3	0.3000	
Cu	65	74	He	3.859	ug/l	24041	0.8	3	0.3000	
Cu	65	74	No Gas	3.846	ug/l	66676	0.9	3	0.3000	
Zn	66	74	He	3.736	ug/l	8628	2.2	3	0.3000	
As	75	74	He	3.682	ug/l	6051	0.1	3	2.0001	
Se	78	74	HEHe	3.663	ug/l	934	1.1	3	3.0000	
Mo	95	103	He	3.509	ug/l	29293	0.7	3	0.3000	
[Cd]	106	103	No Gas	3.61	ug/l	3714	3.6	3	0.3000	
[Cd]	108	103	No Gas	3.664	ug/l	2800	2.2	3	0.3000	
Ag	109	103	No Gas	3.611	ug/l	175766	0.4	3	0.3000	
Cd	111	103	He	3.475	ug/l	15408	3.3	3	0.3000	
Cd	111	103	No Gas	3.682	ug/l	40508	0.8	3	0.3000	
Sb	123	103	No Gas	3.585	ug/l	108503	0.8	3	0.3000	
Ba	138	159	He	3.602	ug/l	108827	0.2	3	0.3000	
W	186	159	No Gas	0.001	ug/l	150	24.0	3	0.0999	RSD Warning
Hg	201	159	No Gas	146.823	ng/l	705	3.1	3	2.0001	
Tl	205	159	No Gas	3.616	ug/l	303499	0.8	3	0.3000	
Pb	208	159	No Gas	3.668	ug/l	419040	0.6	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1348478	2.8	3	1305096.65	103.32	70	120	
Sc	45	He	391478	1.6	3	385078.04	101.66	70	120	
Ge	74	No Gas	2014328	2.6	3	1989219.35	101.26	70	120	
Ge	74	He	333818	0.7	3	329956.68	101.17	70	120	
Ge	74	HEHe	296257	1.7	3	290827.29	101.87	70	120	
Rh	103	No Gas	1956447	3.7	3	1924055.37	101.68	70	120	
Rh	103	He	970238	1.2	3	951366.82	101.98	70	120	
Tb	159	No Gas	3266562	2.3	3	3266294.67	100.01	70	120	
Tb	159	He	1862240	1.3	3	1829197.42	101.81	70	120	
Bi	209	No Gas	1677038	2.5	3	1636705.1	102.46	70	120	

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL5**	**Sample Type**	CalStd
File Name	010CALS.d	**Vial #**	2105
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:35:17	**Sample QC Pass/Fail**	Pass
Comment	A20A194 -JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	11.722	ug/l	109214	1.0	3	0.3000	
Na	23	45	He	465.128	ug/l	1011153	2.0	3	0.2001	
Mg	24	45	He	470.029	ug/l	554995	1.1	3	0.2001	
Al	27	45	He	464.592	ug/l	268457	0.7	3	0.2001	
K	39	45	He	463.334	ug/l	600999	1.0	3	0.2001	
Ca	44	45	He	462.204	ug/l	30893	2.3	3	0.2001	
Ti	47	45	He	22.222	ug/l	8495	3.0	3	0.3000	
V	51	74	He	22.96	ug/l	246715	1.0	3	0.3000	
Cr	52	74	He	23.154	ug/l	312568	0.3	3	0.3000	
Mn	55	74	He	23.076	ug/l	201776	1.0	3	0.3000	
Fe	56	74	He	454.977	ug/l	5350144	1.7	3	0.3000	
Co	59	74	He	23.917	ug/l	444100	0.6	3	0.3000	
Ni	60	74	He	24.744	ug/l	116258	1.7	3	0.3000	
Cu	65	74	He	25.185	ug/l	154686	1.2	3	0.3000	
Cu	65	74	No Gas	24.812	ug/l	416415	0.6	3	0.3000	
Zn	66	74	He	23.902	ug/l	55080	1.1	3	0.3000	
As	75	74	He	23.431	ug/l	38371	0.5	3	2.0001	
Se	78	74	HEHe	11.556	ug/l	2862	1.9	3	3.0000	
Mo	95	103	He	11.467	ug/l	93401	1.1	3	0.3000	
[Cd]	106	103	No Gas	22.819	ug/l	23427	1.3	3	0.3000	
[Cd]	108	103	No Gas	22.816	ug/l	17328	1.1	3	0.3000	
Ag	109	103	No Gas	11.513	ug/l	560931	0.5	3	0.3000	
Cd	111	103	He	22.452	ug/l	100076	0.7	3	0.3000	
Cd	111	103	No Gas	23.521	ug/l	259004	0.7	3	0.3000	
Sb	123	103	No Gas	11.51	ug/l	348196	0.6	3	0.3000	
Ba	138	159	He	23.431	ug/l	699933	0.9	3	0.3000	
W	186	159	No Gas	0.004	ug/l	267	13.2	3	0.0999	
Hg	201	159	No Gas	470.228	ng/l	2273	0.8	3	2.0001	
Tl	205	159	No Gas	11.47	ug/l	975495	0.9	3	0.3000	
Pb	208	159	No Gas	23.079	ug/l	2667328	0.7	3	0.3000	

NR
Sample
was rerun
>10% above
expected
recovery
remade
for reshot.
JB 01/25/20

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1362288	2.1	3	1305096.65	104.38	70	120	
Sc	45	He	390171	2.1	3	385078.04	101.32	70	120	
Ge	74	No Gas	1997327	0.9	3	1989219.35	100.41	70	120	
Ge	74	He	335899	3.2	3	329956.68	101.8	70	120	
Ge	74	HEHe	288177	1.6	3	290827.29	99.09	70	120	
Rh	103	No Gas	1956760	0.6	3	1924055.37	101.7	70	120	
Rh	103	He	975652	3.2	3	951366.82	102.55	70	120	
Tb	159	No Gas	3311157	2.4	3	3266294.67	101.37	70	120	
Tb	159	He	1848281	3.4	3	1829197.42	101.04	70	120	
Bi	209	No Gas	1666242	0.6	3	1636705.1	101.8	70	120	

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL6**	**Sample Type**	CalStd
File Name	011CALS.d	**Vial #**	2106
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:40:12	**Sample QC Pass/Fail**	Pass
Comment	A20A195	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	57.464	ug/l	464291	0.4	3	0.3000	
Na	23	45	He	2406.491	ug/l	5144824	2.3	3	0.2001	
Mg	24	45	He	2424.506	ug/l	2828888	2.0	3	0.2001	
Al	27	45	He	2430.844	ug/l	1388562	2.6	3	0.2001	
K	39	45	He	2392.191	ug/l	2941224	1.0	3	0.2001	
Ca	44	45	He	2445.135	ug/l	157936	0.6	3	0.2001	
Ti	47	45	He	48.025	ug/l	18145	2.7	3	0.3000	
V	51	74	He	48.327	ug/l	516052	0.3	3	0.3000	
Cr	52	74	He	47.245	ug/l	619689	0.7	3	0.3000	
Mn	55	74	He	48.434	ug/l	422778	0.5	3	0.3000	
Fe	56	74	He	2378.776	ug/l	27619373	0.9	3	0.3000	
Co	59	74	He	49.519	ug/l	918281	1.0	3	0.3000	
Ni	60	74	He	50.67	ug/l	236142	1.3	3	0.3000	
Cu	65	74	He	51.632	ug/l	316111	1.2	3	0.3000	
Cu	65	74	No Gas	59.535	ug/l	873746	1.2	3	0.3000	
Zn	66	74	He	50.118	ug/l	115261	0.9	3	0.3000	
As	75	74	He	49.993	ug/l	81697	0.3	3	2.0001	
Se	78	74	HEHe	50.234	ug/l	12491	0.1	3	3.0000	
Mo	95	103	He	49.024	ug/l	385143	0.4	3	0.3000	
[Cd]	106	103	No Gas	55.369	ug/l	49498	0.9	3	0.3000	
[Cd]	108	103	No Gas	56.181	ug/l	37168	1.2	3	0.3000	
Ag	109	103	No Gas	55.54	ug/l	2356338	1.8	3	0.3000	
Cd	111	103	He	47.71	ug/l	207209	0.1	3	0.3000	
Cd	111	103	No Gas	56.525	ug/l	542051	1.7	3	0.3000	
Sb	123	103	No Gas	55.013	ug/l	1450382	1.3	3	0.3000	
Ba	138	159	He	50.024	ug/l	1486580	0.5	3	0.3000	
W	186	159	No Gas	0.011	ug/l	477	9.9	3	0.0999	
Hg	201	159	No Gas	2263.024	ng/l	9571	0.8	3	2.0001	
Tl	205	159	No Gas	54.548	ug/l	4071142	0.8	3	0.3000	
Pb	208	159	No Gas	55.931	ug/l	5670296	0.6	3	0.3000	

NR
JBS 01/25/20

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1212579	18.7	3	1305096.65	92.91	70	120	
Sc	45	He	385736	1.3	3	385078.04	100.17	70	120	
Ge	74	No Gas	1788333	6.4	3	1989219.35	89.9	70	120	
Ge	74	He	335350	1.7	3	329956.68	101.63	70	120	
Ge	74	HEHe	289460	1.3	3	290827.29	99.53	70	120	
Rh	103	No Gas	1742617	17.2	3	1924055.37	90.57	70	120	
Rh	103	He	950313	1.5	3	951366.82	99.89	70	120	
Tb	159	No Gas	2963165	16.7	3	3266294.67	90.72	70	120	
Tb	159	He	1838747	2.3	3	1829197.42	100.52	70	120	
Bi	209	No Gas	1495422	15.4	3	1636705.1	91.37	70	120	

High RSD & Dip in recovery for No gas mode only - reshot for No gas

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL7**	**Sample Type**	CalStd
File Name	012CALS.d	**Vial #**	2107
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:44:58	**Sample QC Pass/Fail**	Pass
Comment	A20A196	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	101.447	ug/l	949442	1.9	3	0.3000	
Na	23	45	He	3952.641	ug/l	8211477	0.6	3	0.2001	
Mg	24	45	He	3998.406	ug/l	4535796	2.1	3	0.2001	
Al	27	45	He	3994.63	ug/l	2218634	1.5	3	0.2001	
K	39	45	He	3943.632	ug/l	4695567	1.8	3	0.2001	
Ca	44	45	He	3992.478	ug/l	250249	1.0	3	0.2001	
Ti	47	45	He	195.967	ug/l	71966	0.6	3	0.3000	
V	51	74	He	200.394	ug/l	2070491	0.8	3	0.3000	
Cr	52	74	He	199.358	ug/l	2487008	2.4	3	0.3000	
Mn	55	74	He	198.899	ug/l	1684991	0.8	3	0.3000	
Fe	56	74	He	3964.381	ug/l	44638095	0.4	3	0.3000	
Co	59	74	He	203.831	ug/l	3669631	1.8	3	0.3000	
Ni	60	74	He	207.661	ug/l	935169	0.6	3	0.3000	
Cu	65	74	He	209.974	ug/l	1246456	1.0	3	0.3000	
Cu	65	74	No Gas	213.066	ug/l	3493095	1.1	3	0.3000	
Zn	66	74	He	204.492	ug/l	456441	1.0	3	0.3000	
As	75	74	He	201.106	ug/l	318900	0.4	3	2.0001	
Se	78	74	HEHe	100.007	ug/l	24668	0.7	3	3.0000	
Mo	95	103	He	100.039	ug/l	762359	0.9	3	0.3000	
[Cd]	106	103	No Gas	203.128	ug/l	201768	1.0	3	0.3000	
[Cd]	108	103	No Gas	204.051	ug/l	149842	1.2	3	0.3000	
Ag	109	103	No Gas	100.305	ug/l	4730878	1.3	3	0.3000	
Cd	111	103	He	195.79	ug/l	826089	0.3	3	0.3000	
Cd	111	103	No Gas	207.013	ug/l	2206899	1.2	3	0.3000	
Sb	123	103	No Gas	100.284	ug/l	2935399	0.9	3	0.3000	
Ba	138	159	He	202.748	ug/l	5929839	0.2	3	0.3000	
W	186	159	No Gas	0.025	ug/l	1034	9.4	3	0.0999	
Hg	201	159	No Gas	4024.414	ng/l	19161	1.7	3	2.0001	
Tl	205	159	No Gas	100.753	ug/l	8460339	0.7	3	0.3000	
Pb	208	159	No Gas	202.631	ug/l	23126140	1.9	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1368371	0.2	3	1305096.65	104.85	70	120	
Sc	45	He	375050	0.7	3	385078.04	97.4	70	120	
Ge	74	No Gas	1959095	1.6	3	1989219.35	98.49	70	120	
Ge	74	He	325578	1.2	3	329956.68	98.67	70	120	
Ge	74	HEHe	287396	3.4	3	290827.29	98.82	70	120	
Rh	103	No Gas	1894675	1.3	3	1924055.37	98.47	70	120	
Rh	103	He	923144	0.9	3	951366.82	97.03	70	120	
Tb	159	No Gas	3269226	0.3	3	3266294.67	100.09	70	120	
Tb	159	He	1809281	0.5	3	1829197.42	98.91	70	120	
Bi	209	No Gas	1673433	1.4	3	1636705.1	102.24	70	120	

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL8**	**Sample Type**	CalStd
File Name	013CALS.d	**Vial #**	2108
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:49:35	**Sample QC Pass/Fail**	Fail
Comment	A20A197	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.027	ug/l	266	15.1	3	0.3000	RSD Warning
Na	23	45	He	9775.581	ug/l	19289063	0.7	3	0.2001	
Mg	24	45	He	9891.317	ug/l	10661781	2.0	3	0.2001	
Al	27	45	He	9806.299	ug/l	5175531	0.9	3	0.2001	
K	39	45	He	9571.107	ug/l	10786834	1.4	3	0.2001	
Ca	44	45	He	9967.302	ug/l	592470	0.3	3	0.2001	
Ti	47	45	He	485.374	ug/l	169375	0.5	3	0.3000	
V	51	74	He	499.938	ug/l	4904888	0.6	3	0.3000	
Cr	52	74	He	486.183	ug/l	5739435	1.1	3	0.3000	
Mn	55	74	He	491.146	ug/l	3952776	0.9	3	0.3000	
Fe	56	74	He	9809.013	ug/l	104831376	1.1	3	0.3000	
Co	59	74	He	498.327	ug/l	8523077	0.4	3	0.3000	
Ni	60	74	He	510.506	ug/l	2182316	1.1	3	0.3000	
Cu	65	74	He	506.287	ug/l	2854867	0.7	3	0.3000	
Cu	65	74	No Gas	508.176	ug/l	8178038	0.6	3	0.3000	
Zn	66	74	He	501.471	ug/l	1063329	1.2	3	0.3000	
As	75	74	He	499.471	ug/l	752440	0.5	3	2.0001	
Se	78	74	HEHe	0.064	ug/l	16	13.5	3	3.0000	
Mo	95	103	He	-0.05	ug/l	759	14.9	3	0.3000	
[Cd]	106	103	No Gas	496.757	ug/l	481564	0.3	3	0.3000	
[Cd]	108	103	No Gas	495.685	ug/l	355215	0.4	3	0.3000	
Ag	109	103	No Gas	0.022	ug/l	1061	7.9	3	0.3000	
Cd	111	103	He	485.188	ug/l	1966012	1.8	3	0.3000	
Cd	111	103	No Gas	498.2	ug/l	5184667	1.9	3	0.3000	
Sb	123	103	No Gas	0.074	ug/l	2339	3.8	3	0.3000	
Ba	138	159	He	487.213	ug/l	14103201	0.7	3	0.3000	
W	186	159	No Gas	100	ug/l	3638732	1.4	3	0.0999	
Hg	201	159	No Gas	111.547	ng/l	531	3.0	3	2.0001	
Tl	205	159	No Gas	0.121	ug/l	10342	3.0	3	0.3000	
Pb	208	159	No Gas	498.963	ug/l	56202817	0.3	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1334909	1.7	3	1305096.65	102.28	70	120	
Sc	45	He	356443	1.5	3	385078.04	92.56	70	120	
Ge	74	No Gas	1923817	1.3	3	1989219.35	96.71	70	120	
Ge	74	He	309324	0.4	3	329956.68	93.75	70	120	
Ge	74	HEHe	262893	0.5	3	290827.29	90.39	70	120	
Rh	103	No Gas	1849230	1.6	3	1924055.37	96.11	70	120	
Rh	103	He	886482	0.4	3	951366.82	93.18	70	120	
Tb	159	No Gas	3226916	1.1	3	3266294.67	98.79	70	120	
Tb	159	He	1790805	1.2	3	1829197.42	97.9	70	120	
Bi	209	No Gas	1653400	1.4	3	1636705.1	101.02	70	120	

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL9**	**Sample Type**	CalStd
File Name	014CALS.d	**Vial #**	2109
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 12:54:12	**Sample QC Pass/Fail**	Pass
Comment	A20A198	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.011	ug/l	117	7.6	3	0.3000	
Na	23	45	He	50049.612	ug/l	92724046	0.4	3	0.2001	
Mg	24	45	He	50019.9	ug/l	50628593	1.3	3	0.2001	
Al	27	45	He	50038.548	ug/l	24798143	1.0	3	0.2001	
K	39	45	He	50091.445	ug/l	52909039	1.3	3	0.2001	
Ca	44	45	He	50008.365	ug/l	2788502	1.4	3	0.2001	
Ti	47	45	He	2503.286	ug/l	820346	0.6	3	0.3000	
V	51	74	He	0.011	ug/l	2069	3.8	3	0.3000	
Cr	52	74	He	1007.142	ug/l	10882017	1.0	3	0.3000	
Mn	55	74	He	2501.869	ug/l	18454673	0.4	3	0.3000	
Fe	56	74	He	50041.752	ug/l	489941606	0.5	3	0.3000	
Co	59	74	He	0.248	ug/l	4008	2.7	3	0.3000	
Ni	60	74	He	993.088	ug/l	3890010	0.3	3	0.3000	
Cu	65	74	He	994.698	ug/l	5140489	0.9	3	0.3000	
Cu	65	74	No Gas	993.265	ug/l	14564714	1.7	3	0.3000	
Zn	66	74	He	2499.313	ug/l	4857319	0.3	3	0.3000	
As	75	74	He	0.182	ug/l	306	5.1	3	2.0001	
Se	78	74	HEHe	0.096	ug/l	22	7.2	3	3.0000	
Mo	95	103	He	-0.031	ug/l	797	1.7	3	0.3000	
[Cd]	106	103	No Gas	1001.084	ug/l	868477	0.9	3	0.3000	
[Cd]	108	103	No Gas	1001.396	ug/l	642155	0.5	3	0.3000	
Ag	109	103	No Gas	0.024	ug/l	1016	3.4	3	0.3000	
Cd	111	103	He	1008.301	ug/l	3613283	1.0	3	0.3000	
Cd	111	103	No Gas	999.539	ug/l	9307231	0.1	3	0.3000	
Sb	123	103	No Gas	0.042	ug/l	1261	6.1	3	0.3000	
Ba	138	159	He	2502.328	ug/l	67321450	1.6	3	0.3000	
W	186	159	No Gas	0.378	ug/l	13037	1.9	3	0.0999	
Hg	201	159	No Gas	17.146	ng/l	83	6.3	3	2.0001	
Tl	205	159	No Gas	0.034	ug/l	2927	6.6	3	0.3000	
Pb	208	159	No Gas	0.178	ug/l	19690	0.6	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1243885	2.0	3	1305096.65	95.31	70	120	
Sc	45	He	334692	0.5	3	385078.04	86.92	70	120	
Ge	74	No Gas	1753131	2.6	3	1989219.35	88.13	70	120	
Ge	74	He	283557	1.3	3	329956.68	85.94	70	120	
Ge	74	HEHe	247339	0.8	3	290827.29	85.05	70	120	
Rh	103	No Gas	1654825	1.5	3	1924055.37	86.01	70	120	
Rh	103	He	784034	0.4	3	951366.82	82.41	70	120	
Tb	159	No Gas	3028995	1.8	3	3266294.67	92.73	70	120	
Tb	159	He	1664302	1.0	3	1829197.42	90.99	70	120	
Bi	209	No Gas	1491620	1.4	3	1636705.1	91.14	70	120	

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL6**	**Sample Type**	CalStd
File Name	015CALS.d	**Vial #**	2106
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 13:25:05	**Sample QC Pass/Fail**	Pass
Comment	A20A195 No Gas Mode reshot for better RSD.	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	47.051	ug/l	447951	0.9	3	0.3000	
Na	23	45	He	2480.07	ug/l	4838022	0.5	3	0.2001	
Mg	24	45	He	2537.452	ug/l	2702677	1.7	3	0.2001	
Al	27	45	He	2511.55	ug/l	1309161	1.3	3	0.2001	
K	39	45	He	2476.968	ug/l	2779487	1.3	3	0.2001	
Ca	44	45	He	2476.935	ug/l	145968	1.2	3	0.2001	
Ti	47	45	He	48.473	ug/l	16709	0.2	3	0.3000	
V	51	74	He	49.228	ug/l	484082	0.4	3	0.3000	
Cr	52	74	He	47.979	ug/l	579345	0.2	3	0.3000	
Mn	55	74	He	49.516	ug/l	398013	0.3	3	0.3000	
Fe	56	74	He	2487.14	ug/l	26597046	1.0	3	0.3000	
Co	59	74	He	51.18	ug/l	874156	0.6	3	0.3000	
Ni	60	74	He	52.034	ug/l	223346	0.7	3	0.3000	
Cu	65	74	He	52.702	ug/l	297219	0.7	3	0.3000	
Cu	65	74	No Gas	49.946	ug/l	823614	1.9	3	0.3000	
Zn	66	74	He	51.489	ug/l	109055	0.2	3	0.3000	
As	75	74	He	50.836	ug/l	76511	0.2	3	2.0001	
Se	78	74	HEHe	49.921	ug/l	11931	1.1	3	3.0000	
Mo	95	103	He	49.97	ug/l	367142	0.8	3	0.3000	
[Cd]	106	103	No Gas	48.007	ug/l	47993	2.4	3	0.3000	
[Cd]	108	103	No Gas	48.809	ug/l	36072	1.8	3	0.3000	
Ag	109	103	No Gas	49.355	ug/l	2342146	1.5	3	0.3000	
Cd	111	103	He	49.207	ug/l	199847	0.9	3	0.3000	
Cd	111	103	No Gas	48.775	ug/l	523157	1.0	3	0.3000	
Sb	123	103	No Gas	49.394	ug/l	1454691	1.5	3	0.3000	
Ba	138	159	He	50.436	ug/l	1448050	0.9	3	0.3000	
W	186	159	No Gas	0.018	ug/l	811	4.9	3	0.0999	
Hg	201	159	No Gas	1946.424	ng/l	9417	0.7	3	2.0001	
Tl	205	159	No Gas	48.432	ug/l	4130417	1.5	3	0.3000	
Pb	208	159	No Gas	49.526	ug/l	5741393	0.5	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1391984	0.6	3	1305096.65	106.66	70	120	
Sc	45	He	352830	5.9	3	385078.04	91.63	70	120	
Ge	74	No Gas	1967338	2.8	3	1989219.35	98.9	70	120	
Ge	74	He	309494	5.8	3	329956.68	93.8	70	120	
Ge	74	HEHe	278206	1.0	3	290827.29	95.66	70	120	
Rh	103	No Gas	1906120	1.9	3	1924055.37	99.07	70	120	
Rh	103	He	890789	6.2	3	951366.82	93.63	70	120	
Tb	159	No Gas	3320542	0.9	3	3266294.67	101.66	70	120	
Tb	159	He	1779504	6.0	3	1829197.42	97.28	70	120	
Bi	209	No Gas	1701019	1.2	3	1636705.1	103.93	70	120	

Calibration Standard Report ICPMS6

Sample Name	**0A24028-CAL5**	**Sample Type**	CalStd
File Name	016CALS.d	**Vial #**	2105
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 13:45:45	**Sample QC Pass/Fail**	Pass
Comment	A20A194 -JPB 01/24 Remade. > 10% above expected value for first shot. At 10% of B spike curve.	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	10.258	ug/l	94700	0.7	3	0.3000	
Na	23	45	He	407.989	ug/l	855436	0.2	3	0.2001	
Mg	24	45	He	411.036	ug/l	467797	0.1	3	0.2001	
Al	27	45	He	405.541	ug/l	225867	0.6	3	0.2001	
K	39	45	He	399.747	ug/l	503832	0.7	3	0.2001	
Ca	44	45	He	391.936	ug/l	25379	2.5	3	0.2001	
Ti	47	45	He	19.136	ug/l	7050	1.3	3	0.3000	
V	51	74	He	19.555	ug/l	206338	0.6	3	0.3000	
Cr	52	74	He	19.825	ug/l	264779	0.8	3	0.3000	
Mn	55	74	He	19.9	ug/l	170666	1.0	3	0.3000	
Fe	56	74	He	392.646	ug/l	4538988	1.7	3	0.3000	
Co	59	74	He	20.544	ug/l	374018	1.0	3	0.3000	
Ni	60	74	He	21.169	ug/l	97703	0.9	3	0.3000	
Cu	65	74	He	21.37	ug/l	128748	0.3	3	0.3000	
Cu	65	74	No Gas	21.754	ug/l	361494	0.3	3	0.3000	
Zn	66	74	He	20.395	ug/l	46092	0.7	3	0.3000	
As	75	74	He	20.049	ug/l	32200	0.5	3	2.0001	
Se	78	74	HEHe	10.297	ug/l	2542	2.3	3	3.0000	
Mo	95	103	He	9.797	ug/l	79005	0.4	3	0.3000	
[Cd]	106	103	No Gas	20.605	ug/l	20876	2.3	3	0.3000	
[Cd]	108	103	No Gas	20.504	ug/l	15371	0.9	3	0.3000	
Ag	109	103	No Gas	10.177	ug/l	489383	1.2	3	0.3000	
Cd	111	103	He	19.372	ug/l	85297	0.8	3	0.3000	
Cd	111	103	No Gas	20.96	ug/l	227816	0.6	3	0.3000	
Sb	123	103	No Gas	10.2	ug/l	304559	0.8	3	0.3000	
Ba	138	159	He	20.066	ug/l	606297	1.0	3	0.3000	
W	186	159	No Gas	0.007	ug/l	377	10.1	3	0.0999	
Hg	201	159	No Gas	422.698	ng/l	2043	1.4	3	2.0001	
Tl	205	159	No Gas	10.313	ug/l	876588	0.3	3	0.3000	
Pb	208	159	No Gas	20.787	ug/l	2401554	0.3	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1349805	2.1	3	1305096.65	103.43	70	120	
Sc	45	He	376031	1.6	3	385078.04	97.65	70	120	
Ge	74	No Gas	1976503	1.1	3	1989219.35	99.36	70	120	
Ge	74	He	329137	0.4	3	329956.68	99.75	70	120	
Ge	74	HEHe	287203	1.3	3	290827.29	98.75	70	120	
Rh	103	No Gas	1931820	1.8	3	1924055.37	100.4	70	120	
Rh	103	He	963265	0.5	3	951366.82	101.25	70	120	
Tb	159	No Gas	3308353	1.0	3	3266294.67	101.29	70	120	
Tb	159	He	1868377	1.3	3	1829197.42	102.14	70	120	
Bi	209	No Gas	1706526	1.5	3	1636705.1	104.27	70	120	

P/A Factor Tuning Report

========== Current Sample ==========
Sample Name: 0A24028-ICV1
Data File: 017_ICV.d
Acquired: 01/24/2020 14:17:02

========= Detector Parameters and P/A Factors =========
Discriminator: 4.6 mV
AnalogHV: 2134 V
PulseHV: 1053 V

Acquired: 01/23/2020 11:47:06

Mass[u]	Element	P/A Factor
23	Na	0.090447
24	Mg	0.093838
27	Al	0.096450
39	K	0.099102
44	Ca	0.100154
47	Ti	0.096184
51	V	0.099185
52	Cr	0.101076
55	Mn	0.102220
56	Fe	0.108258
59	Co	0.105216
60	Ni	0.104310
65	Cu	0.106253
66	Zn	0.107295
75	As	0.105314
95	Mo	0.109024
106	[Cd]	0.111943
107	Ag	0.109399
108	[Cd]	0.111904
109	Ag	0.109888
111	Cd	0.109275
123	Sb	0.114443
138	Ba	0.116218
186	W	0.110333
205	Tl	0.122627
206	[Pb]	0.121765
207	[Pb]	0.122785
208	Pb	0.121736
6	Li	Signal too low
7	[Li]	Signal too low
9	Be	Signal too low
45	Sc	Signal too low
74	Ge	Signal too low
78	Se	Signal too low
103	Rh	Signal too low

159	Tb	Signal too low
201	Hg	Signal too low
209	Bi	Signal too low

=== Independent Detector Parameters and P/A Factors ===

Tune Mode Name: No Gas
Discriminator: 4.6 mV
AnalogHV: 2134 V
PulseHV: 1053 V

Acquired: 01/24/2020 12:54:14

Mass[u]	Element	P/A Factor
6	Li	0.085946
9	Be	0.092222
65	Cu	0.113371
74	Ge	0.110960
103	Rh	0.112897
106	[Cd]	0.115031
108	[Cd]	0.115426
109	Ag	0.117658
111	Cd	0.115527
123	Sb	0.115442
159	Tb	0.114392
186	W	0.115733
205	Tl	0.120702
206	[Pb]	0.120767
207	[Pb]	0.121304
208	Pb	0.120843
209	Bi	0.117850
7	[Li]	Signal too low
201	Hg	Signal too low

Tune Mode Name: He
Discriminator: 4.6 mV
AnalogHV: 2134 V
PulseHV: 1053 V

Acquired: 01/24/2020 12:55:06

Mass[u]	Element	P/A Factor
23	Na	0.096275
24	Mg	0.099630
27	Al	0.101489
39	K	0.104168
44	Ca	0.104038
47	Ti	0.104087
51	V	0.107005
52	Cr	0.108867

55	Mn	0.108813
56	Fe	0.109908
59	Co	0.112029
60	Ni	0.112349
65	Cu	0.113238
66	Zn	0.113616
75	As	0.112738
95	Mo	0.112122
103	Rh	0.113459
111	Cd	0.115974
138	Ba	0.117512
159	Tb	0.115392
45	Sc	Signal too low
74	Ge	Signal too low

Tune Mode Name: HEHe
Discriminator: 4.6 mV
AnalogHV: 2134 V
PulseHV: 1053 V

Acquired: 10/25/2019 14:18:04

Mass[u] Element P/A Factor
(P/A factors could not be measured.)

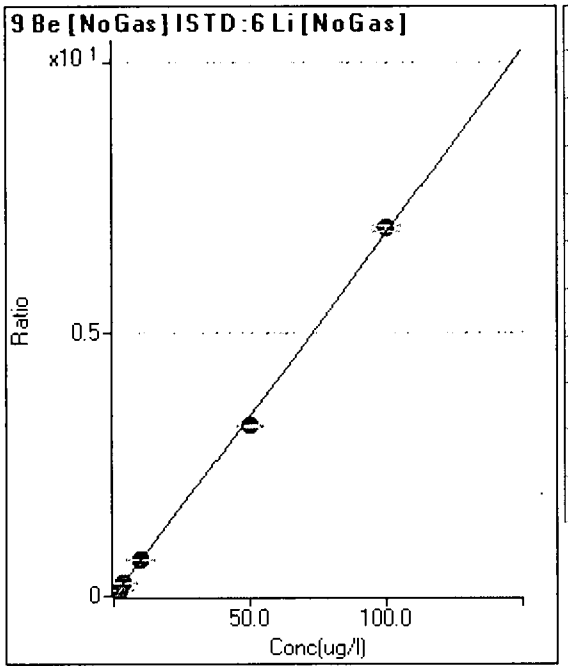
Created: 01/25/2020 14:25:38

Calibration for 017_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\0A24028.b\
Analysis File: 0A24028.batch.bin
DA Date-Time: 01/24/2020 14:18:52
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	0A24028-CAL0	01/24/2020 12:05:09
2	005CALS.d	0A24028-CAL1	01/24/2020 12:10:08
3	006CALS.d	0A24028-CAL2	01/24/2020 12:15:06
4	008CALS.d	0A24028-CAL3	01/24/2020 12:25:23
5	009CALS.d	0A24028-CAL4	01/24/2020 12:30:20
6	016CALS.d	0A24028-CAL5	01/24/2020 13:45:45
7	015CALS.d	0A24028-CAL6	01/24/2020 13:25:05
8	012CALS.d	0A24028-CAL7	01/24/2020 12:44:58
9	013CALS.d	0A24028-CAL8	01/24/2020 12:49:35
10	014CALS.d	0A24028-CAL9	01/24/2020 12:54:12

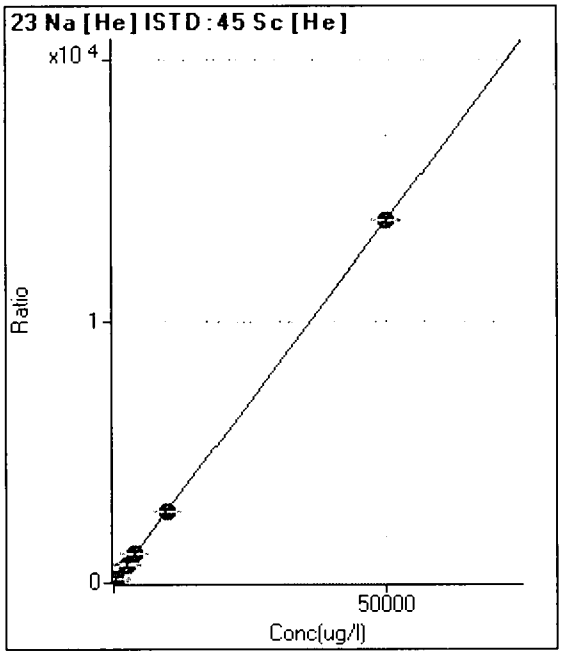
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23	0.000	P	24.4
2	☐	0.180	0.188	1729	0.013	P	3.3
3	☐	0.900	0.889	8068	0.061	P	2.3
4	☐	1.800	1.816	16683	0.124	P	5.0
5	☐	3.600	3.653	33690	0.250	P	3.6
6	☐	10.000	10.258	94700	0.702	P	1.4
7	☐	50.000	47.051	447951	3.218	P	1.0
8	☐	100.000	101.447	949442	6.938	A	1.7
9	☐			266	0.002	P	16.8
10	☐			117	0.001	P	5.7

y = 0.0684 * x + 1.7871E-004
R = 0.9994
DL = 0.001917
BEC = 0.002613

Weight: <None>
Min Conc: <None>

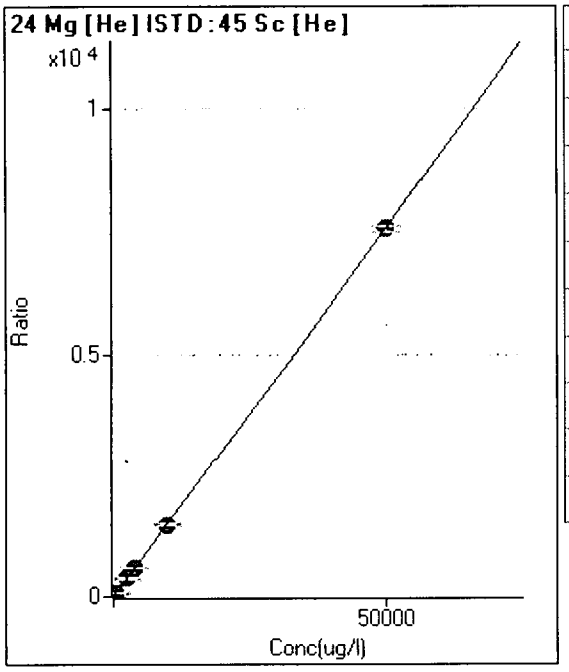


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6593	0.856	P	2.5
2	☐			26029	3.431	P	3.0
3	☐	45.000	46.428	105448	13.705	P	0.8
4	☐	90.000	89.255	197585	25.558	P	2.4
5	☐	180.000	178.115	392601	50.150	P	1.5
6	☐	400.000	407.989	855436	113.768	P	1.8
7	☐	2500.000	2480.070	4838022	687.222	A	6.0
8	☐	4000.000	3952.641	8211477	1,094.760	A	1.0
9	☐	10000.000	9775.581	19289063	2,706.274	A	1.9
10	☐	50000.000	50049.612	92724046	13,852.221	A	0.1

y = 0.2768 * x + 0.8560
R = 1.0000
DL = 0.2313
BEC = 3.093

Weight: <None>
Min Conc: <None>

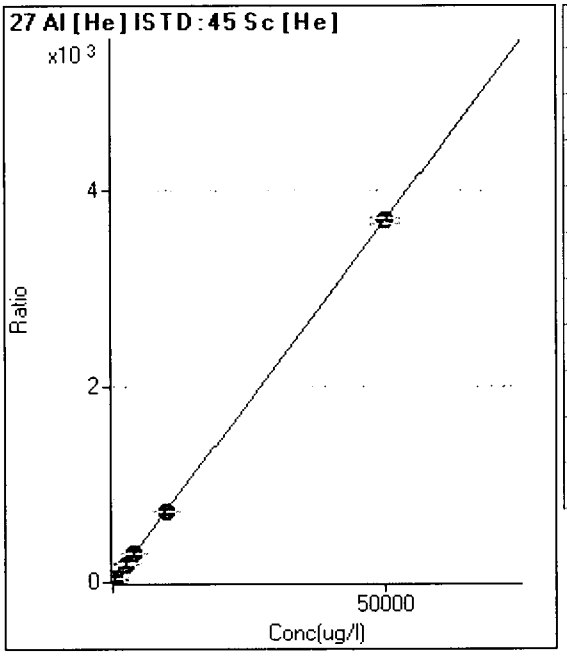
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	441	0.057	P	15.0
2	☐			11172	1.473	P	4.3
3	☐	45.000	46.714	54791	7.121	P	1.2
4	☐	90.000	89.163	104688	13.540	P	1.5
5	☐	180.000	180.752	214395	27.390	P	2.3
6	☐	400.000	411.036	467797	62.212	P	1.5
7	☐	2500.000	2537.452	2702677	383.757	A	5.2
8	☐	4000.000	3998.406	4535796	604.674	A	1.7
9	☐	10000.000	9891.317	10661781	1,495.767	A	2.3
10	☐	50000.000	50019.900	50628593	7,563.785	A	1.6

y = 0.1512 * x + 0.0574
R = 1.0000
DL = 0.1704
BEC = 0.3794

Weight: <None>
Min Conc: <None>

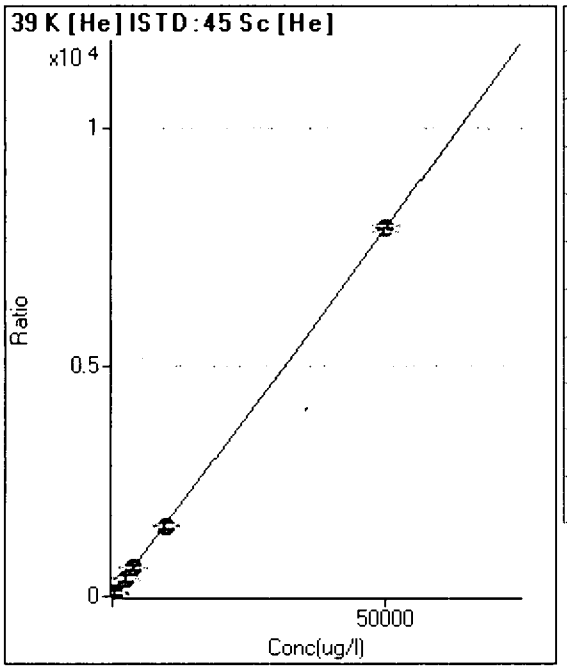


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	98	0.013	P	7.6
2	☐			5373	0.708	P	2.7
3	☐	45.000	46.320	26483	3.442	P	1.9
4	☐	90.000	90.451	51878	6.710	P	1.2
5	☐	180.000	179.345	104048	13.291	P	1.8
6	☐	400.000	405.541	225867	30.039	P	1.8
7	☐	2500.000	2511.550	1309161	185.965	A	6.2
8	☐	4000.000	3994.630	2218634	295.771	A	1.0
9	☐	10000.000	9806.299	5175531	726.061	A	1.0
10	☐	50000.000	50038.548	24798143	3,704.813	A	1.5

y = 0.0740 * x + 0.0128
R = 1.0000
DL = 0.03952
BEC = 0.1724

Weight: <None>
Min Conc: <None>

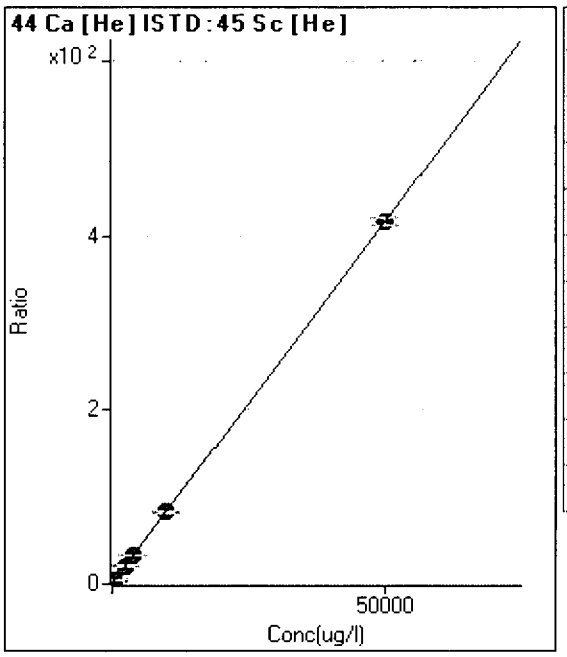
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30422	3.950	P	0.4
2	☐			40945	5.396	P	1.1
3	☐	45.000	47.861	88477	11.499	P	0.6
4	☐	90.000	89.130	139231	18.008	P	1.8
5	☐	180.000	178.721	251601	32.139	P	1.3
6	☐	400.000	399.747	503832	67.001	P	1.1
7	☐	2500.000	2476.968	2779487	394.632	A	4.8
8	☐	4000.000	3943.632	4695567	625.962	A	1.2
9	☐	10000.000	9571.107	10786834	1,513.560	A	2.9
10	☐	50000.000	50091.445	52909039	7,904.657	A	1.8

y = 0.1577 * x + 3.9502
R = 1.0000
DL = 0.3338
BEC = 25.04

Weight: <None>
Min Conc: <None>

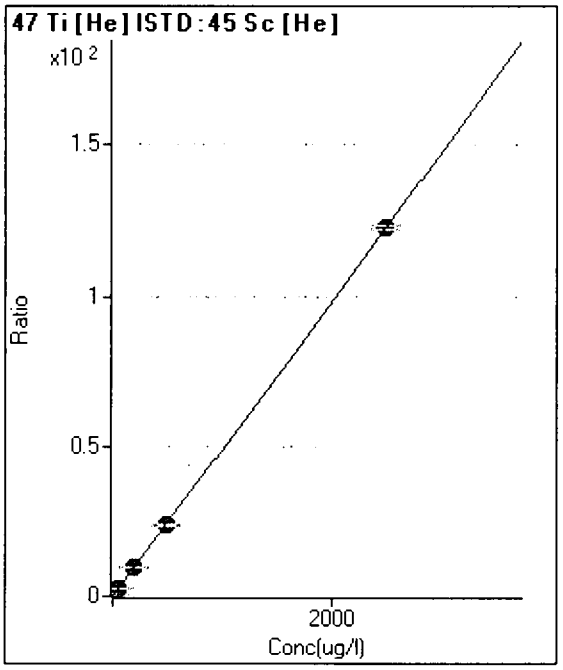


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	848	0.110	P	6.4
2	☐			1463	0.193	P	2.6
3	☐	45.000	49.599	4025	0.523	P	2.4
4	☐	90.000	87.522	6485	0.839	P	4.8
5	☐	180.000	178.556	12506	1.597	P	0.5
6	☐	400.000	391.936	25379	3.374	P	1.5
7	☐	2500.000	2476.935	145968	20.739	P	6.7
8	☐	4000.000	3992.478	250249	33.362	P	0.4
9	☐	10000.000	9967.302	592470	83.123	P	1.8
10	☐	50000.000	50008.365	2788502	416.608	A	2.0

y = 0.0083 * x + 0.1101
R = 1.0000
DL = 2.527
BEC = 13.22

Weight: <None>
Min Conc: <None>

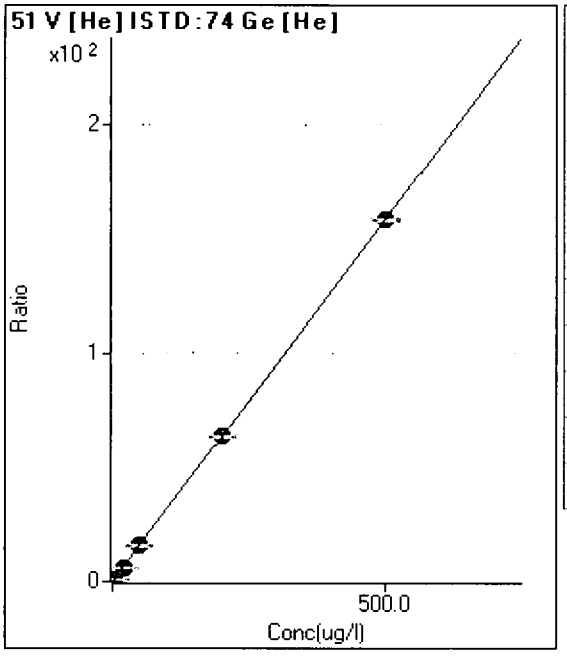
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4	0.001	P	114.6
2	☐			80	0.011	P	25.7
3	☐			363	0.047	P	16.3
4	☐	1.800	1.724	657	0.085	P	5.2
5	☐	3.600	3.257	1253	0.160	P	5.6
6	☐	20.000	19.136	7050	0.937	P	0.9
7	☐	50.000	48.473	16709	2.374	P	6.3
8	☐	200.000	195.967	71966	9.595	P	1.3
9	☐	500.000	485.374	169375	23.763	P	1.9
10	☐	2500.000	2503.286	820346	122.556	P	1.0

y = 0.0490 * x + 5.7990E-004
R = 1.0000
DL = 0.04071
BEC = 0.01184

Weight: <None>
Min Conc: <None>

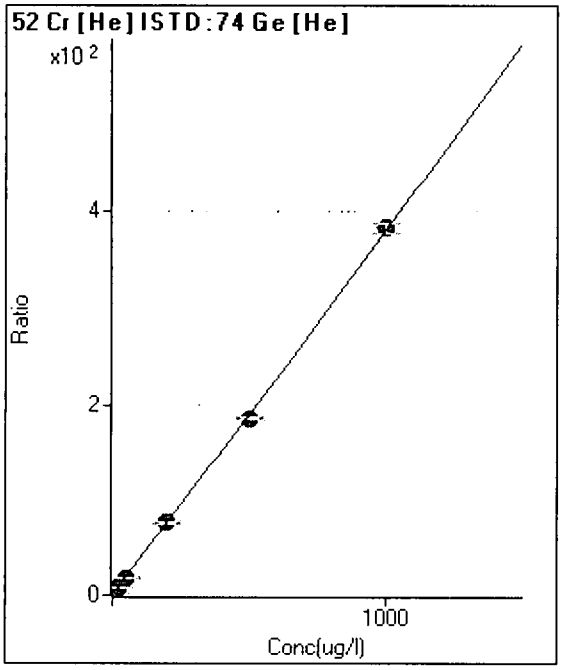


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2294	0.070	P	2.1
2	☐	0.180	0.177	4116	0.126	P	2.9
3	☐	0.900	0.900	11645	0.355	P	2.5
4	☐	1.800	1.724	20509	0.616	P	3.9
5	☐	3.600	3.533	39715	1.190	P	0.3
6	☐	20.000	19.555	206338	6.269	P	0.7
7	☐	50.000	49.228	484082	15.677	P	5.9
8	☐	200.000	200.394	2070491	63.602	A	1.7
9	☐	500.000	499.938	4904888	158.570	A	0.8
10	☐			2069	0.073	P	3.8

y = 0.3170 * x + 0.0695
R = 1.0000
DL = 0.01396
BEC = 0.2192

Weight: <None>
Min Conc: <None>

Calibration for 017_ICV.d



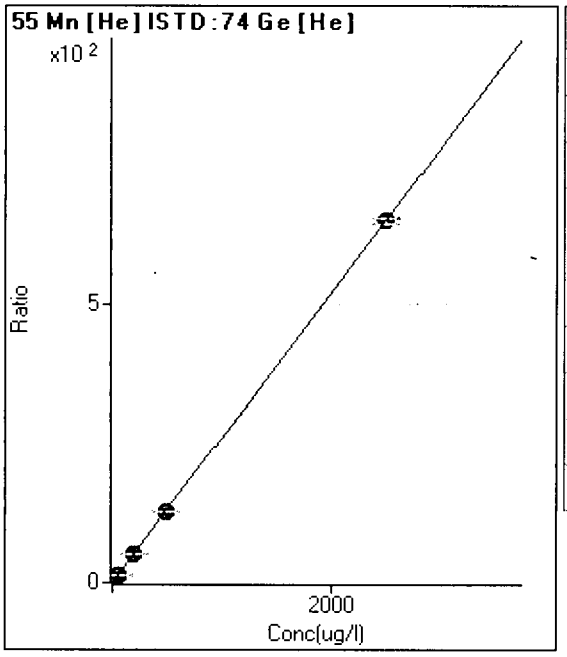
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16462	0.499	P	0.5
2	☐	0.180	0.193	18754	0.572	P	2.2
3	☐	0.900	0.919	27852	0.849	P	2.3
4	☐	1.800	1.770	39040	1.173	P	2.9
5	☐	3.600	3.518	61358	1.838	P	1.0
6	☐	20.000	19.825	264779	8.045	P	1.0
7	☐	50.000	47.979	579345	18.761	P	5.9
8	☐	200.000	199.358	2487008	76.380	A	1.3
9	☐	500.000	486.183	5739435	185.554	A	1.5
10	☐	1000.000	1007.142	10882017	383.846	A	2.3

y = 0.3806 * x + 0.4989
R = 0.9999
DL = 0.02103
BEC = 1.311

Weight: <None>
Min Conc: <None>

JB 01/25/20

Note Cr curve is linear
So Cr confirmed in Diluent
at ~1.25ppb
impacted shots (<10x)
will be reran. (JB)
~~all H2O~~
all H2O Batches
will be reran JB

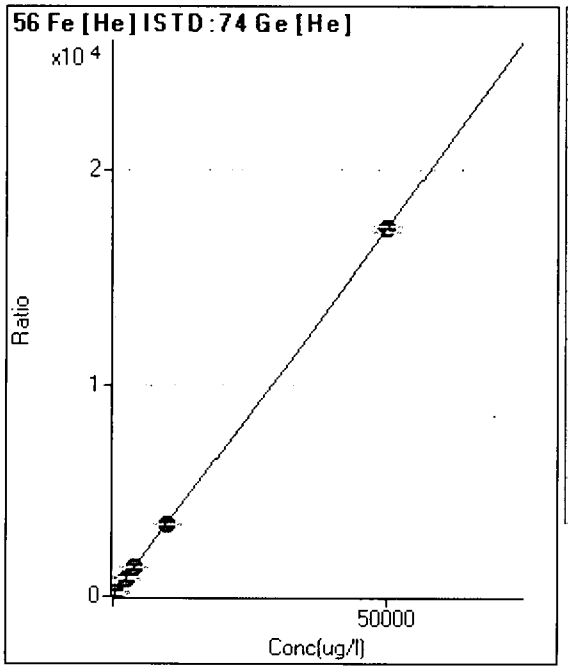


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	258	0.008	P	4.9
2	☐	0.180	0.186	1839	0.056	P	3.8
3	☐	0.900	0.952	8386	0.255	P	1.7
4	☐	1.800	1.779	15672	0.471	P	0.9
5	☐	3.600	3.623	31731	0.951	P	1.2
6	☐	20.000	19.900	170666	5.185	P	1.1
7	☐	50.000	49.516	398013	12.891	P	6.1
8	☐	200.000	198.899	1684991	51.756	A	0.7
9	☐	500.000	491.146	3952776	127.791	A	1.2
10	☐	2500.000	2501.869	18454673	650.928	A	1.7

y = 0.2602 * x + 0.0078
R = 1.0000
DL = 0.004445
BEC = 0.03003

Weight: <None>
Min Conc: <None>

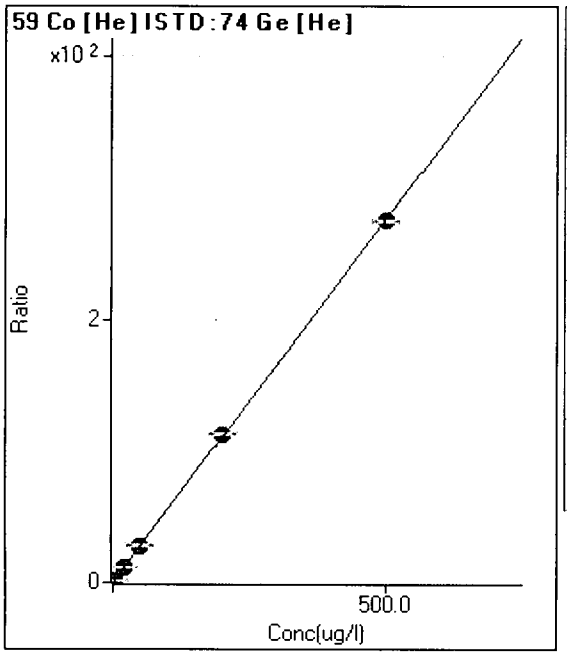
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77260	2.342	P	1.2
2	☐	9.000	9.397	182996	5.586	P	0.8
3	☐	45.000	46.649	605556	18.448	P	1.0
4	☐	90.000	89.509	1106916	33.247	A	2.6
5	☐	180.000	178.879	2139865	64.104	A	1.1
6	☐	400.000	392.646	4538988	137.913	A	2.1
7	☐	2500.000	2487.140	26597046	861.094	A	5.3
8	☐	4000.000	3964.381	44638095	1,371.151	A	1.0
9	☐	10000.000	9809.013	104831376	3,389.167	A	1.5
10	☐	50000.000	50041.752	489941606	17,280.603	A	1.5

y = 0.3453 * x + 2.3417
R = 1.0000
DL = 0.2451
BEC = 6.782

Weight: <None>
Min Conc: <None>

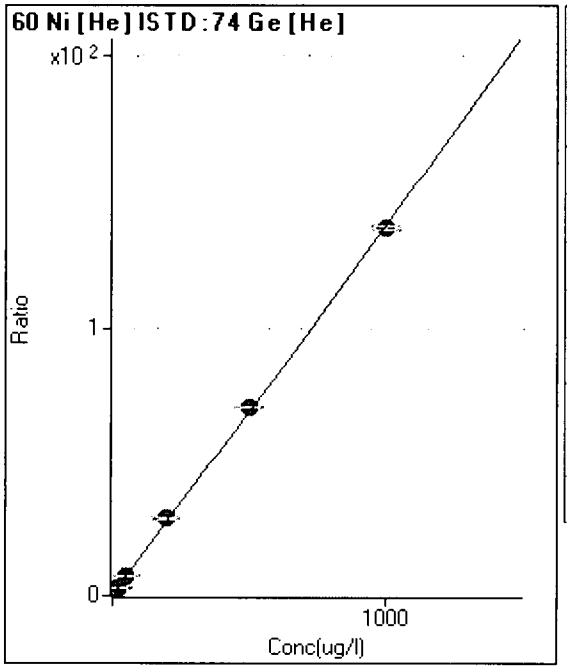


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	149	0.005	P	17.7
2	☐	0.180	0.193	3643	0.111	P	1.5
3	☐	0.900	0.971	17780	0.542	P	0.8
4	☐	1.800	1.831	33861	1.017	P	1.9
5	☐	3.600	3.758	69519	2.083	P	0.2
6	☐	20.000	20.544	374018	11.364	P	1.3
7	☐	50.000	51.180	874156	28.303	P	5.4
8	☐	200.000	203.831	3669631	112.709	A	1.0
9	☐	500.000	498.327	8523077	275.544	A	0.7
10	☐			4008	0.141	P	3.7

y = 0.5529 * x + 0.0045
R = 1.0000
DL = 0.004345
BEC = 0.008171

Weight: <None>
Min Conc: <None>

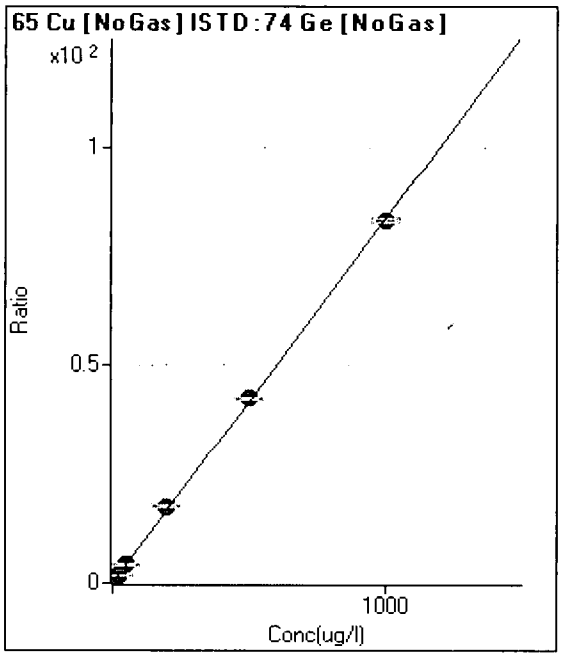
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1479	0.045	P	5.7
2	☐	0.180	0.186	2310	0.071	P	3.1
3	☐	0.900	0.999	6000	0.183	P	4.0
4	☐	1.800	1.890	10184	0.306	P	1.4
5	☐	3.600	3.845	19222	0.576	P	1.5
6	☐	20.000	21.169	97703	2.969	P	1.1
7	☐	50.000	52.034	223346	7.231	P	5.3
8	☐	200.000	207.661	935169	28.725	P	0.6
9	☐	500.000	510.506	2182316	70.551	A	0.9
10	☐	1000.000	993.088	3890010	137.200	A	1.1

y = 0.1381 * x + 0.0448
R = 0.9999
DL = 0.05589
BEC = 0.3246

Weight: <None>
Min Conc: <None>

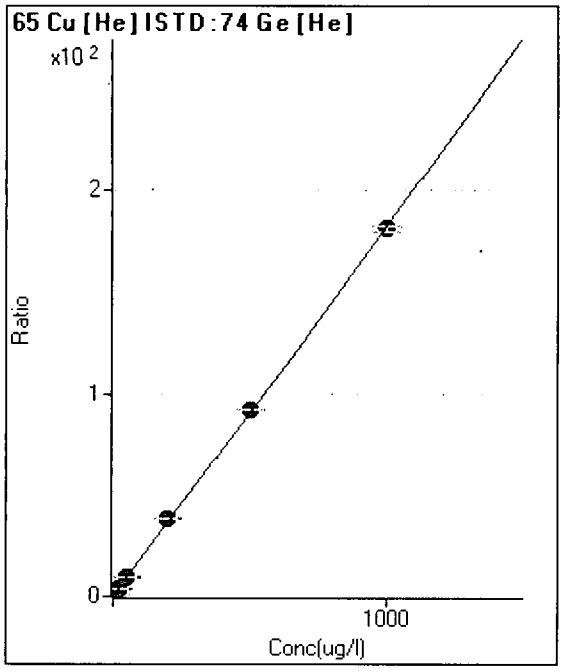


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1881	0.009	P	7.4
2	☐	0.180	0.187	5083	0.025	P	1.4
3	☐	0.900	0.970	18225	0.091	P	1.8
4	☐	1.800	1.906	33948	0.169	P	3.0
5	☐	3.600	3.846	66676	0.331	P	3.4
6	☐	20.000	21.754	361494	1.829	P	0.9
7	☐	50.000	49.946	823614	4.187	P	1.0
8	☐	200.000	213.066	3493095	17.831	A	1.0
9	☐	500.000	508.176	8178038	42.516	A	1.8
10	☐	1000.000	993.265	14564714	83.091	A	0.9

y = 0.0836 * x + 0.0095
R = 0.9999
DL = 0.02497
BEC = 0.1131

Weight: <None>
Min Conc: <None>

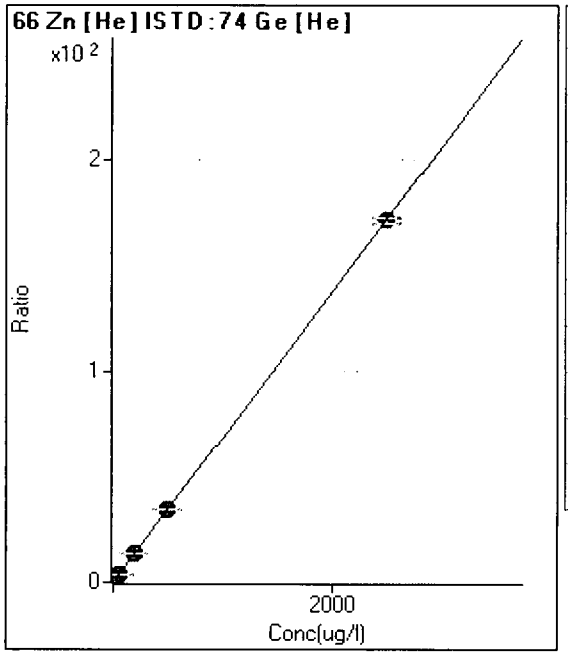
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	554	0.017	P	1.1
2	☐	0.180	0.196	1718	0.052	P	6.1
3	☐	0.900	1.022	6668	0.203	P	1.2
4	☐	1.800	1.902	12101	0.364	P	3.8
5	☐	3.600	3.859	24041	0.720	P	1.2
6	☐	20.000	21.370	128748	3.912	P	0.7
7	☐	50.000	52.702	297219	9.623	P	5.2
8	☐	200.000	209.974	1246456	38.288	A	1.4
9	☐	500.000	506.287	2854867	92.295	A	0.9
10	☐	1000.000	994.698	5140489	181.315	A	1.9

y = 0.1823 * x + 0.0168
R = 0.9999
DL = 0.003131
BEC = 0.09219

Weight: <None>
Min Conc: <None>

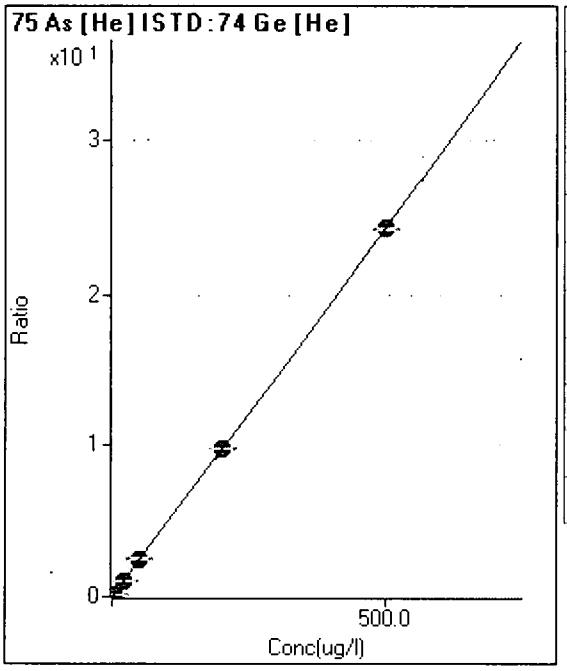


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	79	0.002	P	10.5
2	☐			484	0.015	P	7.3
3	☐	0.900	1.026	2387	0.073	P	2.4
4	☐	1.800	1.863	4331	0.130	P	5.4
5	☐	3.600	3.736	8628	0.258	P	1.6
6	☐	20.000	20.395	46092	1.400	P	0.4
7	☐	50.000	51.489	109055	3.532	P	6.0
8	☐	200.000	204.492	456441	14.020	P	0.4
9	☐	500.000	501.471	1063329	34.377	P	1.5
10	☐	2500.000	2499.313	4857319	171.324	A	1.6

y = 0.0685 * x + 0.0024
R = 1.0000
DL = 0.01095
BEC = 0.03488

Weight: <None>
Min Conc: <None>

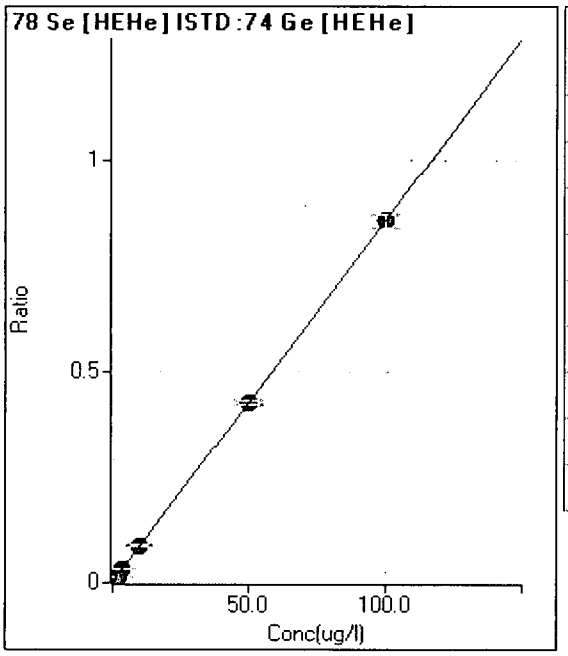
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64	0.002	P	5.6
2	☐	0.180	0.190	366	0.011	P	4.5
3	☐	0.900	0.933	1555	0.047	P	1.8
4	☐	1.800	1.836	3042	0.091	P	2.2
5	☐	3.600	3.682	6051	0.181	P	0.8
6	☐	20.000	20.049	32200	0.978	P	0.8
7	☐	50.000	50.836	76511	2.478	P	5.8
8	☐	200.000	201.106	318900	9.796	P	0.9
9	☐	500.000	499.471	752440	24.326	P	0.8
10	☐			306	0.011	P	6.3

y = 0.0487 * x + 0.0019
R = 1.0000
DL = 0.006738
BEC = 0.03992

Weight: <None>
Min Conc: <None>

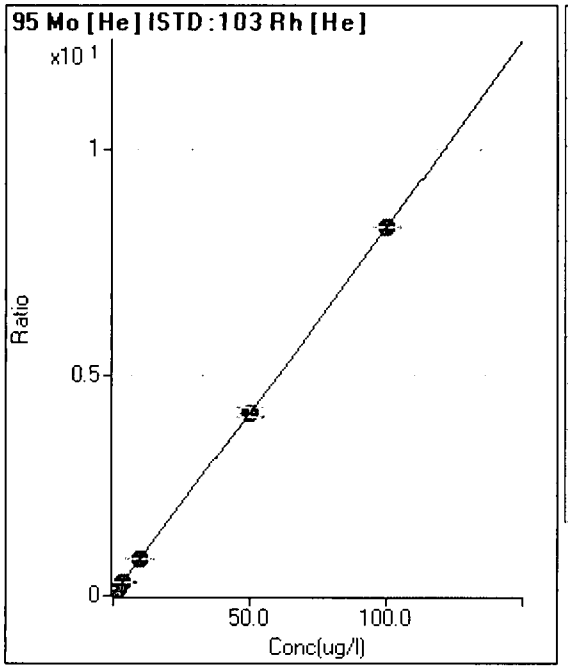


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2	0.000	P	59.4
2	☐	0.180	0.194	50	0.002	P	10.3
3	☐	0.900	0.975	244	0.008	P	3.9
4	☐	1.800	1.801	459	0.016	P	4.0
5	☐	3.600	3.663	934	0.032	P	2.5
6	☐	10.000	10.297	2542	0.089	P	1.2
7	☐	50.000	49.921	11931	0.429	P	1.5
8	☐	100.000	100.007	24668	0.859	P	4.0
9	☐			16	0.001	P	14.0
10	☐			22	0.001	P	6.8

y = 0.0086 * x + 5.7322E-005
R = 1.0000
DL = 0.0119
BEC = 0.006673

Weight: <None>
Min Conc: <None>

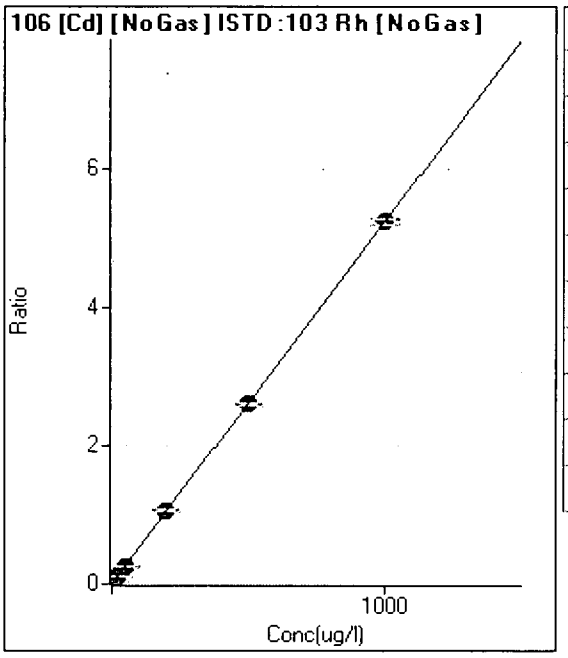
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1208	0.013	P	7.4
2	☐	0.180	0.192	2705	0.028	P	2.3
3	☐	0.900	0.889	8248	0.086	P	1.5
4	☐	1.800	1.768	15121	0.158	P	3.1
5	☐	3.600	3.509	29293	0.302	P	1.3
6	☐	10.000	9.797	79005	0.820	P	0.7
7	☐	50.000	49.970	367142	4.131	P	5.8
8	☐	100.000	100.039	762359	8.258	P	0.1
9	☐			759	0.009	P	14.6
10	☐			797	0.010	P	1.7

y = 0.0824 * x + 0.0127
R = 1.0000
DL = 0.03434
BEC = 0.1541

Weight: <None>
Min Conc: <None>

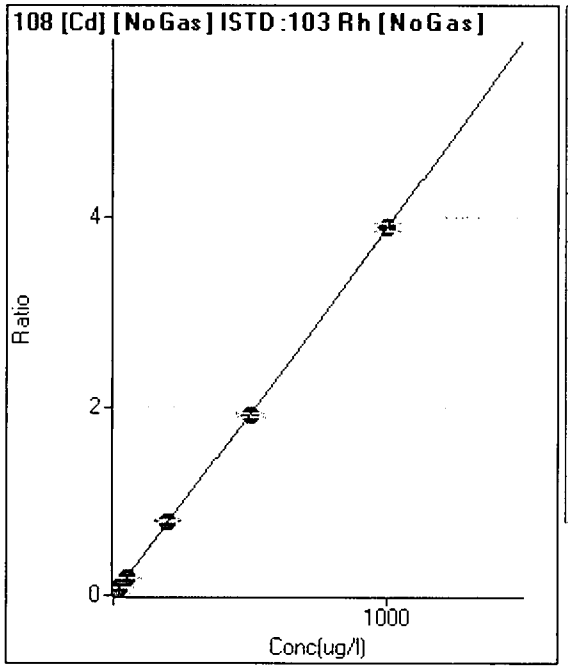


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16	0.000	P	64.9
2	☐	0.180	0.166	186	0.001	P	9.0
3	☐	0.900	0.889	927	0.005	P	10.2
4	☐	1.800	1.739	1798	0.009	P	6.3
5	☐	3.600	3.610	3714	0.019	P	6.1
6	☐	20.000	20.605	20876	0.108	P	4.0
7	☐	50.000	48.007	47993	0.252	P	1.2
8	☐	200.000	203.128	201768	1.065	P	1.9
9	☐	500.000	496.757	481564	2.605	P	1.6
10	☐	1000.000	1001.084	868477	5.249	P	1.3

y = 0.0052 * x + 8.0776E-005
R = 1.0000
DL = 0.02997
BEC = 0.01541

Weight: <None>
Min Conc: <None>

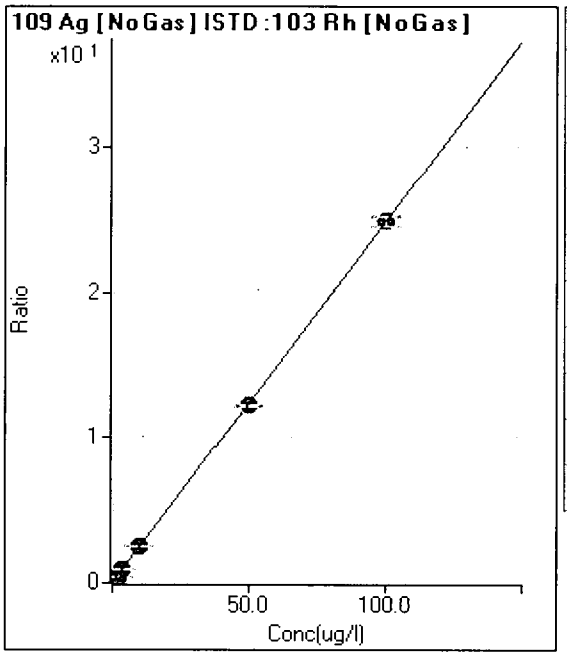
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23	0.000	P	14.2
2	☐	0.180	0.162	146	0.001	P	10.2
3	☐	0.900	0.903	708	0.004	P	2.7
4	☐	1.800	1.812	1397	0.007	P	0.6
5	☐	3.600	3.664	2800	0.014	P	3.4
6	☐	20.000	20.504	15371	0.080	P	2.4
7	☐	50.000	48.809	36072	0.189	P	2.8
8	☐	200.000	204.051	149842	0.791	P	2.1
9	☐	500.000	495.685	355215	1.921	P	2.0
10	☐	1000.000	1001.396	642155	3.881	P	2.0

y = 0.0039 * x + 1.2128E-004
R = 1.0000
DL = 0.01337
BEC = 0.03129

Weight: <None>
Min Conc: <None>

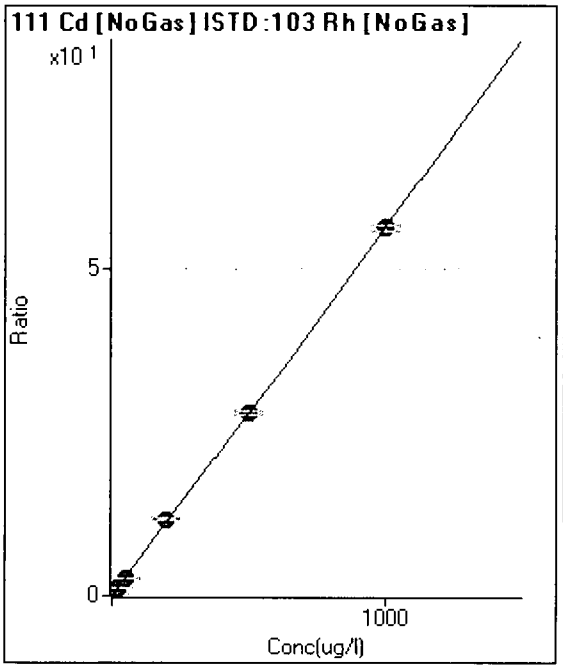


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	31	0.000	P	58.5
2	☐	0.180	0.184	8929	0.046	P	3.4
3	☐	0.900	0.899	43752	0.224	P	3.6
4	☐	1.800	1.776	86510	0.442	P	2.5
5	☐	3.600	3.611	175766	0.899	P	4.1
6	☐	10.000	10.177	489383	2.534	P	2.7
7	☐	50.000	49.355	2342146	12.289	A	1.4
8	☐	100.000	100.305	4730878	24.974	A	2.5
9	☐			1061	0.006	P	8.9
10	☐			1016	0.006	P	3.8

y = 0.2490 * x + 1.6167E-004
R = 1.0000
DL = 0.00114
BEC = 0.0006493

Weight: <None>
Min Conc: <None>

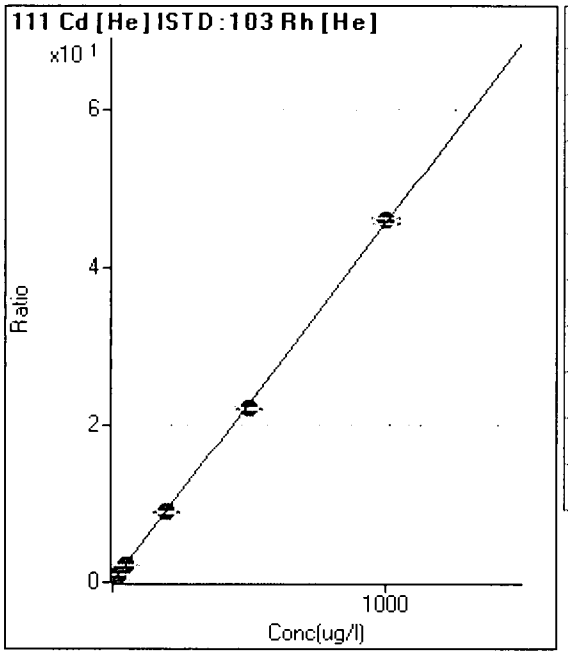
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1	0.000	P	438.9
2	☐	0.180	0.184	2009	0.010	P	11.3
3	☐	0.900	0.906	9969	0.051	P	2.7
4	☐	1.800	1.825	20075	0.103	P	3.4
5	☐	3.600	3.682	40508	0.207	P	3.0
6	☐	20.000	20.960	227816	1.180	P	2.4
7	☐	50.000	48.775	523157	2.745	P	1.1
8	☐	200.000	207.013	2206899	11.650	A	2.4
9	☐	500.000	498.200	5184667	28.038	A	1.4
10	☐	1000.000	999.539	9307231	56.252	A	1.6

y = 0.0563 * x + 6.4869E-006
R = 1.0000
DL = 0.001518
BEC = 0.0001153

Weight: <None>
Min Conc: <None>

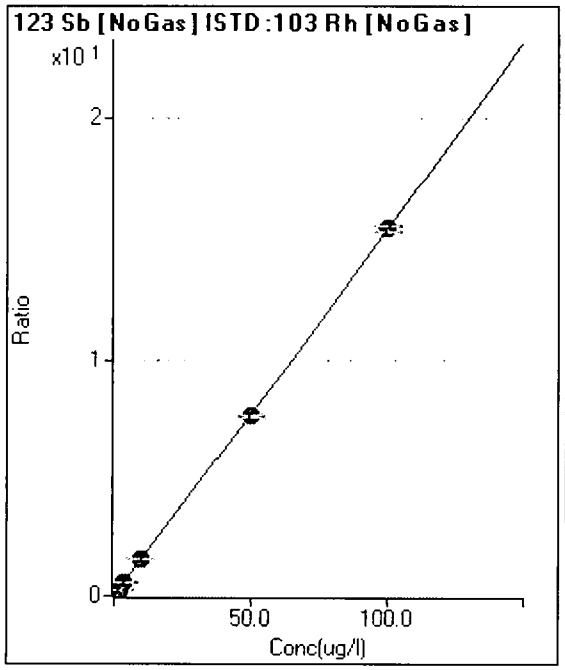


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3	0.000	P	100.3
2	☐	0.180	0.173	756	0.008	P	4.1
3	☐	0.900	0.873	3832	0.040	P	5.2
4	☐	1.800	1.762	7691	0.081	P	1.9
5	☐	3.600	3.475	15408	0.159	P	4.3
6	☐	20.000	19.372	85297	0.886	P	0.7
7	☐	50.000	49.207	199847	2.249	P	6.2
8	☐	200.000	195.790	826089	8.949	P	0.9
9	☐	500.000	485.188	1966012	22.177	A	1.4
10	☐	1000.000	1008.301	3613283	46.087	A	1.3

y = 0.0457 * x + 3.4870E-005
R = 0.9999
DL = 0.002296
BEC = 0.0007629

Weight: <None>
Min Conc: <None>

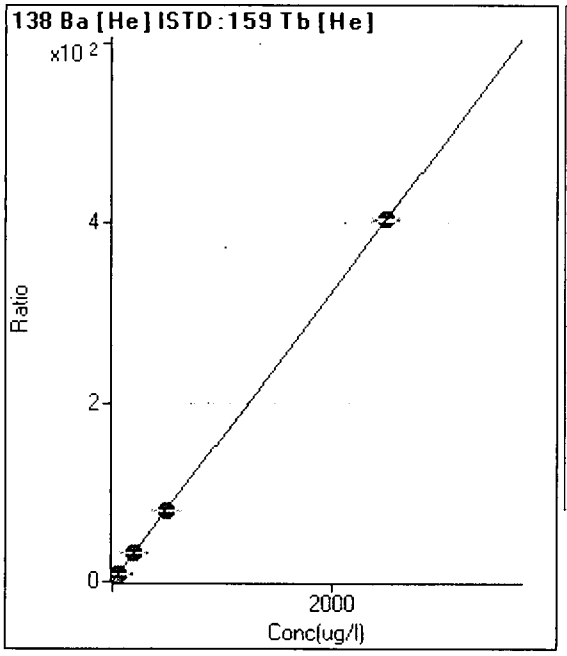
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	230	0.001	P	13.1
2	☐	0.180	0.182	5698	0.029	P	3.8
3	☐	0.900	0.891	27113	0.139	P	4.5
4	☐	1.800	1.754	53203	0.272	P	1.7
5	☐	3.600	3.585	108503	0.555	P	3.1
6	☐	10.000	10.200	304559	1.577	P	2.6
7	☐	50.000	49.394	1454691	7.632	A	1.1
8	☐	100.000	100.284	2935399	15.495	A	1.5
9	☐			2339	0.013	P	4.5
10	☐			1261	0.008	P	5.2

y = 0.1545 * x + 0.0012
R = 1.0000
DL = 0.003051
BEC = 0.007742

Weight: <None>
Min Conc: <None>

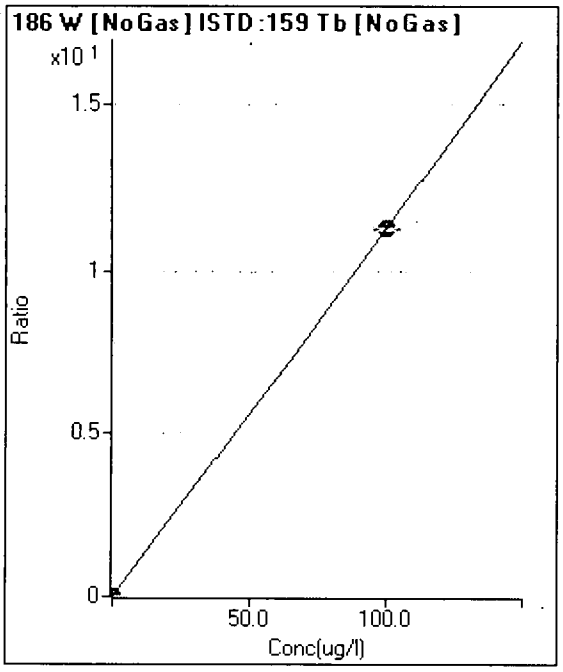


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	408	0.002	P	11.5
2	☐	0.180	0.172	5462	0.030	P	1.8
3	☐	0.900	0.905	27508	0.149	P	1.9
4	☐	1.800	1.791	53866	0.292	P	1.7
5	☐	3.600	3.602	108827	0.584	P	1.4
6	☐	20.000	20.066	606297	3.246	P	2.3
7	☐	50.000	50.436	1448050	8.155	A	5.4
8	☐	200.000	202.748	5929839	32.775	A	0.5
9	☐	500.000	487.213	14103201	78.757	A	0.8
10	☐	2500.000	2502.328	67321450	404.487	A	0.6

y = 0.1616 * x + 0.0022
R = 1.0000
DL = 0.004748
BEC = 0.01381

Weight: <None>
Min Conc: <None>

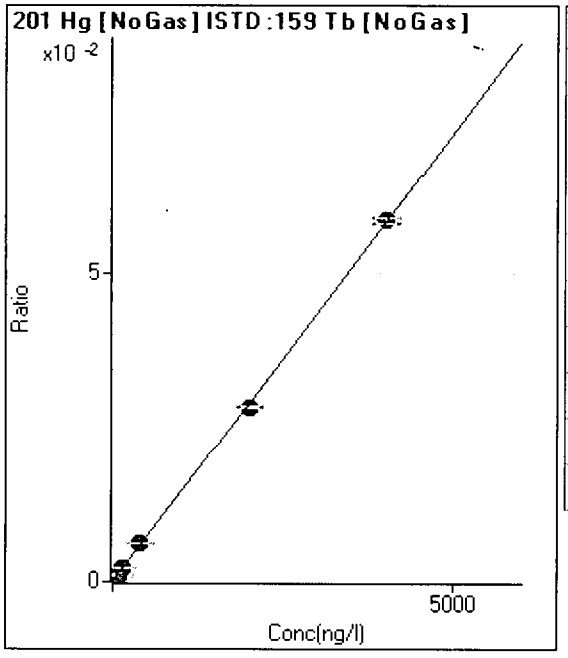
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127	0.000	P	17.3
2	☐			120	0.000	P	47.2
3	☐			120	0.000	P	39.9
4	☐			150	0.000	P	25.3
5	☐			150	0.000	P	22.3
6	☐			377	0.001	P	9.1
7	☐			811	0.002	P	5.8
8	☐			1034	0.003	P	9.6
9	☐	100.000	100.000	3638732	11.276	A	0.7
10	☐			13037	0.043	P	0.6

y = 0.1128 * x + 3.8872E-004
R = 1.0000
DL = 0.001787
BEC = 0.003447

Weight: <None>
Min Conc: <None>

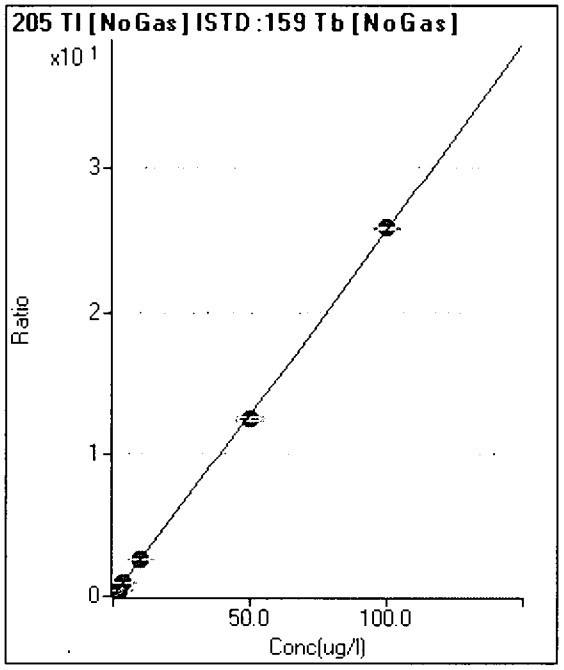


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8	0.000	P	42.4
2	☐			48	0.000	P	14.1
3	☐	36.000	35.855	179	0.001	P	8.1
4	☐	72.000	72.224	352	0.001	P	7.7
5	☐	144.000	146.823	705	0.002	P	5.4
6	☐	400.000	422.698	2043	0.006	P	2.2
7	☐	2000.000	1946.424	9417	0.028	P	0.8
8	☐	4000.000	4024.414	19161	0.059	P	1.8
9	☐			531	0.002	P	2.3
10	☐			83	0.000	P	7.9

y = 1.4558E-005 * x + 2.2994E-005
R = 0.9999
DL = 2.008
BEC = 1.579

Weight: <None>
Min Conc: <None>

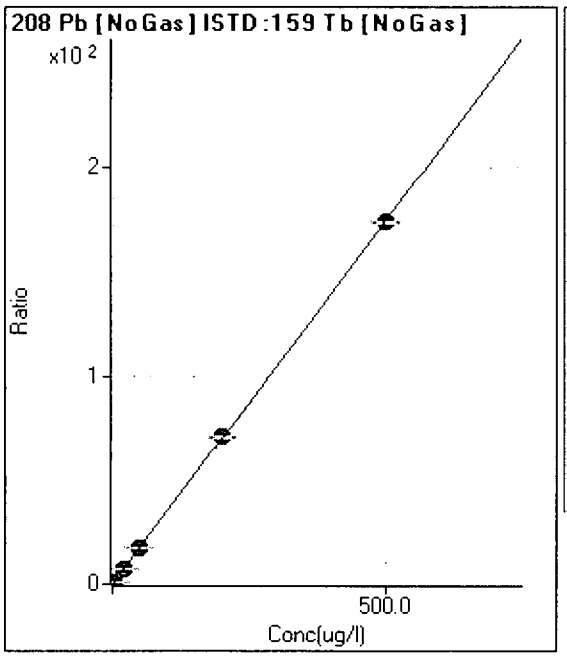
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	282	0.001	P	8.5
2	☐	0.180	0.178	15306	0.047	P	3.1
3	☐	0.900	0.896	76043	0.231	P	4.4
4	☐	1.800	1.784	150671	0.459	P	2.7
5	☐	3.600	3.616	303499	0.930	P	3.0
6	☐	10.000	10.313	876588	2.650	P	0.9
7	☐	50.000	48.432	4130417	12.440	A	2.2
8	☐	100.000	100.753	8460339	25.879	A	0.6
9	☐			10342	0.032	P	2.5
10	☐			2927	0.010	P	7.9

y = 0.2568 * x + 8.6469E-004
R = 0.9998
DL = 0.0008578
BEC = 0.003367

Weight: <None>
Min Conc: <None>

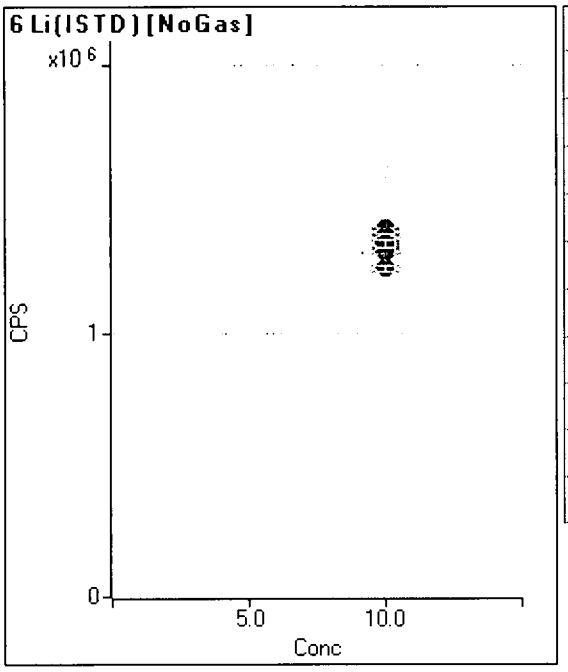


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	961	0.003	P	1.9
2	☐	0.180	0.183	21909	0.067	P	2.5
3	☐	0.900	0.909	105314	0.320	P	5.2
4	☐	1.800	1.786	205599	0.626	P	3.2
5	☐	3.600	3.668	419040	1.283	P	2.4
6	☐	20.000	20.787	2401554	7.259	A	0.7
7	☐	50.000	49.526	5741393	17.292	A	1.1
8	☐	200.000	202.631	23126140	70.737	A	1.6
9	☐	500.000	498.963	56202817	174.180	A	0.8
10	☐			19690	0.065	P	1.9

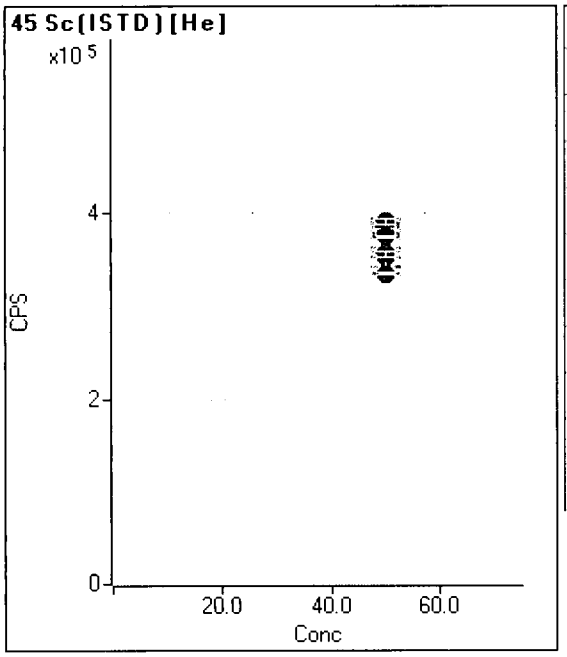
y = 0.3491 * x + 0.0029
R = 1.0000
DL = 0.0004851
BEC = 0.008432

Weight: <None>
Min Conc: <None>

Calibration for 017_ICV.d

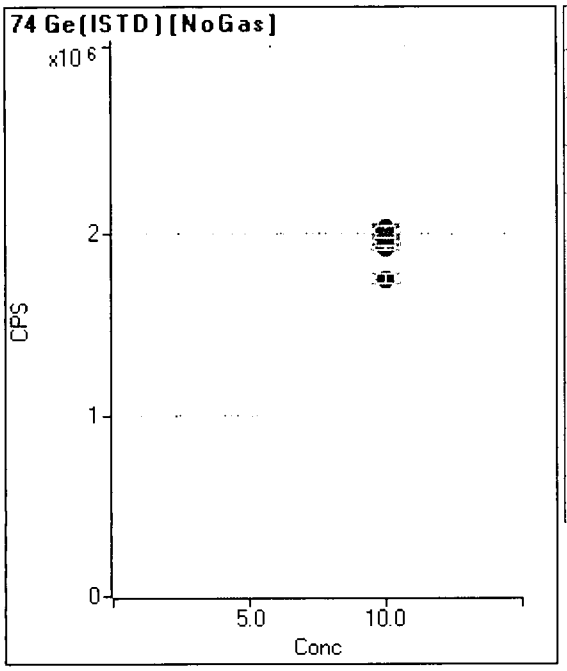


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		1305097		A	1.6
2	☐	10.000		1328828		A	2.3
3	☐	10.000		1323578		A	0.9
4	☐	10.000		1343250		A	3.7
5	☐	10.000		1348478		A	2.8
6	☐	10.000		1349805		A	2.1
7	☐	10.000		1391984		A	0.6
8	☐	10.000		1368371		A	0.2
9	☐	10.000		1334909		A	1.7
10	☐	10.000		1243885		A	2.0

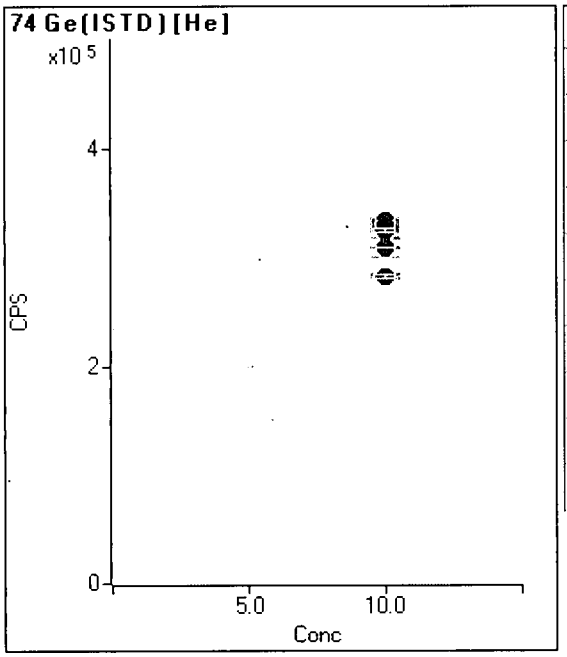


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	50.000		385078		P	0.9
2	☐	50.000		379385		P	0.7
3	☐	50.000		384724		P	1.0
4	☐	50.000		386648		P	1.7
5	☐	50.000		391478		P	1.6
6	☐	50.000		376031		P	1.6
7	☐	50.000		352830		P	5.9
8	☐	50.000		375050		P	0.7
9	☐	50.000		356443		P	1.5
10	☐	50.000		334692		P	0.5

Calibration for 017_ICV.d

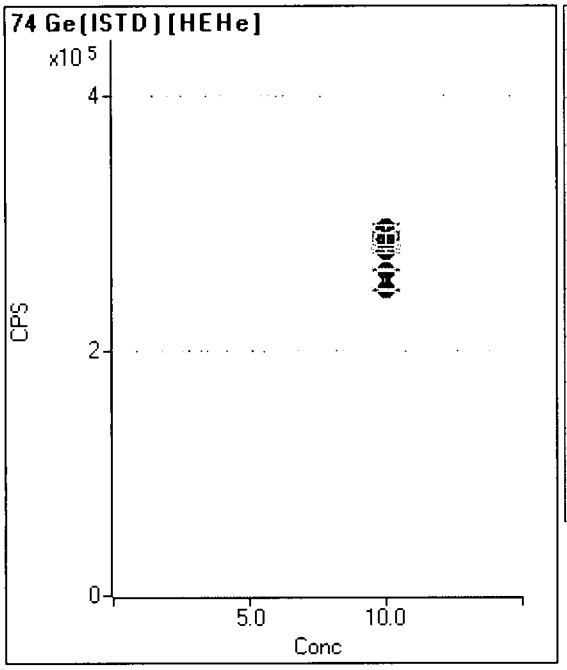


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		1989219		A	1.0
2	☐	10.000		2023765		A	2.9
3	☐	10.000		2011675		A	1.9
4	☐	10.000		2010053		A	1.5
5	☐	10.000		2014328		A	2.6
6	☐	10.000		1976503		A	1.1
7	☐	10.000		1967338		A	2.8
8	☐	10.000		1959095		A	1.6
9	☐	10.000		1923817		A	1.3
10	☐	10.000		1753131		A	2.6

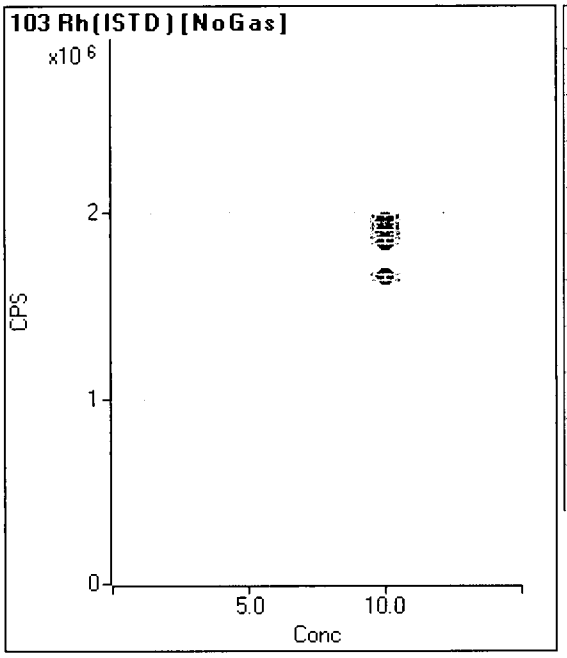


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		329957		P	1.1
2	☐	10.000		327584		P	0.9
3	☐	10.000		328265		P	0.9
4	☐	10.000		333063		P	2.4
5	☐	10.000		333818		P	0.7
6	☐	10.000		329137		P	0.4
7	☐	10.000		309494		P	5.8
8	☐	10.000		325578		P	1.2
9	☐	10.000		309324		P	0.4
10	☐	10.000		283557		P	1.3

Calibration for 017_ICV.d

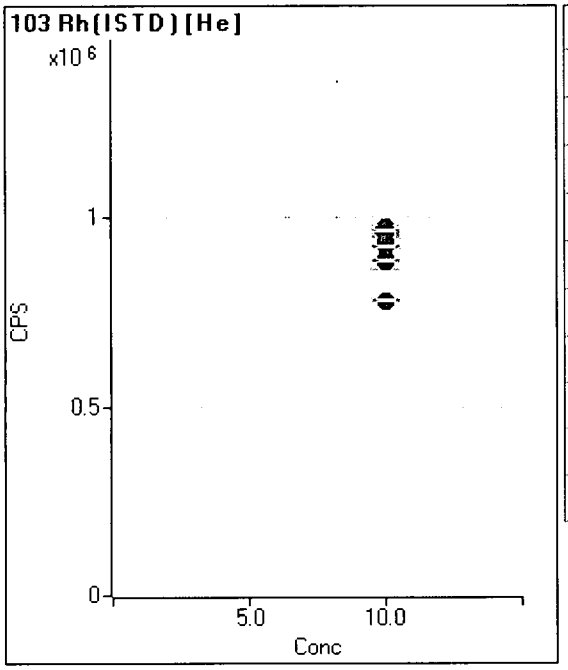


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		290827		P	0.6
2	☐	10.000		288440		P	0.8
3	☐	10.000		289347		P	1.0
4	☐	10.000		295987		P	2.4
5	☐	10.000		296257		P	1.7
6	☐	10.000		287203		P	1.3
7	☐	10.000		278206		P	1.0
8	☐	10.000		287396		P	3.4
9	☐	10.000		262893		P	0.5
10	☐	10.000		247339		P	0.8

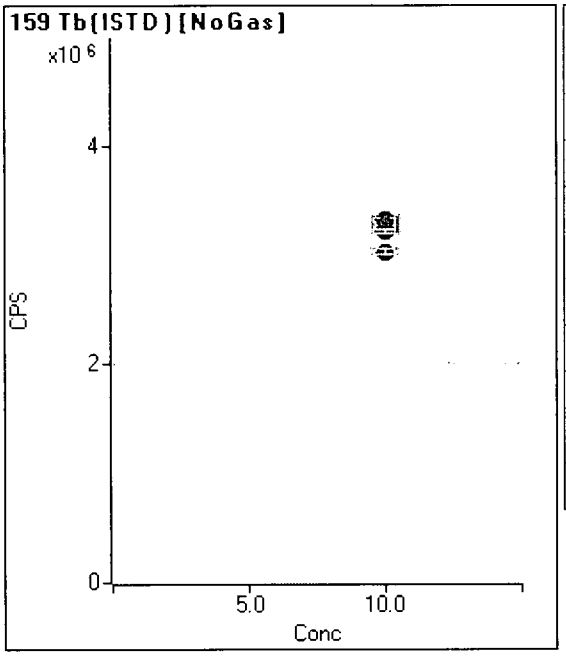


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		1924055		A	1.3
2	☐	10.000		1943137		A	3.4
3	☐	10.000		1955200		A	2.8
4	☐	10.000		1955478		A	1.6
5	☐	10.000		1956447		A	3.7
6	☐	10.000		1931820		A	1.8
7	☐	10.000		1906120		A	1.9
8	☐	10.000		1894675		A	1.3
9	☐	10.000		1849230		A	1.6
10	☐	10.000		1654825		A	1.5

Calibration for 017_ICV.d

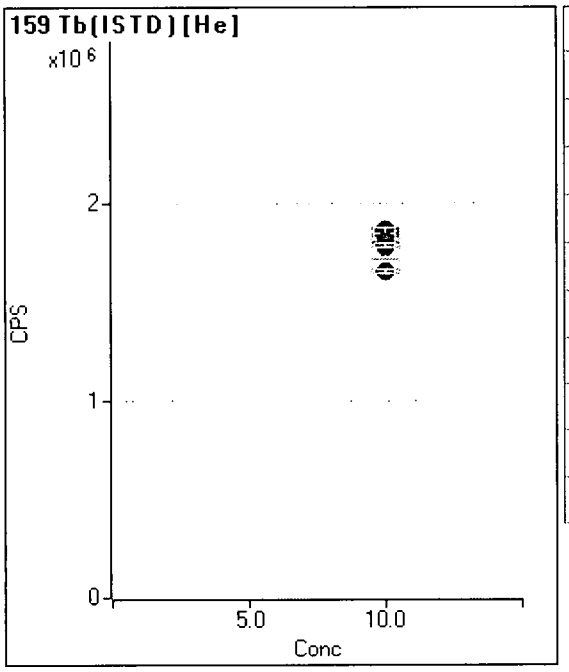


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		951367		P	1.1
2	☐	10.000		949342		P	0.4
3	☐	10.000		959476		P	0.5
4	☐	10.000		954544		P	1.4
5	☐	10.000		970238		P	1.2
6	☐	10.000		963265		P	0.5
7	☐	10.000		890789		P	6.2
8	☐	10.000		923144		P	0.9
9	☐	10.000		886482		P	0.4
10	☐	10.000		784034		P	0.4

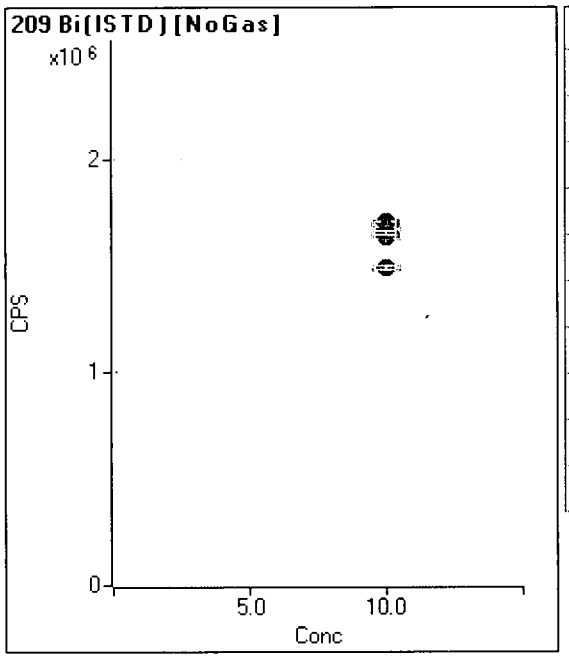


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		3266295		A	2.5
2	☐	10.000		3281565		A	2.5
3	☐	10.000		3294781		A	4.2
4	☐	10.000		3283291		A	1.6
5	☐	10.000		3266562		A	2.3
6	☐	10.000		3308353		A	1.0
7	☐	10.000		3320542		A	0.9
8	☐	10.000		3269226		A	0.3
9	☐	10.000		3226916		A	1.1
10	☐	10.000		3028995		A	1.8

Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		1829197		A	1.7
2	☐	10.000		1816191		A	1.6
3	☐	10.000		1852271		A	1.1
4	☐	10.000		1846701		A	1.3
5	☐	10.000		1862240		A	1.3
6	☐	10.000		1868377		A	1.3
7	☐	10.000		1779504		A	6.0
8	☐	10.000		1809281		A	0.5
9	☐	10.000		1790805		A	1.2
10	☐	10.000		1664302		A	1.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		1636705		A	1.2
2	☐	10.000		1654495		A	1.6
3	☐	10.000		1670571		A	2.2
4	☐	10.000		1636816		A	1.6
5	☐	10.000		1677038		A	2.5
6	☐	10.000		1706526		A	1.5
7	☐	10.000		1701019		A	1.2
8	☐	10.000		1673433		A	1.4
9	☐	10.000		1653400		A	1.4
10	☐	10.000		1491620		A	1.4

Initial Calibration Verification (ICV) Report ICPMS6

Sample Name	**0A24028-ICV1**	**Sample Type**	ICV
File Name	017_ICV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 14:17:02	**Sample QC Pass/Fail**	Pass
Comment	A20A138 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpValue	% Rec	%QC Low	%QC High	QC Flag
Be	9	6	No Gas	39.512	ug/l	4.5	358845	40	98.78	90	110	
Na	23	45	He	3996.043	ug/l	5.9	7830126	4000	99.9	90	110	
Mg	24	45	He	4136.560	ug/l	4.3	4427941	4000	103.41	90	110	
Al	27	45	He	3988.833	ug/l	3.9	2090813	4000	99.72	90	110	
K	39	45	He	3977.362	ug/l	5.4	4468223	4000	99.43	90	110	
Ca	44	45	He	4067.672	ug/l	4.4	240575	4000	101.69	90	110	
Ti	47	45	He	96.247	ug/l	6.0	33340	100	96.25	90	110	
V	51	74	He	96.951	ug/l	3.6	948933	100	96.95	90	110	
Cr	52	74	He	100.491	ug/l	4.4	1193438	100	100.49	90	110	
Mn	55	74	He	99.470	ug/l	4.0	797309	100	99.47	90	110	
Fe	56	74	He	4054.026	ug/l	4.6	43178419	4000	101.35	90	110	
Co	59	74	He	103.817	ug/l	4.7	1767824	100	103.82	90	110	
Ni	60	74	He	106.550	ug/l	3.7	454653	100	106.55	90	110	
Cu	65	74	He	105.513	ug/l	3.3	592924	100	105.51	90	110	
Cu	65	74	No Gas	108.103	ug/l	2.0	1689653	100	108.1	90	110	
Zn	66	74	He	100.900	ug/l	3.3	213132	100	100.9	90	110	
As	75	74	He	96.501	ug/l	3.7	144815	100	96.5	90	110	
Se	78	74	HEHe	41.913	ug/l	1.7	9636	40	104.78	90	110	
Mo	95	103	He	39.463	ug/l	5.7	292017	40	98.66	90	110	
Ag	109	103	No Gas	36.670	ug/l	2.2	1679956	40	91.68	90	110	
Cd	111	103	He	95.525	ug/l	5.5	390491	100	95.52	90	110	
Cd	111	103	No Gas	97.869	ug/l	2.6	1013365	100	97.87	90	110	
Sb	123	103	No Gas	36.307	ug/l	2.2	1032298	40	90.77	90	110	
Ba	138	159	He	99.335	ug/l	5.0	2867159	100	99.34	90	110	
Hg	201	159	No Gas	788.221	ng/l	2.7	3693	800	98.53	90	110	
Tl	205	159	No Gas	39.947	ug/l	1.9	3295681	40	99.87	90	110	
Pb	208	159	No Gas	99.973	ug/l	2.2	11208870	100	99.97	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1329269	3.6	1305096.65	101.85	70	120	
Ge	74	No Gas	1867079	1.7	1989219.35	93.86	70	120	
Rh	103	No Gas	1840397	1.7	1924055.37	95.65	70	120	
Tb	159	No Gas	3212314	1.7	3266294.67	98.35	70	120	
Bi	209	No Gas	1649774	1.6	1636705.1	100.8	70	120	
Sc	45	He	354421	4.9	385078.04	92.04	70	120	
Ge	74	He	308291	3.6	329956.68	93.43	70	120	
Rh	103	He	895951	4.9	951366.82	94.18	70	120	
Tb	159	He	1788208	4.7	1829197.42	97.76	70	120	
Ge	74	HEHe	267632	1.4	290827.29	92.02	70	120	

Initial Calibration Blank (ICB) Report ICPMS6

Sample Name	**0A24028-ICB1**	**Sample Type**	ICB
File Name	018_ICB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 14:21:34	**Sample QC Pass/Fail**	Pass
Comment	ICB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.008	ug/l	29.2	99	0.09	
Na	23	45	He	0.365	ug/l	9.3	6828	45	
Mg	24	45	He	0.530	ug/l	3.6	981	45	
Al	27	45	He	0.622	ug/l	15.8	420	22.5	
K	39	45	He	1.910	ug/l	16.5	30334	45	
Ca	44	45	He	1.304	ug/l	177.3	863	45	
Ti	47	45	He	0.010	ug/l	140.0	8	1.8	
V	51	74	He	-0.073	ug/l	N/A	1449	0.45	
Cr	52	74	He	-0.080	ug/l	N/A	14630	0.45	
Mn	55	74	He	0.021	ug/l	13.5	416	0.45	
Fe	56	74	He	0.146	ug/l	56.1	74705	22.5	
Co	59	74	He	0.012	ug/l	5.7	354	0.09	
Ni	60	74	He	0.021	ug/l	97.6	1489	0.45	
Cu	65	74	He	0.033	ug/l	5.5	711	0.45	
Cu	65	74	No Gas	0.038	ug/l	26.6	2378	0.45	
Zn	66	74	He	0.029	ug/l	36.1	138	1.8	
As	75	74	He	0.029	ug/l	19.2	105	0.45	
Se	78	74	HEHe	0.015	ug/l	47.2	5	0.45	
Mo	95	103	He	0.020	ug/l	34.3	1308	0.45	
Ag	109	103	No Gas	0.005	ug/l	9.7	242	0.09	
Cd	111	103	He	0.011	ug/l	6.6	50	0.09	
Cd	111	103	No Gas	0.016	ug/l	12.9	167	0.09	
Sb	123	103	No Gas	0.168	ug/l	2.6	5045	0.45	
Ba	138	159	He	0.023	ug/l	14.0	1068	0.45	
Hg	201	159	No Gas	7.639	ng/l	5.0	43	36	
Tl	205	159	No Gas	0.016	ug/l	10.8	1636	0.09	
Pb	208	159	No Gas	0.017	ug/l	8.4	2830	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1324561	0.8	1305096.65	101.49	70	120	
Ge	74	No Gas	1883936	1.3	1989219.35	94.71	70	120	
Rh	103	No Gas	1861794	0.8	1924055.37	96.76	70	120	
Tb	159	No Gas	3216905	0.6	3266294.67	98.49	70	120	
Bi	209	No Gas	1655618	0.9	1636705.1	101.16	70	120	
Sc	45	He	356725	0.7	385078.04	92.64	70	120	
Ge	74	He	312311	0.8	329956.68	94.65	70	120	
Rh	103	He	910373	1.2	951366.82	95.69	70	120	
Tb	159	He	1817648	1.7	1829197.42	99.37	70	120	
Ge	74	HEHe	272739	1.1	290827.29	93.78	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRL1**	**Sample Type**	CRL1
File Name	019CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 14:26:17	**Sample QC Pass/Fail**	Fail
Comment	A20A190 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.190	ug/l	3.3	1736	105.56	70	130	
Na	23	45	He	9.812	ug/l	0.4	25720	109.02	70	130	
Mg	24	45	He	9.165	ug/l	0.3	10394	101.83	70	130	
Al	27	45	He	9.249	ug/l	1.7	5023	102.77	70	130	
K	39	45	He	11.929	ug/l	5.0	41994	132.54	70	130	CRL1 Failed
Ca	44	45	He	14.968	ug/l	12.7	1691	166.31	70	130	CRL1 Failed
Ti	47	45	He	0.171	ug/l	10.0	64	95	70	130	
V	51	74	He	0.106	ug/l	6.3	3253	58.89	70	130	CRL1 Failed
Cr	52	74	He	0.139	ug/l	10.1	17405	77.22	70	130	
Mn	55	74	He	0.185	ug/l	6.4	1765	102.78	70	130	
Fe	56	74	He	8.760	ug/l	2.7	169240	97.33	70	130	
Co	59	74	He	0.184	ug/l	4.4	3343	102.22	70	130	
Ni	60	74	He	0.328	ug/l	5.4	2841	182.22	70	130	CRL1 Failed
Cu	65	74	He	0.197	ug/l	5.7	1660	109.44	70	130	
Cu	65	74	No Gas	0.203	ug/l	3.4	5094	112.78	70	130	
Zn	66	74	He	0.335	ug/l	3.2	799	186.11	70	130	CRL1 Failed
As	75	74	He	0.188	ug/l	8.3	349	104.44	70	130	
Se	78	74	HEHe	0.164	ug/l	6.2	40	91.11	70	130	
Mo	95	103	He	0.175	ug/l	6.9	2488	97.22	70	130	
Ag	109	103	No Gas	0.180	ug/l	2.1	8424	100	70	130	
Cd	111	103	He	0.189	ug/l	8.7	793	105	70	130	
Cd	111	103	No Gas	0.190	ug/l	3.2	2004	105.56	70	130	
Sb	123	103	No Gas	0.214	ug/l	1.6	6426	118.89	70	130	
Ba	138	159	He	0.174	ug/l	0.5	5529	96.67	70	130	
Hg	201	159	No Gas	10.007	ng/l	3.6	54	138.99	70	130	CRL1 Failed
Tl	205	159	No Gas	0.182	ug/l	2.0	15340	101.11	70	130	
Pb	208	159	No Gas	0.185	ug/l	1.0	21775	102.78	70	130	

All CRL failures < MRL JPB 01/25/20

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1319418	2.4	1305096.65	101.1	70	120	
Ge	74	No Gas	1925827	0.8	1989219.35	96.81	70	120	
Rh	103	No Gas	1875442	1.3	1924055.37	97.47	70	120	
Tb	159	No Gas	3222053	1.2	3266294.67	98.65	70	120	
Bi	209	No Gas	1639944	0.3	1636705.1	100.2	70	120	
Sc	45	He	360087	1.4	385078.04	93.51	70	120	
Ge	74	He	315407	1.1	329956.68	95.59	70	120	
Rh	103	He	917469	1.4	951366.82	96.44	70	120	
Tb	159	He	1821799	2.5	1829197.42	99.6	70	120	
Ge	74	HEHe	272092	0.8	290827.29	93.56	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRL2**	**Sample Type**	CRL2
File Name	020_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 14:30:59	**Sample QC Pass/Fail**	Pass
Comment	A20A191 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.818	ug/l	5.8	7856	90.89	70	130	
Na	23	45	He	46.345	ug/l	0.7	97695	102.99	70	130	
Mg	24	45	He	45.972	ug/l	1.3	50047	102.16	70	130	
Al	27	45	He	45.605	ug/l	0.7	24202	101.34	70	130	
K	39	45	He	48.509	ug/l	1.5	82837	107.8	70	130	
Ca	44	45	He	49.587	ug/l	1.6	3735	110.19	70	130	
Ti	47	45	He	0.828	ug/l	8.7	293	92	70	130	
V	51	74	He	0.799	ug/l	3.0	10035	88.78	70	130	
Cr	52	74	He	0.886	ug/l	1.3	25988	98.44	70	130	
Mn	55	74	He	0.899	ug/l	2.6	7514	99.89	70	130	
Fe	56	74	He	44.743	ug/l	1.1	552992	99.43	70	130	
Co	59	74	He	0.907	ug/l	3.0	15723	100.78	70	130	
Ni	60	74	He	0.980	ug/l	2.2	5602	108.89	70	130	
Cu	65	74	He	0.977	ug/l	2.7	6056	108.56	70	130	
Cu	65	74	No Gas	0.924	ug/l	9.5	17029	102.67	70	130	
Zn	66	74	He	1.053	ug/l	4.0	2318	117	70	130	
As	75	74	He	0.915	ug/l	2.6	1446	101.67	70	130	
Se	78	74	HEHe	0.873	ug/l	5.1	209	97	70	130	
Mo	95	103	He	0.883	ug/l	0.6	7699	98.11	70	130	
Ag	109	103	No Gas	0.839	ug/l	7.4	40816	93.22	70	130	
Cd	111	103	He	0.878	ug/l	1.2	3616	97.56	70	130	
Cd	111	103	No Gas	0.864	ug/l	8.5	9494	96	70	130	
Sb	123	103	No Gas	0.867	ug/l	7.4	26374	96.33	70	130	
Ba	138	159	He	0.871	ug/l	1.6	25813	96.78	70	130	
Hg	201	159	No Gas	37.071	ng/l	6.8	185	102.98	70	130	
Tl	205	159	No Gas	0.852	ug/l	7.8	72153	94.67	70	130	
Pb	208	159	No Gas	0.876	ug/l	6.7	101443	97.33	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1402706	5.5	1305096.65	107.48	70	120	
Ge	74	No Gas	1970711	7.0	1989219.35	99.07	70	120	
Rh	103	No Gas	1959987	7.9	1924055.37	101.87	70	120	
Tb	159	No Gas	3296029	6.8	3266294.67	100.91	70	120	
Bi	209	No Gas	1715777	7.2	1636705.1	104.83	70	120	
Sc	45	He	357031	0.7	385078.04	92.72	70	120	
Ge	74	He	310842	0.4	329956.68	94.21	70	120	
Rh	103	He	900565	1.1	951366.82	94.66	70	120	
Tb	159	He	1804787	3.3	1829197.42	98.67	70	120	
Ge	74	HEHe	275968	0.2	290827.29	94.89	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRL3**	**Sample Type**	CRL3
File Name	021CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 14:35:42	**Sample QC Pass/Fail**	Pass
Comment	A20A192 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.768	ug/l	1.2	16195	98.22	70	130	
Na	23	45	He	89.934	ug/l	1.2	189531	99.93	70	130	
Mg	24	45	He	89.003	ug/l	1.2	99507	98.89	70	130	
Al	27	45	He	89.886	ug/l	0.3	49089	99.87	70	130	
K	39	45	He	88.052	ug/l	1.0	131327	97.84	70	130	
Ca	44	45	He	85.008	ug/l	2.9	6023	94.45	70	130	
Ti	47	45	He	1.721	ug/l	10.5	624	95.61	70	130	
V	51	74	He	1.665	ug/l	2.5	19101	92.5	70	130	
Cr	52	74	He	1.622	ug/l	3.7	35700	90.11	70	130	
Mn	55	74	He	1.758	ug/l	1.7	14877	97.67	70	130	
Fe	56	74	He	87.004	ug/l	1.3	1035774	96.67	70	130	
Co	59	74	He	1.820	ug/l	1.2	32338	101.11	70	130	
Ni	60	74	He	1.867	ug/l	3.3	9681	103.72	70	130	
Cu	65	74	He	1.876	ug/l	4.3	11474	104.22	70	130	
Cu	65	74	No Gas	1.858	ug/l	1.5	31984	103.22	70	130	
Zn	66	74	He	1.793	ug/l	1.1	4007	99.61	70	130	
As	75	74	He	1.786	ug/l	0.5	2845	99.22	70	130	
Se	78	74	HEHe	1.800	ug/l	1.5	433	100	70	130	
Mo	95	103	He	1.701	ug/l	1.5	14117	94.5	70	130	
Ag	109	103	No Gas	1.745	ug/l	1.3	82616	96.94	70	130	
Cd	111	103	He	1.713	ug/l	3.3	7229	95.17	70	130	
Cd	111	103	No Gas	1.792	ug/l	1.9	19167	99.56	70	130	
Sb	123	103	No Gas	1.758	ug/l	1.0	51859	97.67	70	130	
Ba	138	159	He	1.756	ug/l	1.2	52405	97.56	70	130	
Hg	201	159	No Gas	71.133	ng/l	2.1	346	98.8	70	130	
Tl	205	159	No Gas	1.735	ug/l	0.7	145830	96.39	70	130	
Pb	208	159	No Gas	1.764	ug/l	1.5	202001	98	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1337224	0.4	1305096.65	102.46	70	120	
Ge	74	No Gas	1939891	1.2	1989219.35	97.52	70	120	
Rh	103	No Gas	1900899	0.9	1924055.37	98.8	70	120	
Tb	159	No Gas	3265334	1.0	3266294.67	99.97	70	120	
Bi	209	No Gas	1655217	0.8	1636705.1	101.13	70	120	
Sc	45	He	368101	0.5	385078.04	95.59	70	120	
Ge	74	He	319901	1.7	329956.68	96.95	70	120	
Rh	103	He	923206	1.2	951366.82	97.04	70	120	
Tb	159	He	1831748	1.5	1829197.42	100.14	70	120	
Ge	74	HEHe	279052	0.8	290827.29	95.95	70	120	

Interference Check Solution A (ICS-A) Report ICPMS6

Sample Name	**0A24028-IFA1**	**Sample Type**	ICSA
File Name	022ICSA.d	**Vial #**	2110
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 14:46:00	**Sample QC Pass/Fail**	Fail
Comment	A20A253	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	ExpValue	QC Flag
Be	9	6	No Gas	0.009	ug/l	13.5	73	0.18	
Na	23	45	He	256704.799	ug/l	3.3	408954360	250000	
Mg	24	45	He	99547.161	ug/l	3.2	86651018	100000	
Al	27	45	He	102331.681	ug/l	3.5	43610951	100000	
K	39	45	He	101930.771	ug/l	2.5	92582628	100000	
Ca	44	45	He	300287.124	ug/l	1.8	14401643	300000	
Ti	47	45	He	2028.871	ug/l	3.1	571791	2000	
V	51	74	He	0.046	ug/l	17.8	2026	0.9	
Cr	52	74	He	0.068	ug/l	52.4	12615	0.9	
Mn	55	74	He	0.833	ug/l	2.2	5396	0.9	
Fe	56	74	He	247570.797	ug/l	2.3	2054522298	250000	
Co	59	74	He	0.720	ug/l	1.8	9680	0.18	ICSA Warning
Ni	60	74	He	0.072	ug/l	21.6	1318	0.9	
Cu	65	74	He	0.407	ug/l	8.8	2188	0.9	
Cu	65	74	No Gas	2.460	ug/l	2.3	30717	0.9	ICSA Warning
Zn	66	74	He	0.816	ug/l	8.3	1400	3.6	
As	75	74	He	0.157	ug/l	4.6	230	0.9	
Se	78	74	HEHe	0.063	ug/l	15.0	13	0.9	
Mo	95	103	He	2227.099	ug/l	2.2	11667908	2000	
Cd	111	103	He	1.103	ug/l	3.7	3205	0.18	ICSA Warning
Cd	111	103	No Gas	0.346	ug/l	13.0	2594	0.18	
Sb	123	103	No Gas	0.184	ug/l	7.7	3918	0.9	
Ba	138	159	He	0.541	ug/l	2.9	12210	0.9	
W	186	159	No Gas	90.634	ug/l	4.6	2520392	100	
Hg	201	159	No Gas	84.703	ng/l	4.4	310	72	
Tl	205	159	No Gas	0.005	ug/l	5.3	502	0.18	
Pb	208	159	No Gas	0.173	ug/l	2.5	15594	0.18	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	961438	4.6	1305096.65	73.67	70	120	
Ge	74	No Gas	1427705	4.2	1989219.35	71.77	70	120	
Rh	103	No Gas	1329345	5.0	1924055.37	69.09	70	120	Recovery Failed
Tb	159	No Gas	2469312	4.2	3266294.67	75.6	70	120	
Bi	209	No Gas	1218089	4.2	1636705.1	74.42	70	120	
Sc	45	He	288015	3.2	385078.04	74.79	70	120	
Ge	74	He	240392	2.1	329956.68	72.86	70	120	
Rh	103	He	635782	2.2	951366.82	66.83	70	120	Recovery Failed
Tb	159	He	1363225	3.0	1829197.42	74.53	70	120	
Ge	74	HEHe	210917	1.6	290827.29	72.52	70	120	

Interference Check Solution AB (ICS-AB) Report ICPMS6

Sample Name	**0A24028-IFB1**	**Sample Type**	ICSB
File Name	023ICSB.d	**Vial #**	2111
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 14:50:44	**Sample QC Pass/Fail**	Fail
Comment	A20A254	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	ExpValue	Flag
Be	9	6	No Gas	0.006	ug/l	39.5	58	0.18	
Na	23	45	He	253538.525	ug/l	7.6	401603389	250000	
Mg	24	45	He	99720.260	ug/l	9.5	86224072	100000	
Al	27	45	He	99922.864	ug/l	9.3	42303206	100000	
K	39	45	He	100058.575	ug/l	7.7	90345567	100000	
Ca	44	45	He	299758.034	ug/l	8.1	14286132	300000	
Ti	47	45	He	1985.779	ug/l	8.1	556282	2000	
V	51	74	He	210.550	ug/l	4.2	1623206	200	
Cr	52	74	He	205.092	ug/l	5.0	1907863	200	
Mn	55	74	He	212.555	ug/l	5.5	1342943	200	
Fe	56	74	He	242233.472	ug/l	5.1	2031054939	250000	
Co	59	74	He	203.035	ug/l	6.2	2725052	200	
Ni	60	74	He	194.592	ug/l	5.6	653561	200	
Cu	65	74	He	189.855	ug/l	5.7	840493	200	
Cu	65	74	No Gas	200.368	ug/l	0.5	2444995	200	
Zn	66	74	He	92.641	ug/l	6.1	154202	100	
As	75	74	He	104.393	ug/l	6.1	123451	100	
Se	78	74	HEHe	108.039	ug/l	0.6	19800	100	
Mo	95	103	He	2168.905	ug/l	8.3	11469792	2000	
Ag	109	103	No Gas	50.448	ug/l	1.3	1701649	50	
Cd	111	103	He	99.641	ug/l	7.9	292253	100	
Cd	111	103	No Gas	100.942	ug/l	1.1	769687	100	
Sb	123	103	No Gas	0.163	ug/l	5.4	3582	0.9	
Ba	138	159	He	0.852	ug/l	8.5	19144	100	ICSB Warning
W	186	159	No Gas	87.493	ug/l	1.3	2565446	100	
Hg	201	159	No Gas	2055.554	ng/l	0.6	7787	2000	
Tl	205	159	No Gas	0.003	ug/l	17.7	393	0.18	
Pb	208	159	No Gas	0.167	ug/l	0.2	15880	0.18	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	996120	1.7	1305096.65	76.33	70	120	
Ge	74	No Gas	1457890	2.4	1989219.35	73.29	70	120	
Rh	103	No Gas	1354911	1.8	1924055.37	70.42	70	120	
Tb	159	No Gas	2600149	1.7	3266294.67	79.61	70	120	
Bi	209	No Gas	1248117	1.7	1636705.1	76.26	70	120	
Sc	45	He	287364	8.2	385078.04	74.62	70	120	
Ge	74	He	243287	5.6	329956.68	73.73	70	120	
Rh	103	He	644247	7.6	951366.82	67.72	70	120	Recovery Failed
Tb	159	He	1374101	7.4	1829197.42	75.12	70	120	
Ge	74	HEHe	213341	0.9	290827.29	73.36	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**0A24028-CCV1**	**Sample Type**	CCV
File Name	034_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 15:49:52	**Sample QC Pass/Fail**	Pass
Comment	A20A138- KT 1/23/20	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	39.885	ug/l	1.2	339495	40	99.71	90	110	
Na	23	45	He	3867.529	ug/l	2.0	7261171	4000	96.69	90	110	
Mg	24	45	He	4070.656	ug/l	2.2	4172643	4000	101.77	90	110	
Al	27	45	He	3887.871	ug/l	2.0	1951193	4000	97.2	90	110	
K	39	45	He	3888.663	ug/l	2.4	4183870	4000	97.22	90	110	
Ca	44	45	He	3992.981	ug/l	2.7	226141	4000	99.82	90	110	
Ti	47	45	He	94.303	ug/l	3.2	31294	100	94.3	90	110	
V	51	74	He	94.994	ug/l	1.7	909304	100	94.99	90	110	
Cr	52	74	He	96.599	ug/l	4.0	1122393	100	96.6	90	110	
Mn	55	74	He	98.080	ug/l	1.7	768884	100	98.08	90	110	
Fe	56	74	He	3980.822	ug/l	0.8	41476280	4000	99.52	90	110	
Co	59	74	He	102.862	ug/l	1.7	1713345	100	102.86	90	110	
Ni	60	74	He	104.797	ug/l	1.3	437339	100	104.8	90	110	
Cu	65	74	He	104.817	ug/l	1.7	575972	100	104.82	90	110	
Cu	65	74	No Gas	103.243	ug/l	0.8	1641891	100	103.24	90	110	
Zn	66	74	He	99.120	ug/l	0.8	204752	100	99.12	90	110	
As	75	74	He	94.307	ug/l	1.2	138405	100	94.31	90	110	
Se	78	74	HEHe	40.773	ug/l	0.8	9411	40	101.93	90	110	
Mo	95	103	He	38.895	ug/l	1.4	285880	40	97.24	90	110	
Ag	109	103	No Gas	36.587	ug/l	1.5	1688673	40	91.47	90	110	
Cd	111	103	He	94.121	ug/l	1.2	382123	100	94.12	90	110	
Cd	111	103	No Gas	99.585	ug/l	0.9	1038900	100	99.58	90	110	
Sb	123	103	No Gas	37.274	ug/l	1.8	1067656	40	93.18	90	110	
Ba	138	159	He	96.081	ug/l	0.8	2806491	100	96.08	90	110	
Hg	201	159	No Gas	810.285	ng/l	0.4	3917	800	101.29	90	110	
Tl	205	159	No Gas	40.753	ug/l	0.9	3469226	40	101.88	90	110	
Pb	208	159	No Gas	98.781	ug/l	0.6	11429095	100	98.78	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1244571	1.1	1305096.65	95.36	70	120	
Ge	74	No Gas	1899130	0.9	1989219.35	95.47	70	120	
Rh	103	No Gas	1853809	1.0	1924055.37	96.35	70	120	
Tb	159	No Gas	3314235	0.9	3266294.67	101.47	70	120	
Bi	209	No Gas	1688794	1.0	1636705.1	103.18	70	120	
Sc	45	He	338983	1.7	385078.04	88.03	70	120	
Ge	74	He	301266	1.3	329956.68	91.3	70	120	
Rh	103	He	888262	0.7	951366.82	93.37	70	120	
Tb	159	He	1806914	1.6	1829197.42	98.78	70	120	
Ge	74	HEHe	268658	0.7	290827.29	92.38	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**0A24028-CCB1**	**Sample Type**	CCB
File Name	035_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 15:54:24	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.010	ug/l	27.4	110	0.09	
Na	23	45	He	3.965	ug/l	12.9	12669	45	
Mg	24	45	He	0.620	ug/l	8:1	981	45	
Al	27	45	He	0.431	ug/l	10.9	290	22.5	
K	39	45	He	2.344	ug/l	59.4	28042	45	
Ca	44	45	He	-1.301	ug/l	N/A	646	45	
Ti	47	45	He	0.023	ug/l	66.8	11	1.8	
V	51	74	He	-0.063	ug/l	N/A	1430	0.45	
Cr	52	74	He	-0.024	ug/l	N/A	14206	0.45	
Mn	55	74	He	0.013	ug/l	34.5	323	0.45	
Fe	56	74	He	0.445	ug/l	103.4	72311	22.5	
Co	59	74	He	0.014	ug/l	31.8	358	0.09	
Ni	60	74	He	0.016	ug/l	91.8	1366	0.45	
Cu	65	74	He	0.023	ug/l	41.6	606	0.45	
Cu	65	74	No Gas	0.019	ug/l	15.9	2102	0.45	
Zn	66	74	He	0.017	ug/l	66.3	104	1.8	
As	75	74	He	0.026	ug/l	28.0	92	0.45	
Se	78	74	HEHe	0.016	ug/l	33.6	5	0.45	
Mo	95	103	He	0.028	ug/l	53.0	1297	0.45	
Ag	109	103	No Gas	0.005	ug/l	0.9	284	0.09	
Cd	111	103	He	0.012	ug/l	4.2	51	0.09	
Cd	111	103	No Gas	0.014	ug/l	25.6	153	0.09	
Sb	123	103	No Gas	0.159	ug/l	1.4	4803	0.45	
Ba	138	159	He	0.013	ug/l	10.2	763	0.45	
Hg	201	159	No Gas	7.152	ng/l	2.4	43	36	
Tl	205	159	No Gas	0.031	ug/l	8.0	2926	0.09	
Pb	208	159	No Gas	0.017	ug/l	8.4	2992	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1274674	0.7	1305096.65	97.67	70	120	
Ge	74	No Gas	1907299	0.6	1989219.35	95.88	70	120	
Rh	103	No Gas	1867439	0.1	1924055.37	97.06	70	120	
Tb	159	No Gas	3356530	0.6	3266294.67	102.76	70	120	
Bi	209	No Gas	1692122	1.1	1636705.1	103.39	70	120	
Sc	45	He	325168	5.5	385078.04	84.44	70	120	
Ge	74	He	290435	5.3	329956.68	88.02	70	120	
Rh	103	He	867145	4.4	951366.82	91.15	70	120	
Tb	159	He	1734492	5.0	1829197.42	94.82	70	120	
Ge	74	HEHe	267890	9.9	290827.29	92.11	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRL4**	**Sample Type**	CRL1
File Name	036CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 16:07:23	**Sample QC Pass/Fail**	Fail
Comment	A20A190 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.180	ug/l	5.5	1592	100	70	130	
Na	23	45	He	11.753	ug/l	8.8	28123	130.59	70	130	CRL1 Failed
Mg	24	45	He	8.991	ug/l	7.0	9702	99.9	70	130	
Al	27	45	He	8.782	ug/l	5.3	4540	97.58	70	130	
K	39	45	He	10.451	ug/l	15.8	38349	116.12	70	130	
Ca	44	45	He	14.424	ug/l	21.3	1574	160.27	70	130	CRL1 Failed
Ti	47	45	He	0.140	ug/l	11.1	51	77.78	70	130	
V	51	74	He	0.102	ug/l	21.8	3090	56.67	70	130	CRL1 Failed
Cr	52	74	He	0.115	ug/l	108.3	16464	63.89	70	130	CRL1 Failed
Mn	55	74	He	0.164	ug/l	13.2	1531	91.11	70	130	
Fe	56	74	He	8.431	ug/l	11.4	159531	93.68	70	130	
Co	59	74	He	0.177	ug/l	9.6	3103	98.33	70	130	
Ni	60	74	He	0.297	ug/l	8.0	2615	165	70	130	CRL1 Failed
Cu	65	74	He	0.194	ug/l	10.9	1583	107.78	70	130	
Cu	65	74	No Gas	0.171	ug/l	2.8	4619	95	70	130	
Zn	66	74	He	0.345	ug/l	3.2	791	191.67	70	130	CRL1 Failed
As	75	74	He	0.177	ug/l	7.0	320	98.33	70	130	
Se	78	74	HEHe	0.184	ug/l	5.6	42	102.22	70	130	
Mo	95	103	He	0.171	ug/l	15.8	2397	95	70	130	
Ag	109	103	No Gas	0.172	ug/l	0.9	8140	95.56	70	130	
Cd	111	103	He	0.177	ug/l	11.6	728	98.33	70	130	
Cd	111	103	No Gas	0.184	ug/l	7.1	1959	102.22	70	130	
Sb	123	103	No Gas	0.193	ug/l	3.3	5879	107.22	70	130	
Ba	138	159	He	0.166	ug/l	7.2	5281	92.22	70	130	
Hg	201	159	No Gas	13.578	ng/l	11.2	74	188.58	70	130	CRL1 Failed
Tl	205	159	No Gas	0.179	ug/l	1.6	15583	99.44	70	130	
Pb	208	159	No Gas	0.178	ug/l	0.6	21680	98.89	70	130	

All CRL failures < MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1279025	3.2	1305096.65	98	70	120	
Ge	74	No Gas	1946778	1.7	1989219.35	97.87	70	120	
Rh	103	No Gas	1894025	2.1	1924055.37	98.44	70	120	
Tb	159	No Gas	3331793	0.6	3266294.67	102.01	70	120	
Bi	209	No Gas	1694120	0.2	1636705.1	103.51	70	120	
Sc	45	He	343026	5.2	385078.04	89.08	70	120	
Ge	74	He	304426	5.6	329956.68	92.26	70	120	
Rh	103	He	896434	4.5	951366.82	94.23	70	120	
Tb	159	He	1818361	4.9	1829197.42	99.41	70	120	
Ge	74	HEHe	255225	9.2	290827.29	87.76	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRL5**	**Sample Type**	CRL2
File Name	037_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 16:12:05	**Sample QC Pass/Fail**	Pass
Comment	A20A191 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.859	ug/l	2.4	7614	95.44	70	130	
Na	23	45	He	48.563	ug/l	1.4	95293	107.92	70	130	
Mg	24	45	He	45.757	ug/l	1.0	46503	101.68	70	130	
Al	27	45	He	44.954	ug/l	2.6	22268	99.9	70	130	
K	39	45	He	47.858	ug/l	1.0	76651	106.35	70	130	
Ca	44	45	He	44.043	ug/l	4.5	3179	97.87	70	130	
Ti	47	45	He	0.915	ug/l	12.5	302	101.67	70	130	
V	51	74	He	0.805	ug/l	4.9	9692	89.44	70	130	
Cr	52	74	He	0.778	ug/l	4.2	23727	86.44	70	130	
Mn	55	74	He	0.889	ug/l	1.6	7135	98.78	70	130	
Fe	56	74	He	43.972	ug/l	0.4	522969	97.72	70	130	
Co	59	74	He	0.924	ug/l	2.0	15384	102.67	70	130	
Ni	60	74	He	0.962	ug/l	2.8	5301	106.89	70	130	
Cu	65	74	He	0.933	ug/l	1.2	5577	103.67	70	130	
Cu	65	74	No Gas	0.869	ug/l	0.6	16178	96.56	70	130	
Zn	66	74	He	1.015	ug/l	1.5	2148	112.78	70	130	
As	75	74	He	0.888	ug/l	2.0	1349	98.67	70	130	
Se	78	74	HEHe	0.914	ug/l	4.1	218	101.56	70	130	
Mo	95	103	He	0.864	ug/l	2.8	7381	96	70	130	
Ag	109	103	No Gas	0.853	ug/l	1.5	40993	94.78	70	130	
Cd	111	103	He	0.865	ug/l	4.3	3478	96.11	70	130	
Cd	111	103	No Gas	0.883	ug/l	2.6	9595	98.11	70	130	
Sb	123	103	No Gas	0.877	ug/l	0.9	26390	97.44	70	130	
Ba	138	159	He	0.852	ug/l	1.4	24542	94.67	70	130	
Hg	201	159	No Gas	37.857	ng/l	8.8	191	105.16	70	130	
Tl	205	159	No Gas	0.871	ug/l	1.8	74753	96.78	70	130	
Pb	208	159	No Gas	0.890	ug/l	1.7	104367	98.89	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1292418	0.3	1305096.65	99.03	70	120	
Ge	74	No Gas	1968975	0.9	1989219.35	98.98	70	120	
Rh	103	No Gas	1929946	1.1	1924055.37	100.31	70	120	
Tb	159	No Gas	3327507	0.5	3266294.67	101.87	70	120	
Bi	209	No Gas	1717254	0.5	1636705.1	104.92	70	120	
Sc	45	He	333316	1.4	385078.04	86.56	70	120	
Ge	74	He	298431	1.0	329956.68	90.45	70	120	
Rh	103	He	879454	1.5	951366.82	92.44	70	120	
Tb	159	He	1754386	1.7	1829197.42	95.91	70	120	
Ge	74	HEHe	276181	0.4	290827.29	94.96	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRL6**	**Sample Type**	CRL3
File Name	038CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 16:16:48	**Sample QC Pass/Fail**	Pass
Comment	A20A192 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.703	ug/l	2.5	15394	94.61	70	130	
Na	23	45	He	93.018	ug/l	3.0	180485	103.35	70	130	
Mg	24	45	He	90.636	ug/l	4.6	93361	100.71	70	130	
Al	27	45	He	88.574	ug/l	2.6	44587	98.42	70	130	
K	39	45	He	89.710	ug/l	3.3	122820	99.68	70	130	
Ca	44	45	He	86.792	ug/l	3.3	5653	96.44	70	130	
Ti	47	45	He	1.727	ug/l	9.3	578	95.94	70	130	
V	51	74	He	1.656	ug/l	1.1	18210	92	70	130	
Cr	52	74	He	1.603	ug/l	8.5	33967	89.06	70	130	
Mn	55	74	He	1.699	ug/l	0.2	13783	94.39	70	130	
Fe	56	74	He	86.963	ug/l	1.8	991526	96.63	70	130	
Co	59	74	He	1.790	ug/l	1.4	30454	99.44	70	130	
Ni	60	74	He	1.808	ug/l	4.4	9020	100.44	70	130	
Cu	65	74	He	1.884	ug/l	1.7	11037	104.67	70	130	
Cu	65	74	No Gas	1.774	ug/l	1.9	30766	98.56	70	130	
Zn	66	74	He	1.815	ug/l	4.5	3883	100.83	70	130	
As	75	74	He	1.806	ug/l	2.0	2754	100.33	70	130	
Se	78	74	HEHe	1.824	ug/l	1.0	436	101.33	70	130	
Mo	95	103	He	1.731	ug/l	3.9	13892	96.17	70	130	
Ag	109	103	No Gas	1.701	ug/l	1.2	81997	94.5	70	130	
Cd	111	103	He	1.727	ug/l	3.0	7064	95.94	70	130	
Cd	111	103	No Gas	1.787	ug/l	4.7	19447	99.28	70	130	
Sb	123	103	No Gas	1.728	ug/l	1.9	51899	96	70	130	
Ba	138	159	He	1.728	ug/l	1.4	49525	96	70	130	
Hg	201	159	No Gas	74.338	ng/l	4.4	366	103.25	70	130	
Tl	205	159	No Gas	1.760	ug/l	2.0	150161	97.78	70	130	
Pb	208	159	No Gas	1.770	ug/l	1.3	205803	98.33	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1320262	2.5	1305096.65	101.16	70	120	
Ge	74	No Gas	1949182	0.9	1989219.35	97.99	70	120	
Rh	103	No Gas	1935400	2.2	1924055.37	100.59	70	120	
Tb	159	No Gas	3315727	1.2	3266294.67	101.51	70	120	
Bi	209	No Gas	1726476	0.6	1636705.1	105.48	70	120	
Sc	45	He	339433	2.6	385078.04	88.15	70	120	
Ge	74	He	306379	1.7	329956.68	92.85	70	120	
Rh	103	He	894634	1.9	951366.82	94.04	70	120	
Tb	159	He	1758766	1.4	1829197.42	96.15	70	120	
Ge	74	HEHe	277173	0.4	290827.29	95.3	70	120	

Sample Report ICPMS6

Sample Name	**0010756-BLK1**	**Sample Type**	Sample
File Name	042SMPL.d	**Vial #**	3114
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	5.0000
Acq Time	01/24/2020 17:24:52	**Sample QC Pass/Fail**	Pass
Comment	0010756 Sediment RCRA	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	0.011	22.1	116	16.9	100	
Na	23	45	He	ug/l	5.728	39.1	14987	2.1	50000	
Mg	24	45	He	ug/l	2.041	28.8	2254	7.5	50000	
Al	27	45	He	ug/l	1.265	31.5	655	15.0	50000	
K	39	45	He	ug/l	3.333	189.0	27601	1.2	50000	
Ca	44	45	He	ug/l	4.832	68.9	933	7.4	50000	
Ti	47	45	He	ug/l	0.079	52.0	28	50.0	2500	
V	51	74	He	ug/l	-0.016	N/A	1742	2.2	500	
Cr	52	74	He	ug/l	0.078	358.7	14327	1.1	1000	
Mn	55	74	He	ug/l	0.022	31.0	368	7.4	2500	
Fe	56	74	He	ug/l	1.169	139.4	74356	1.0	50000	
Co	59	74	He	ug/l	0.007	26.4	226	10.4	500	
Ni	60	74	He	ug/l	-0.03	N/A	1098	5.9	1000	
Cu	65	74	He	ug/l	0.039	54.8	649	4.3	1000	
Cu	65	74	No Gas	ug/l	0.02	13.7	2101	0.8	1000	
Zn	66	74	He	ug/l	0.021	92.3	102	14.7	2500	
As	75	74	He	ug/l	0.031	47.0	94	3.3	500	
Se	78	74	HEHe	ug/l	0.011	31.8	4	19.9	100	
Mo	95	103	He	ug/l	0.004	1215.0	1038	8.7	100	
Ag	109	103	No Gas	ug/l	0.002	9.9	127	7.0	100	
Cd	111	103	He	ug/l	0.003	17.1	13	25.0	1000	
Cd	111	103	No Gas	ug/l	0.003	17.5	38	14.2	1000	
Sb	123	103	No Gas	ug/l	0.012	5.0	573	5.5	100	
Ba	138	159	He	ug/l	0.008	61.3	573	16.2	2500	
W	186	159	No Gas	ug/l	0.001	74.9	180	20.0	40	
Hg	201	159	No Gas	ng/l	13.722	2.9	75	2.0	4000	
Tl	205	159	No Gas	ug/l	0.175	4.4	15370	3.2	100	
Pb	208	159	No Gas	ug/l	0.017	5.4	2921	3.3	500	

He mode RR-10
JB 01/25/20
As Ba Cr

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1255453	1.0	1305096.65	96.2	70	120	
Sc	45	He	318058	20.7	385078.04	82.6	70	120	RSD Warning
Ge	74	No Gas	1892161	2.7	1989219.35	95.12	70	120	
Ge	74	He	277959	18.7	329956.68	84.24	70	120	
Ge	74	HEHe	273232	0.5	290827.29	93.95	70	120	
Rh	103	No Gas	1883809	2.6	1924055.37	97.91	70	120	
Rh	103	He	830671	20.1	951366.82	87.31	70	120	RSD Warning
Tb	159	No Gas	3352196	1.1	3266294.67	102.63	70	120	
Tb	159	He	1688393	20.6	1829197.42	92.3	70	120	RSD Warning
Bi	209	No Gas	1705910	1.0	1636705.1	104.23	70	120	

Sample Report ICPMS6

Sample Name	**0010756-BS1**	**Sample Type**	Sample
File Name	043SMPL.d	**Vial #**	3115
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	5.0000
Acq Time	01/24/2020 17:29:35	**Sample QC Pass/Fail**	Pass
Comment	0010756 Sediment RCRA	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	24.308	3.7	212913	0.7	100	
Na	23	45	He	ug/l	2494.793	1.5	4784271	2.0	50000	
Mg	24	45	He	ug/l	2458.142	0.3	2572772	0.8	50000	
Al	27	45	He	ug/l	2417.917	1.0	1238969	1.1	50000	
K	39	45	He	ug/l	2476.392	0.6	2730357	0.7	50000	
Ca	44	45	He	ug/l	2468.185	1.3	143015	0.9	50000	
Ti	47	45	He	ug/l	47.31	1.0	16032	0.5	2500	
V	51	74	He	ug/l	48.375	0.7	469353	0.7	500	
Cr	52	74	He	ug/l	48.331	1.4	575623	0.9	1000	
Mn	55	74	He	ug/l	48.54	0.9	384962	0.3	2500	
Fe	56	74	He	ug/l	2461.734	2.0	25965604	1.9	50000	
Co	59	74	He	ug/l	51.654	1.0	870227	0.7	500	
Ni	60	74	He	ug/l	51.432	0.1	217767	0.7	1000	
Cu	65	74	He	ug/l	52.017	1.2	289337	0.9	1000	
Cu	65	74	No Gas	ug/l	50.942	2.2	813671	1.4	1000	
Zn	66	74	He	ug/l	49.151	0.8	102712	0.4	2500	
As	75	74	He	ug/l	48.975	0.9	72719	0.9	500	
Se	78	74	HEHe	ug/l	23.562	1.2	5571	0.3	100	
Mo	95	103	He	ug/l	24.512	2.1	181576	1.7	100	
Ag	109	103	No Gas	ug/l	24.841	1.5	1171650	0.8	100	
Cd	111	103	He	ug/l	47.407	1.1	193533	1.0	1000	
Cd	111	103	No Gas	ug/l	49.888	1.3	531869	1.2	1000	
Sb	123	103	No Gas	ug/l	24.389	1.7	713972	1.0	100	
Ba	138	159	He	ug/l	47.554	1.5	1402465	0.8	2500	
W	186	159	No Gas	ug/l	0.009	19.2	450	14.6	40	
Hg	201	159	No Gas	ng/l	999.278	1.0	4819	0.7	4000	
Tl	205	159	No Gas	ug/l	24.976	1.2	2121837	1.0	100	
Pb	208	159	No Gas	ug/l	50.674	0.2	5851543	1.2	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1281660	3.6	1305096.65	98.2	70	120	
Sc	45	He	346019	0.6	385078.04	89.86	70	120	
Ge	74	No Gas	1905743	2.0	1989219.35	95.8	70	120	
Ge	74	He	304653	0.7	329956.68	92.33	70	120	
Ge	74	HEHe	275218	1.5	290827.29	94.63	70	120	
Rh	103	No Gas	1894494	1.3	1924055.37	98.46	70	120	
Rh	103	He	893152	0.4	951366.82	93.88	70	120	
Tb	159	No Gas	3307415	1.2	3266294.67	101.26	70	120	
Tb	159	He	1824164	1.2	1829197.42	99.72	70	120	
Bi	209	No Gas	1697735	0.6	1636705.1	103.73	70	120	

Sample Report ICPMS6

Sample Name	**A0A0539-01**	**Sample Type**	Sample
File Name	046SMPL.d	**Vial #**	3203
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	5.0000
Acq Time	01/24/2020 17:43:25	**Sample QC Pass/Fail**	Fail
Comment	0010756 Sediment RCRA	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	0.695	0.7	5787	1.2	100	
Na	23	45	He	ug/l	1026.2	3.0	2199717	3.5	50000	
Mg	24	45	He	ug/l	6852.533	0.9	8001233	0.8	50000	
Al	27	45	He	ug/l	26572.387	0.7	15190776	0.2	50000	
K	39	45	He	ug/l	1351.294	1.0	1676158	0.7	50000	
Ca	44	45	He	ug/l	7792.161	0.7	501950	0.9	50000	
Ti	47	45	He	ug/l	2579.316	1.5	975004	1.0	2500	>LDR
V	51	74	He	ug/l	138.962	0.9	1311066	1.5	500	
Cr	52	74	He	ug/l	38.426	0.4	449368	0.3	1000	
Mn	55	74	He	ug/l	666.078	1.2	5148950	1.2	2500	
Fe	56	74	He	ug/l	48450.483	0.2	497098628	0.8	50000	>LDR
Co	59	74	He	ug/l	24.646	0.2	405023	0.8	500	
Ni	60	74	He	ug/l	42.589	0.3	176088	0.3	1000	
Cu	65	74	He	ug/l	41.304	0.6	224164	0.4	1000	
Cu	65	74	No Gas	ug/l	42.772	0.7	655794	0.9	1000	
Zn	66	74	He	ug/l	97.35	1.0	198338	1.4	2500	
As	75	74	He	ug/l	4.927	0.7	7186	1.4	500	
Se	78	74	HEHe	ug/l	0.561	3.5	131	3.7	100	
Mo	95	103	He	ug/l	0.712	0.7	6064	0.8	100	
Ag	109	103	No Gas	ug/l	0.205	3.5	8931	3.1	100	
Cd	111	103	He	ug/l	0.165	8.9	644	8.6	1000	
Cd	111	103	No Gas	ug/l	0.835	3.2	8198	2.3	1000	
Sb	123	103	No Gas	ug/l	0.27	2.6	7498	1.5	100	
Ba	138	159	He	ug/l	153.777	0.4	4410923	1.2	2500	
W	186	159	No Gas	ug/l	0.061	10.5	2423	9.0	40	
Hg	201	159	No Gas	ng/l	84.602	3.3	422	2.4	4000	
Tl	205	159	No Gas	ug/l	0.125	1.6	11067	1.9	100	
Pb	208	159	No Gas	ug/l	11.258	0.9	1321985	0.6	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1212377	0.5	1305096.65	92.9	70	120	
Sc	45	He	386074	0.7	385078.04	100.26	70	120	
Ge	74	No Gas	1828293	1.4	1989219.35	91.91	70	120	
Ge	74	He	297108	0.7	329956.68	90.04	70	120	
Ge	74	HEHe	267541	0.7	290827.29	91.99	70	120	
Rh	103	No Gas	1745563	1.1	1924055.37	90.72	70	120	
Rh	103	He	849079	0.4	951366.82	89.25	70	120	
Tb	159	No Gas	3361428	1.0	3266294.67	102.91	70	120	
Tb	159	He	1774361	1.2	1829197.42	97	70	120	
Bi	209	No Gas	1646546	0.8	1636705.1	100.6	70	120	

Sample Report ICPMS6

Sample Name	**A0A0539-02**	**Sample Type**	Sample
File Name	047SMPL.d	**Vial #**	3204
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	5.0000
Acq Time	01/24/2020 17:48:04	**Sample QC Pass/Fail**	Fail
Comment	0010756 Sediment RCRA	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	0.824	1.9	6812	1.9	100	
Na	23	45	He	ug/l	1091.45	0.3	2392952	0.4	50000	
Mg	24	45	He	ug/l	7348.595	1.5	8778482	1.3	50000	
Al	27	45	He	ug/l	34728.374	0.4	20312178	0.5	50000	
K	39	45	He	ug/l	1696.106	1.4	2144457	1.0	50000	
Ca	44	45	He	ug/l	8587.016	1.5	565816	1.1	50000	
Ti	47	45	He	ug/l	2992.583	0.8	1157420	1.2	2500	>LDR
V	51	74	He	ug/l	161.136	1.4	1510547	1.1	500	
Cr	52	74	He	ug/l	45.633	0.5	527629	0.4	1000	
Mn	55	74	He	ug/l	612.245	1.6	4703922	1.6	2500	
Fe	56	74	He	ug/l	52238.235	0.6	532688423	1.0	50000	>LDR
Co	59	74	He	ug/l	25.877	0.9	422627	0.1	500	
Ni	60	74	He	ug/l	44.559	0.6	183050	0.8	1000	
Cu	65	74	He	ug/l	45.689	0.6	246399	0.3	1000	
Cu	65	74	No Gas	ug/l	47.627	0.9	715902	0.2	1000	
Zn	66	74	He	ug/l	119.268	0.5	241490	0.9	2500	
As	75	74	He	ug/l	5.694	1.8	8245	1.2	500	
Se	78	74	HEHe	ug/l	0.633	5.0	146	3.2	100	
Mo	95	103	He	ug/l	0.502	3.8	4621	3.1	100	
Ag	109	103	No Gas	ug/l	0.16	1.0	6923	1.4	100	
Cd	111	103	He	ug/l	0.217	3.9	850	4.1	1000	
Cd	111	103	No Gas	ug/l	1.004	3.2	9787	3.7	1000	
Sb	123	103	No Gas	ug/l	0.298	1.9	8188	1.8	100	
Ba	138	159	He	ug/l	186.38	1.5	5371073	2.4	2500	
W	186	159	No Gas	ug/l	0.044	6.2	1805	7.0	40	
Hg	201	159	No Gas	ng/l	76.589	3.5	380	2.3	4000	
Tl	205	159	No Gas	ug/l	0.143	4.0	12558	3.7	100	
Pb	208	159	No Gas	ug/l	12.7	0.5	1481142	1.4	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1205084	2.0	1305096.65	92.34	70	120	
Sc	45	He	394986	0.4	385078.04	102.57	70	120	
Ge	74	No Gas	1792899	0.9	1989219.35	90.13	70	120	
Ge	74	He	295297	0.8	329956.68	89.5	70	120	
Ge	74	HEHe	265909	1.8	290827.29	91.43	70	120	
Rh	103	No Gas	1732272	0.6	1924055.37	90.03	70	120	
Rh	103	He	855002	0.3	951366.82	89.87	70	120	
Tb	159	No Gas	3338634	1.3	3266294.67	102.21	70	120	
Tb	159	He	1782623	1.7	1829197.42	97.45	70	120	
Bi	209	No Gas	1640537	0.3	1636705.1	100.23	70	120	

Sample Report ICPMS6

Sample Name	**0010756-DUP1**	**Sample Type**	Sample
File Name	048SMPL.d	**Vial #**	3205
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	5.0000
Acq Time	01/24/2020 17:52:42	**Sample QC Pass/Fail**	Fail
Comment	0010756 Sediment RCRA	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	0.827	2.0	6557	3.8	100	
Na	23	45	He	ug/l	1158.465	1.3	2469998	0.6	50000	
Mg	24	45	He	ug/l	7406.79	1.4	8606031	0.5	50000	
Al	27	45	He	ug/l	32880.473	1.0	18706837	1.5	50000	
K	39	45	He	ug/l	1705.093	3.0	2096500	2.1	50000	
Ca	44	45	He	ug/l	9167.767	0.7	587589	1.7	50000	
Ti	47	45	He	ug/l	2907.036	2.6	1093706	3.1	2500	>LDR
V	51	74	He	ug/l	156.785	2.4	1450310	2.4	500	
Cr	52	74	He	ug/l	42.106	1.1	481499	1.1	1000	
Mn	55	74	He	ug/l	578.21	0.8	4383322	0.9	2500	
Fe	56	74	He	ug/l	54781.24	1.6	551171258	1.6	50000	>LDR
Co	59	74	He	ug/l	28.602	0.4	460920	0.5	500	
Ni	60	74	He	ug/l	44.303	1.3	179579	1.3	1000	
Cu	65	74	He	ug/l	40.151	0.7	213710	0.7	1000	
Cu	65	74	No Gas	ug/l	42.952	9.3	629128	0.2	1000	
Zn	66	74	He	ug/l	109.827	0.6	219416	0.6	2500	
As	75	74	He	ug/l	5.235	0.3	7484	0.2	500	
Se	78	74	HEHe	ug/l	0.564	6.1	131	6.5	100	
Mo	95	103	He	ug/l	0.488	1.2	4443	1.2	100	
Ag	109	103	No Gas	ug/l	0.099	10.3	4185	3.3	100	
Cd	111	103	He	ug/l	0.149	2.4	574	1.7	1000	
Cd	111	103	No Gas	ug/l	0.885	8.8	8404	1.2	1000	
Sb	123	103	No Gas	ug/l	0.237	9.2	6387	3.0	100	
Ba	138	159	He	ug/l	199.114	0.6	5633905	1.6	2500	
W	186	159	No Gas	ug/l	0.07	30.0	2666	32.3	40	
Hg	201	159	No Gas	ng/l	51.051	4.0	245	6.1	4000	
Tl	205	159	No Gas	ug/l	0.137	9.1	11492	3.6	100	
Pb	208	159	No Gas	ug/l	8.61	6.1	960798	0.2	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1156827	5.7	1305096.65	88.64	70	120	
Sc	45	He	384222	1.4	385078.04	99.78	70	120	
Ge	74	No Gas	1755838	8.6	1989219.35	88.27	70	120	
Ge	74	He	291361	0.1	329956.68	88.3	70	120	
Ge	74	HEHe	266357	0.9	290827.29	91.59	70	120	
Rh	103	No Gas	1695249	7.5	1924055.37	88.11	70	120	
Rh	103	He	839128	0.8	951366.82	88.2	70	120	
Tb	159	No Gas	3200934	5.8	3266294.67	98	70	120	
Tb	159	He	1750308	1.4	1829197.42	95.69	70	120	
Bi	209	No Gas	1560352	8.8	1636705.1	95.33	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**0A24028-CCB2**	**Sample Type**	CCB
File Name	050_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 18:01:52	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.007	ug/l	17.7	88	0.09	
Na	23	45	He	1.350	ug/l	10.4	8640	45	
Mg	24	45	He	0.576	ug/l	8.2	1015	45	
Al	27	45	He	1.509	ug/l	15.9	875	22.5	
K	39	45	He	1.208	ug/l	17.2	29100	45	
Ca	44	45	He	-2.100	ug/l	N/A	651	45	
Ti	47	45	He	0.124	ug/l	36.5	47	1.8	
V	51	74	He	-0.069	ug/l	N/A	1498	0.45	
Cr	52	74	He	-0.096	ug/l	N/A	14511	0.45	
Mn	55	74	He	0.029	ug/l	12.2	481	0.45	
Fe	56	74	He	1.708	ug/l	13.1	92000	22.5	
Co	59	74	He	0.009	ug/l	18.1	292	0.09	
Ni	60	74	He	0.002	ug/l	559.7	1417	0.45	
Cu	65	74	He	0.014	ug/l	36.1	606	0.45	
Cu	65	74	No Gas	-0.001	ug/l	N/A	1829	0.45	
Zn	66	74	He	0.020	ug/l	27.9	118	1.8	
As	75	74	He	0.025	ug/l	28.9	99	0.45	
Se	78	74	HEHe	0.012	ug/l	7.9	4	0.45	
Mo	95	103	He	0.022	ug/l	45.2	1321	0.45	
Ag	109	103	No Gas	0.004	ug/l	10.2	231	0.09	
Cd	111	103	He	0.008	ug/l	46.1	36	0.09	
Cd	111	103	No Gas	0.010	ug/l	4.8	114	0.09	
Sb	123	103	No Gas	0.164	ug/l	3.8	5150	0.45	
Ba	138	159	He	0.018	ug/l	13.8	911	0.45	
Hg	201	159	No Gas	7.523	ng/l	16.6	45	36	
Tl	205	159	No Gas	0.023	ug/l	3.7	2265	0.09	
Pb	208	159	No Gas	0.016	ug/l	12.9	2811	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1289858	0.3	1305096.65	98.83	70	120	
Ge	74	No Gas	1946902	0.8	1989219.35	97.87	70	120	
Rh	103	No Gas	1938070	1.6	1924055.37	100.73	70	120	
Tb	159	No Gas	3354801	1.1	3266294.67	102.71	70	120	
Bi	209	No Gas	1681540	1.4	1636705.1	102.74	70	120	
Sc	45	He	351395	1.2	385078.04	91.25	70	120	
Ge	74	He	313923	1.4	329956.68	95.14	70	120	
Rh	103	He	911747	0.7	951366.82	95.84	70	120	
Tb	159	He	1794097	1.1	1829197.42	98.08	70	120	
Ge	74	HEHe	283360	0.7	290827.29	97.43	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**0A24028-CCV3**	**Sample Type**	CCV
File Name	052_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 18:11:08	**Sample QC Pass/Fail**	Pass
Comment	A20A138 - JPB 01/24	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	39.564	ug/l	2.1	347432	40	98.91	90	110	
Na	23	45	He	3946.036	ug/l	1.4	7553696	4000	98.65	90	110	
Mg	24	45	He	4046.739	ug/l	0.6	4229768	4000	101.17	90	110	
Al	27	45	He	3954.851	ug/l	1.1	2023922	4000	98.87	90	110	
K	39	45	He	3895.398	ug/l	0.9	4274020	4000	97.38	90	110	
Ca	44	45	He	4083.885	ug/l	0.3	235855	4000	102.1	90	110	
Ti	47	45	He	96.418	ug/l	0.2	32631	100	96.42	90	110	
V	51	74	He	95.664	ug/l	0.9	948409	100	95.66	90	110	
Cr	52	74	He	97.605	ug/l	2.8	1174634	100	97.6	90	110	
Mn	55	74	He	97.879	ug/l	1.3	794732	100	97.88	90	110	
Fe	56	74	He	4004.457	ug/l	1.7	43208678	4000	100.11	90	110	
Co	59	74	He	103.187	ug/l	1.2	1780182	100	103.19	90	110	
Ni	60	74	He	104.416	ug/l	0.5	451322	100	104.42	90	110	
Cu	65	74	He	105.041	ug/l	0.9	597833	100	105.04	90	110	
Cu	65	74	No Gas	104.476	ug/l	0.6	1676804	100	104.48	90	110	
Zn	66	74	He	99.564	ug/l	1.0	213002	100	99.56	90	110	
As	75	74	He	94.941	ug/l	0.7	144311	100	94.94	90	110	
Se	78	74	HEHe	41.255	ug/l	1.4	9552	40	103.14	90	110	
Mo	95	103	He	39.677	ug/l	1.4	296578	40	99.19	90	110	
Ag	109	103	No Gas	36.653	ug/l	0.9	1725018	40	91.63	90	110	
Cd	111	103	He	95.541	ug/l	0.5	394510	100	95.54	90	110	
Cd	111	103	No Gas	99.348	ug/l	1.0	1056849	100	99.35	90	110	
Sb	123	103	No Gas	37.524	ug/l	1.9	1096104	40	93.81	90	110	
Ba	138	159	He	97.834	ug/l	1.2	2854157	100	97.83	90	110	
Hg	201	159	No Gas	820.243	ng/l	1.1	3981	800	102.53	90	110	
Tl	205	159	No Gas	40.295	ug/l	2.6	3443688	40	100.74	90	110	
Pb	208	159	No Gas	100.077	ug/l	1.8	11624913	100	100.08	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1284219	1.9	1305096.65	98.4	70	120	
Ge	74	No Gas	1916753	1.0	1989219.35	96.36	70	120	
Rh	103	No Gas	1890278	1.1	1924055.37	98.24	70	120	
Tb	159	No Gas	3327914	1.5	3266294.67	101.89	70	120	
Bi	209	No Gas	1708255	0.6	1636705.1	104.37	70	120	
Sc	45	He	345590	0.7	385078.04	89.75	70	120	
Ge	74	He	312001	0.7	329956.68	94.56	70	120	
Rh	103	He	903397	0.3	951366.82	94.96	70	120	
Tb	159	He	1804775	1.7	1829197.42	98.66	70	120	
Ge	74	HEHe	269553	1.8	290827.29	92.69	70	120	

Sample Report ICPMS6

Sample Name	**0010756-BLK2**	**Sample Type**	Sample
File Name	053SMPL.d	**Vial #**	3114
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	5.0000
Acq Time	01/24/2020 18:19:55	**Sample QC Pass/Fail**	Pass
Comment	0010756 Sediment RCRA BLK1 reran for He mode IS RSD	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	0.004	44.9	61	28.0	100	
Na	23	45	He	ug/l	2.533	6.4	10889	2.9	50000	
Mg	24	45	He	ug/l	2.397	8.2	2936	7.1	50000	
Al	27	45	He	ug/l	3.161	3.3	1726	3.2	50000	
K	39	45	He	ug/l	0.673	73.7	28367	2.1	50000	
Ca	44	45	He	ug/l	2.936	20.0	941	3.7	50000	
Ti	47	45	He	ug/l	0.261	42.2	93	40.2	2500	
V	51	74	He	ug/l	-0.025	N/A	1898	6.6	500	
Cr	52	74	He	ug/l	-0.049	N/A	14801	2.7	1000	
Mn	55	74	He	ug/l	0.067	12.0	781	8.3	2500	
Fe	56	74	He	ug/l	3.351	8.1	107832	2.7	50000	
Co	59	74	He	ug/l	0.007	34.8	261	16.2	500	
Ni	60	74	He	ug/l	-0.054	N/A	1153	7.1	1000	
Cu	65	74	He	ug/l	0.028	41.0	677	9.6	1000	
Cu	65	74	No Gas	ug/l	0.018	22.9	2146	2.7	1000	
Zn	66	74	He	ug/l	0.034	20.7	146	10.3	2500	
As	75	74	He	ug/l	0.012	31.5	78	7.1	500	
Se	78	74	HEHe	ug/l	0.011	37.7	4	27.8	100	
Mo	95	103	He	ug/l	0.003	262.3	1181	3.6	100	
Ag	109	103	No Gas	ug/l	0.002	24.4	128	18.5	100	
Cd	111	103	He	ug/l	0.004	104.4	20	88.2	1000	
Cd	111	103	No Gas	ug/l	0.004	45.7	40	43.6	1000	
Sb	123	103	No Gas	ug/l	0.057	1.2	1944	1.1	100	
Ba	138	159	He	ug/l	0.01	12.4	704	4.3	2500	
W	186	159	No Gas	ug/l	0.002	96.3	207	36.6	40	
Hg	201	159	No Gas	ng/l	9.053	9.8	51	7.9	4000	
Tl	205	159	No Gas	ug/l	0.016	3.5	1627	2.8	100	
Pb	208	159	No Gas	ug/l	0.014	3.6	2610	2.3	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1325784	1.4	1305096.65	101.59	70	120	
Sc	45	He	349666	0.2	385078.04	90.8	70	120	
Ge	74	No Gas	1952921	2.5	1989219.35	98.18	70	120	
Ge	74	He	308193	0.1	329956.68	93.4	70	120	
Ge	74	HEHe	290324	4.7	290827.29	99.83	70	120	
Rh	103	No Gas	1951858	0.6	1924055.37	101.45	70	120	
Rh	103	He	914393	0.8	951366.82	96.11	70	120	
Tb	159	No Gas	3317024	0.6	3266294.67	101.55	70	120	
Tb	159	He	1810114	1.0	1829197.42	98.96	70	120	
Bi	209	No Gas	1672607	1.5	1636705.1	102.19	70	120	

Sample Report ICPMS6

Sample Name	**0010756-MS1**	**Sample Type**	Sample
File Name	054SMPL.d	**Vial #**	3206
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	5.0000
Acq Time	01/24/2020 18:24:49	**Sample QC Pass/Fail**	Fail
Comment	0010756 Sediment RCRA	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	23.961	1.8	197381	1.4	100	
Na	23	45	He	ug/l	3036.279	1.1	6423754	0.3	50000	
Mg	24	45	He	ug/l	9370.766	0.8	10821966	0.5	50000	
Al	27	45	He	ug/l	31294.955	1.4	17694685	0.7	50000	
K	39	45	He	ug/l	3338.422	2.2	4051145	1.4	50000	
Ca	44	45	He	ug/l	11153.576	0.7	710287	1.0	50000	
Ti	47	45	He	ug/l	2784.075	1.9	1040991	2.1	2500	>LDR
V	51	74	He	ug/l	198.441	0.6	1841001	0.1	500	
Cr	52	74	He	ug/l	87.383	0.3	986805	0.4	1000	
Mn	55	74	He	ug/l	2260.427	0.2	17190780	0.5	2500	>LDR
Fe	56	74	He	ug/l	63468.326	2.2	640585248	1.7	50000	>LDR
Co	59	74	He	ug/l	78.153	0.7	1263243	0.3	500	
Ni	60	74	He	ug/l	90.88	0.5	368193	0.6	1000	
Cu	65	74	He	ug/l	89.428	0.9	476921	0.4	1000	
Cu	65	74	No Gas	ug/l	89.424	2.0	1355001	0.9	1000	
Zn	66	74	He	ug/l	157.337	0.6	315316	0.4	2500	
As	75	74	He	ug/l	50.696	0.6	72221	0.5	500	
Se	78	74	HEHe	ug/l	22.446	0.5	5063	1.0	100	
Mo	95	103	He	ug/l	23.155	1.1	161641	0.6	100	
Ag	109	103	No Gas	ug/l	23.215	0.5	1020914	0.6	100	
Cd	111	103	He	ug/l	46.13	0.3	177405	0.3	1000	
Cd	111	103	No Gas	ug/l	48.422	0.5	481319	1.3	1000	
Sb	123	103	No Gas	ug/l	20.143	1.6	549845	1.7	100	
Ba	138	159	He	ug/l	245.752	0.6	7052970	0.9	2500	
W	186	159	No Gas	ug/l	0.075	5.3	2950	6.0	40	
Hg	201	159	No Gas	ng/l	984.119	1.3	4761	2.4	4000	
Tl	205	159	No Gas	ug/l	22.61	0.8	1926960	1.9	100	
Pb	208	159	No Gas	ug/l	57.661	0.6	6678296	0.6	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1204443	1.0	1305096.65	92.29	70	120	
Sc	45	He	381863	0.8	385078.04	99.16	70	120	
Ge	74	No Gas	1809523	1.2	1989219.35	90.97	70	120	
Ge	74	He	292305	0.5	329956.68	88.59	70	120	
Ge	74	HEHe	262545	1.2	290827.29	90.28	70	120	
Rh	103	No Gas	1766208	1.0	1924055.37	91.8	70	120	
Rh	103	He	841372	0.6	951366.82	88.44	70	120	
Tb	159	No Gas	3317540	1.2	3266294.67	101.57	70	120	
Tb	159	He	1775432	1.1	1829197.42	97.06	70	120	
Bi	209	No Gas	1643057	0.4	1636705.1	100.39	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**0A24028-CCV4**	**Sample Type**	CCV
File Name	062_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 19:05:05	**Sample QC Pass/Fail**	Pass
Comment	A20A138 - JPB 01/24	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	39.029	ug/l	1.2	348472	40	97.57	90	110	
Na	23	45	He	3962.674	ug/l	1.6	7468058	4000	99.07	90	110	
Mg	24	45	He	4154.224	ug/l	0.5	4274715	4000	103.86	90	110	
Al	27	45	He	3980.090	ug/l	1.1	2005141	4000	99.5	90	110	
K	39	45	He	3911.838	ug/l	2.5	4225132	4000	97.8	90	110	
Ca	44	45	He	4095.787	ug/l	1.3	232856	4000	102.39	90	110	
Ti	47	45	He	97.419	ug/l	1.8	32457	100	97.42	90	110	
V	51	74	He	96.095	ug/l	0.6	935133	100	96.1	90	110	
Cr	52	74	He	98.523	ug/l	0.3	1163712	100	98.52	90	110	
Mn	55	74	He	98.584	ug/l	0.5	785723	100	98.58	90	110	
Fe	56	74	He	4028.677	ug/l	1.0	42667877	4000	100.72	90	110	
Co	59	74	He	104.090	ug/l	1.1	1762713	100	104.09	90	110	
Ni	60	74	He	107.517	ug/l	0.7	456118	100	107.52	90	110	
Cu	65	74	He	106.491	ug/l	0.6	594916	100	106.49	90	110	
Cu	65	74	No Gas	102.991	ug/l	2.1	1667780	100	102.99	90	110	
Zn	66	74	He	100.364	ug/l	0.5	210755	100	100.36	90	110	
As	75	74	He	99.542	ug/l	0.1	148512	100	99.54	90	110	
Se	78	74	HEHe	40.771	ug/l	0.4	9447	40	101.93	90	110	
Mo	95	103	He	39.826	ug/l	0.4	293620	40	99.56	90	110	
Ag	109	103	No Gas	37.087	ug/l	0.6	1749237	40	92.72	90	110	
Cd	111	103	He	94.921	ug/l	0.8	386580	100	94.92	90	110	
Cd	111	103	No Gas	99.073	ug/l	1.6	1056037	100	99.07	90	110	
Sb	123	103	No Gas	39.103	ug/l	2.2	1144363	40	97.76	90	110	
Ba	138	159	He	99.010	ug/l	1.5	2841664	100	99.01	90	110	
Hg	201	159	No Gas	804.422	ng/l	1.8	3895	800	100.55	90	110	
Tl	205	159	No Gas	40.092	ug/l	3.8	3417112	40	100.23	90	110	
Pb	208	159	No Gas	99.058	ug/l	2.4	11476590	100	99.06	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1305578	1.9	1305096.65	100.04	70	120	
Ge	74	No Gas	1934316	1.7	1989219.35	97.24	70	120	
Rh	103	No Gas	1894436	2.3	1924055.37	98.46	70	120	
Tb	159	No Gas	3319667	2.0	3266294.67	101.63	70	120	
Bi	209	No Gas	1677702	1.3	1636705.1	102.5	70	120	
Sc	45	He	340213	0.3	385078.04	88.35	70	120	
Ge	74	He	306238	0.6	329956.68	92.81	70	120	
Rh	103	He	890995	0.9	951366.82	93.65	70	120	
Tb	159	He	1775373	0.7	1829197.42	97.06	70	120	
Ge	74	HEHe	269712	0.4	290827.29	92.74	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**0A24028-CCB3**	**Sample Type**	CCB
File Name	063_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 19:09:35	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.010	ug/l	35.3	114	0.09	
Na	23	45	He	1.148	ug/l	3.4	8165	45	
Mg	24	45	He	1.018	ug/l	8.4	1469	45	
Al	27	45	He	2.827	ug/l	6.3	1544	22.5	
K	39	45	He	2.164	ug/l	6.5	29851	45	
Ca	44	45	He	-2.557	ug/l	N/A	618	45	
Ti	47	45	He	0.191	ug/l	25.1	69	1.8	
V	51	74	He	-0.063	ug/l	N/A	1536	0.45	
Cr	52	74	He	-0.060	ug/l	N/A	14738	0.45	
Mn	55	74	He	0.070	ug/l	13.5	806	0.45	
Fe	56	74	He	3.537	ug/l	5.3	110314	22.5	
Co	59	74	He	0.014	ug/l	2.9	387	0.09	
Ni	60	74	He	0.027	ug/l	7.6	1502	0.45	
Cu	65	74	He	0.017	ug/l	29.4	619	0.45	
Cu	65	74	No Gas	0.009	ug/l	75.1	2000	0.45	
Zn	66	74	He	0.021	ug/l	36.7	119	1.8	
As	75	74	He	0.022	ug/l	14.9	93	0.45	
Se	78	74	HEHe	0.019	ug/l	36.5	6	0.45	
Mo	95	103	He	0.025	ug/l	31.6	1346	0.45	
Ag	109	103	No Gas	0.007	ug/l	5.1	352	0.09	
Cd	111	103	He	0.013	ug/l	6.2	59	0.09	
Cd	111	103	No Gas	0.021	ug/l	10.1	228	0.09	
Sb	123	103	No Gas	0.106	ug/l	2.5	3405	0.45	
Ba	138	159	He	0.029	ug/l	8.5	1222	0.45	
Hg	201	159	No Gas	7.505	ng/l	19.1	43	36	
Tl	205	159	No Gas	0.029	ug/l	2.5	2700	0.09	
Pb	208	159	No Gas	0.022	ug/l	6.1	3475	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1297538	1.1	1305096.65	99.42	70	120	
Ge	74	No Gas	1956960	1.3	1989219.35	98.38	70	120	
Rh	103	No Gas	1937708	0.6	1924055.37	100.71	70	120	
Tb	159	No Gas	3279211	1.3	3266294.67	100.4	70	120	
Bi	209	No Gas	1670222	0.7	1636705.1	102.05	70	120	
Sc	45	He	347796	1.1	385078.04	90.32	70	120	
Ge	74	He	309637	0.6	329956.68	93.84	70	120	
Rh	103	He	910858	1.3	951366.82	95.74	70	120	
Tb	159	He	1773094	1.0	1829197.42	96.93	70	120	
Ge	74	HEHe	270561	1.3	290827.29	93.03	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**0A24028-CCV5**	**Sample Type**	CCV
File Name	074_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 20:02:11	**Sample QC Pass/Fail**	Pass
Comment	A20A138 - JPB 01/24	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	39.901	ug/l	2.4	349655	40	99.75	90	110	
Na	23	45	He	3749.988	ug/l	1.1	7457293	4000	93.75	90	110	
Mg	24	45	He	3943.689	ug/l	0.7	4282294	4000	98.59	90	110	
Al	27	45	He	3766.681	ug/l	2.2	2002225	4000	94.17	90	110	
K	39	45	He	3768.189	ug/l	1.6	4295421	4000	94.2	90	110	
Ca	44	45	He	3953.923	ug/l	1.6	237240	4000	98.85	90	110	
Ti	47	45	He	94.575	ug/l	0.6	33250	100	94.58	90	110	
V	51	74	He	93.400	ug/l	1.5	950200	100	93.4	90	110	
Cr	52	74	He	95.261	ug/l	2.4	1176673	100	95.26	90	110	
Mn	55	74	He	95.334	ug/l	2.6	794179	100	95.33	90	110	
Fe	56	74	He	3866.292	ug/l	1.7	42808761	4000	96.66	90	110	
Co	59	74	He	100.414	ug/l	1.2	1777615	100	100.41	90	110	
Ni	60	74	He	101.675	ug/l	1.7	450953	100	101.68	90	110	
Cu	65	74	He	102.295	ug/l	1.8	597386	100	102.3	90	110	
Cu	65	74	No Gas	104.779	ug/l	2.8	1700919	100	104.78	90	110	
Zn	66	74	He	96.383	ug/l	0.6	211601	100	96.38	90	110	
As	75	74	He	93.526	ug/l	1.7	145867	100	93.53	90	110	
Se	78	74	HEHe	40.287	ug/l	0.9	9470	40	100.72	90	110	
Mo	95	103	He	38.290	ug/l	1.9	295960	40	95.72	90	110	
Ag	109	103	No Gas	37.226	ug/l	3.0	1734507	40	93.06	90	110	
Cd	111	103	He	91.691	ug/l	1.5	391463	100	91.69	90	110	
Cd	111	103	No Gas	101.530	ug/l	2.6	1069351	100	101.53	90	110	
Sb	123	103	No Gas	38.866	ug/l	3.1	1123906	40	97.16	90	110	
Ba	138	159	He	97.049	ug/l	3.2	2906131	100	97.05	90	110	
Hg	201	159	No Gas	803.025	ng/l	0.5	3862	800	100.38	90	110	
Tl	205	159	No Gas	41.266	ug/l	1.4	3494160	40	103.16	90	110	
Pb	208	159	No Gas	100.997	ug/l	2.8	11619302	100	101	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1281883	3.4	1305096.65	98.22	70	120	
Ge	74	No Gas	1939561	2.5	1989219.35	97.5	70	120	
Rh	103	No Gas	1872673	3.6	1924055.37	97.33	70	120	
Tb	159	No Gas	3297163	2.9	3266294.67	100.95	70	120	
Bi	209	No Gas	1667924	0.5	1636705.1	101.91	70	120	
Sc	45	He	359011	1.2	385078.04	93.23	70	120	
Ge	74	He	320171	1.5	329956.68	97.03	70	120	
Rh	103	He	934202	1.7	951366.82	98.2	70	120	
Tb	159	He	1853089	2.1	1829197.42	101.31	70	120	
Ge	74	HEHe	273613	1.4	290827.29	94.08	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**0A24028-CCB4**	**Sample Type**	CCB
File Name	075_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 20:06:42	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.010	ug/l	7.7	112	0.09	
Na	23	45	He	0.853	ug/l	24.0	7648	45	
Mg	24	45	He	1.111	ug/l	7.5	1579	45	
Al	27	45	He	3.310	ug/l	7.2	1806	22.5	
K	39	45	He	2.150	ug/l	6.9	30047	45	
Ca	44	45	He	-2.404	ug/l	N/A	631	45	
Ti	47	45	He	0.215	ug/l	26.3	78	1.8	
V	51	74	He	-0.057	ug/l	N/A	1606	0.45	
Cr	52	74	He	-0.078	ug/l	N/A	14651	0.45	
Mn	55	74	He	0.091	ug/l	3.9	980	0.45	
Fe	56	74	He	4.420	ug/l	6.6	120725	22.5	
Co	59	74	He	0.014	ug/l	19.2	390	0.09	
Ni	60	74	He	0.025	ug/l	94.0	1509	0.45	
Cu	65	74	He	0.018	ug/l	43.4	627	0.45	
Cu	65	74	No Gas	0.023	ug/l	9.6	2230	0.45	
Zn	66	74	He	0.064	ug/l	13.1	211	1.8	
As	75	74	He	0.025	ug/l	49.2	99	0.45	
Se	78	74	HEHe	0.011	ug/l	52.0	4	0.45	
Mo	95	103	He	0.019	ug/l	37.2	1309	0.45	
Ag	109	103	No Gas	0.007	ug/l	9.0	389	0.09	
Cd	111	103	He	0.014	ug/l	20.8	63	0.09	
Cd	111	103	No Gas	0.017	ug/l	38.3	189	0.09	
Sb	123	103	No Gas	0.159	ug/l	2.9	4963	0.45	
Ba	138	159	He	0.048	ug/l	5.3	1790	0.45	
Hg	201	159	No Gas	7.279	ng/l	7.5	42	36	
Tl	205	159	No Gas	0.021	ug/l	7.0	2028	0.09	
Pb	208	159	No Gas	0.040	ug/l	2.3	5586	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1288995	2.0	1305096.65	98.77	70	120	
Ge	74	No Gas	1958249	1.6	1989219.35	98.44	70	120	
Rh	103	No Gas	1926439	1.4	1924055.37	100.12	70	120	
Tb	159	No Gas	3272180	1.8	3266294.67	100.18	70	120	
Bi	209	No Gas	1649162	1.4	1636705.1	100.76	70	120	
Sc	45	He	350257	0.5	385078.04	90.96	70	120	
Ge	74	He	312145	0.7	329956.68	94.6	70	120	
Rh	103	He	918450	0.9	951366.82	96.54	70	120	
Tb	159	He	1803598	1.3	1829197.42	98.6	70	120	
Ge	74	HEHe	285931	1.6	290827.29	98.32	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**0A24028-CCV6**	**Sample Type**	CCV
File Name	086_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 21:02:04	**Sample QC Pass/Fail**	Fail
Comment	A20A138 - JPB 01/24	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	39.701	ug/l	1.5	343469	40	99.25	90	110	
Na	23	45	He	4370.036	ug/l	31.4	7371835	4000	109.25	90	110	
Mg	24	45	He	4615.178	ug/l	31.9	4247135	4000	115.38	90	110	> +/- 10%
Al	27	45	He	4482.748	ug/l	29.0	2030146	4000	112.07	90	110	> +/- 10%
K	39	45	He	4389.793	ug/l	27.6	4271507	4000	109.74	90	110	
Ca	44	45	He	4631.418	ug/l	29.5	236414	4000	115.79	90	110	> +/- 10%
Ti	47	45	He	109.497	ug/l	28.5	32819	100	109.5	90	110	
V	51	74	He	107.218	ug/l	29.5	940350	100	107.22	90	110	
Cr	52	74	He	111.140	ug/l	30.3	1180299	100	111.14	90	110	> +/- 10%
Mn	55	74	He	110.553	ug/l	28.6	795637	100	110.55	90	110	> +/- 10%
Fe	56	74	He	4534.412	ug/l	30.2	43236607	4000	113.36	90	110	> +/- 10%
Co	59	74	He	119.790	ug/l	30.2	1826395	100	119.79	90	110	> +/- 10%
Ni	60	74	He	119.391	ug/l	29.0	456924	100	119.39	90	110	> +/- 10%
Cu	65	74	He	119.894	ug/l	29.3	604069	100	119.89	90	110	> +/- 10%
Cu	65	74	No Gas	106.009	ug/l	1.1	1708707	100	106.01	90	110	
Zn	66	74	He	112.239	ug/l	29.8	212412	100	112.24	90	110	> +/- 10%
As	75	74	He	103.560	ug/l	29.1	139391	100	103.56	90	110	
Se	78	74	HEHe	41.124	ug/l	1.2	9529	40	102.81	90	110	
Mo	95	103	He	45.389	ug/l	28.8	298868	40	113.47	90	110	> +/- 10%
Ag	109	103	No Gas	37.613	ug/l	3.0	1754621	40	94.03	90	110	
Cd	111	103	He	108.089	ug/l	28.3	393664	100	108.09	90	110	
Cd	111	103	No Gas	101.302	ug/l	2.9	1068153	100	101.3	90	110	
Sb	123	103	No Gas	38.485	ug/l	1.2	1114946	40.	96.21	90	110	
Ba	138	159	He	112.823	ug/l	29.2	2890316	100	112.82	90	110	> +/- 10%
Hg	201	159	No Gas	796.327	ng/l	1.5	3858	800	99.54	90	110	
Tl	205	159	No Gas	40.533	ug/l	1.2	3458642	40	101.33	90	110	
Pb	208	159	No Gas	99.815	ug/l	1.4	11575655	100	99.82	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1265278	3.2	1305096.65	96.95	70	120	
Ge	74	No Gas	1925444	3.5	1989219.35	96.79	70	120	
Rh	103	No Gas	1875106	4.2	1924055.37	97.46	70	120	
Tb	159	No Gas	3322522	3.3	3266294.67	101.72	70	120	
Bi	209	No Gas	1681158	2.8	1636705.1	102.72	70	120	
Sc	45	He	321874	25.9	385078.04	83.59	70	120	RSD Warning
Ge	74	He	290757	25.9	329956.68	88.12	70	120	RSD Warning
Rh	103	He	836528	25.3	951366.82	87.93	70	120	RSD Warning
Tb	159	He	1668994	26.1	1829197.42	91.24	70	120	RSD Warning
Ge	74	HEHe	269722	1.2	290827.29	92.74	70	120	

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Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**0A24028-CCB5**	**Sample Type**	CCB
File Name	087_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 21:06:36	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.009	ug/l	35.6	108	0.09	
Na	23	45	He	0.701	ug/l	7.5	7197	45	
Mg	24	45	He	0.677	ug/l	17.2	1095	45	
Al	27	45	He	1.121	ug/l	9.4	656	22.5	
K	39	45	He	1.940	ug/l	15.3	29168	45	
Ca	44	45	He	-2.889	ug/l	N/A	590	45	
Ti	47	45	He	0.071	ug/l	29.7	28	1.8	
V	51	74	He	-0.058	ug/l	N/A	1585	0.45	
Cr	52	74	He	-0.084	ug/l	N/A	14490	0.45	
Mn	55	74	He	0.032	ug/l	22.3	501	0.45	
Fe	56	74	He	1.030	ug/l	12.1	83703	22.5	
Co	59	74	He	0.013	ug/l	12.6	368	0.09	
Ni	60	74	He	0.006	ug/l	100.4	1417	0.45	
Cu	65	74	He	0.015	ug/l	48.7	609	0.45	
Cu	65	74	No Gas	0.008	ug/l	20.3	1962	0.45	
Zn	66	74	He	0.056	ug/l	20.5	192	1.8	
As	75	74	He	0.038	ug/l	11.7	118	0.45	
Se	78	74	HEHe	0.013	ug/l	41.7	5	0.45	
Mo	95	103	He	0.017	ug/l	41.3	1279	0.45	
Ag	109	103	No Gas	0.006	ug/l	15.5	341	0.09	
Cd	111	103	He	0.011	ug/l	14.2	50	0.09	
Cd	111	103	No Gas	0.017	ug/l	10.9	184	0.09	
Sb	123	103	No Gas	0.182	ug/l	0.9	5685	0.45	
Ba	138	159	He	0.022	ug/l	10.0	1056	0.45	
Hg	201	159	No Gas	6.920	ng/l	13.0	42	36	
Tl	205	159	No Gas	0.020	ug/l	6.2	2035	0.09	
Pb	208	159	No Gas	0.023	ug/l	2.2	3730	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1309898	2.0	1305096.65	100.37	70	120	
Ge	74	No Gas	1944194	0.8	1989219.35	97.74	70	120	
Rh	103	No Gas	1943910	0.6	1924055.37	101.03	70	120	
Tb	159	No Gas	3355416	1.3	3266294.67	102.73	70	120	
Bi	209	No Gas	1709958	1.2	1636705.1	104.48	70	120	
Sc	45	He	342672	0.7	385078.04	88.99	70	120	
Ge	74	He	310328	0.4	329956.68	94.05	70	120	
Rh	103	He	908894	0.1	951366.82	95.54	70	120	
Tb	159	He	1807429	1.3	1829197.42	98.81	70	120	
Ge	74	HEHe	279829	1.8	290827.29	96.22	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**0A24028-CCV7**	**Sample Type**	CCV
File Name	098_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 21:57:58	**Sample QC Pass/Fail**	Pass
Comment	A20A138 - JPB 01/24	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	38.994	ug/l	2.6	332236	40	97.48	90	110	
Na	23	45	He	3884.576	ug/l	3.7	7183644	4000	97.11	90	110	
Mg	24	45	He	3995.698	ug/l	2.8	4034647	4000	99.89	90	110	
Al	27	45	He	3898.003	ug/l	4.1	1926817	4000	97.45	90	110	
K	39	45	He	3910.188	ug/l	1.5	4144819	4000	97.75	90	110	
Ca	44	45	He	4013.069	ug/l	2.4	223908	4000	100.33	90	110	
Ti	47	45	He	95.337	ug/l	2.9	31168	100	95.34	90	110	
V	51	74	He	94.199	ug/l	0.8	892571	100	94.2	90	110	
Cr	52	74	He	97.571	ug/l	1.8	1122229	100	97.57	90	110	
Mn	55	74	He	97.738	ug/l	0.9	758458	100	97.74	90	110	
Fe	56	74	He	3965.338	ug/l	0.6	40895671	4000	99.13	90	110	
Co	59	74	He	102.261	ug/l	0.7	1686139	100	102.26	90	110	
Ni	60	74	He	104.120	ug/l	0.7	430118	100	104.12	90	110	
Cu	65	74	He	104.830	ug/l	1.1	570225	100	104.83	90	110	
Cu	65	74	No Gas	104.421	ug/l	2.2	1590894	100	104.42	90	110	
Zn	66	74	He	98.784	ug/l	1.0	201979	100	98.78	90	110	
As	75	74	He	93.856	ug/l	0.8	136346	100	93.86	90	110	
Se	78	74	HEHe	41.388	ug/l	0.6	9038	40	103.47	90	110	
Mo	95	103	He	39.231	ug/l	2.3	284344	40	98.08	90	110	
Ag	109	103	No Gas	37.124	ug/l	1.8	1653056	40	92.81	90	110	
Cd	111	103	He	95.520	ug/l	2.5	382419	100	95.52	90	110	
Cd	111	103	No Gas	100.705	ug/l	1.2	1013602	100	100.7	90	110	
Sb	123	103	No Gas	37.757	ug/l	2.5	1043380	40	94.39	90	110	
Ba	138	159	He	96.671	ug/l	2.8	2796129	100	96.67	90	110	
Hg	201	159	No Gas	829.134	ng/l	1.6	3820	800	103.64	90	110	
Tl	205	159	No Gas	41.935	ug/l	0.5	3402236	40	104.84	90	110	
Pb	208	159	No Gas	103.101	ug/l	1.2	11368528	100	103.1	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1245991	1.6	1305096.65	95.47	70	120	
Ge	74	No Gas	1819766	1.2	1989219.35	91.48	70	120	
Rh	103	No Gas	1788637	1.4	1924055.37	92.96	70	120	
Tb	159	No Gas	3158598	0.8	3266294.67	96.7	70	120	
Bi	209	No Gas	1648990	2.3	1636705.1	100.75	70	120	
Sc	45	He	333940	1.5	385078.04	86.72	70	120	
Ge	74	He	298182	0.4	329956.68	90.37	70	120	
Rh	103	He	876136	1.8	951366.82	92.09	70	120	
Tb	159	He	1789628	1.6	1829197.42	97.84	70	120	
Ge	74	HEHe	254191	0.5	290827.29	87.4	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**0A24028-CCB6**	**Sample Type**	CCB
File Name	099_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 22:02:29	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.010	ug/l	20.4	110	0.09	
Na	23	45	He	0.893	ug/l	17.3	7157	45	
Mg	24	45	He	0.539	ug/l	10.0	901	45	
Al	27	45	He	0.650	ug/l	23.4	395	22.5	
K	39	45	He	2.101	ug/l	35.8	27782	45	
Ca	44	45	He	-1.941	ug/l	N/A	610	45	
Ti	47	45	He	0.013	ug/l	45.9	8	1.8	
V	51	74	He	-0.014	ug/l	N/A	1896	0.45	
Cr	52	74	He	-0.128	ug/l	N/A	13128	0.45	
Mn	55	74	He	0.018	ug/l	46.7	362	0.45	
Fe	56	74	He	0.200	ug/l	90.2	70302	22.5	
Co	59	74	He	0.008	ug/l	10.7	269	0.09	
Ni	60	74	He	0.027	ug/l	5.4	1416	0.45	
Cu	65	74	He	0.000	ug/l	8806.4	490	0.45	
Cu	65	74	No Gas	-0.007	ug/l	N/A	1635	0.45	
Zn	66	74	He	0.030	ug/l	41.2	129	1.8	
As	75	74	He	0.034	ug/l	29.8	105	0.45	
Se	78	74	HEHe	0.013	ug/l	53.6	4	0.45	
Mo	95	103	He	0.013	ug/l	61.1	1181	0.45	
Ag	109	103	No Gas	0.006	ug/l	21.8	313	0.09	
Cd	111	103	He	0.008	ug/l	70.4	36	0.09	
Cd	111	103	No Gas	0.015	ug/l	5.8	154	0.09	
Sb	123	103	No Gas	0.170	ug/l	1.4	4993	0.45	
Ba	138	159	He	0.017	ug/l	4.8	859	0.45	
Hg	201	159	No Gas	6.512	ng/l	4.1	38	36	
Tl	205	159	No Gas	0.016	ug/l	4.9	1636	0.09	
Pb	208	159	No Gas	0.019	ug/l	3.3	3076	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1255448	2.5	1305096.65	96.2	70	120	
Ge	74	No Gas	1835621	2.7	1989219.35	92.28	70	120	
Rh	103	No Gas	1819689	4.5	1924055.37	94.58	70	120	
Tb	159	No Gas	3253279	5.0	3266294.67	99.6	70	120	
Bi	209	No Gas	1651720	3.7	1636705.1	100.92	70	120	
Sc	45	He	324457	1.0	385078.04	84.26	70	120	
Ge	74	He	291732	2.5	329956.68	88.42	70	120	
Rh	103	He	857972	1.4	951366.82	90.18	70	120	
Tb	159	He	1745918	1.8	1829197.42	95.45	70	120	
Ge	74	HEHe	260266	0.6	290827.29	89.49	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRL7**	**Sample Type**	CRL1
File Name	100CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 22:07:12	**Sample QC Pass/Fail**	Fail
Comment	A20A190 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.166	ug/l	7.4	1498	92.22	70	130	
Na	23	45	He	12.170	ug/l	14.6	24664	135.22	70	130	CRL1 Failed
Mg	24	45	He	10.350	ug/l	12.5	9477	115	70	130	
Al	27	45	He	9.971	ug/l	11.2	4389	110.79	70	130	
K	39	45	He	16.482	ug/l	26.7	38274	183.13	70	130	CRL1 Failed
Ca	44	45	He	17.217	ug/l	19.7	1481	191.3	70	130	CRL1 Failed
Ti	47	45	He	0.254	ug/l	21.9	77	141.11	70	130	CRL1 Failed
V	51	74	He	0.199	ug/l	27.9	3447	110.56	70	130	
Cr	52	74	He	0.251	ug/l	70.5	15476	139.44	70	130	CRL1 Failed
Mn	55	74	He	0.208	ug/l	9.8	1615	115.56	70	130	
Fe	56	74	He	10.571	ug/l	20.5	155802	117.46	70	130	
Co	59	74	He	0.210	ug/l	15.0	3132	116.67	70	130	
Ni	60	74	He	0.456	ug/l	19.8	2807	253.33	70	130	CRL1 Failed
Cu	65	74	He	0.213	ug/l	16.2	1449	118.33	70	130	
Cu	65	74	No Gas	0.163	ug/l	3.6	4281	90.56	70	130	
Zn	66	74	He	0.374	ug/l	9.0	731	207.78	70	130	CRL1 Failed
As	75	74	He	0.220	ug/l	15.0	329	122.22	70	130	
Se	78	74	HEHe	0.204	ug/l	6.3	48	113.33	70	130	
Mo	95	103	He	0.230	ug/l	25.7	2428	127.78	70	130	
Ag	109	103	No Gas	0.175	ug/l	2.2	8034	97.22	70	130	
Cd	111	103	He	0.200	ug/l	13.5	706	111.11	70	130	
Cd	111	103	No Gas	0.189	ug/l	1.7	1961	105	70	130	
Sb	123	103	No Gas	0.226	ug/l	1.5	6628	125.56	70	130	
Ba	138	159	He	0.196	ug/l	12.5	5277	108.89	70	130	
Hg	201	159	No Gas	10.395	ng/l	12.2	56	144.38	70	130	CRL1 Failed
Tl	205	159	No Gas	0.181	ug/l	2.4	15270	100.56	70	130	
Pb	208	159	No Gas	0.185	ug/l	2.6	21722	102.78	70	130	

All CRL failures < MRL JB 01/25/20

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1296008	0.3	1305096.65	99.3	70	120	
Ge	74	No Gas	1850325	0.8	1989219.35	93.02	70	120	
Rh	103	No Gas	1838201	1.7	1924055.37	95.54	70	120	
Tb	159	No Gas	3226036	2.0	3266294.67	98.77	70	120	
Bi	209	No Gas	1662394	0.3	1636705.1	101.57	70	120	
Sc	45	He	294508	11.2	385078.04	76.48	70	120	
Ge	74	He	262704	12.2	329956.68	79.62	70	120	
Rh	103	He	777335	12.7	951366.82	81.71	70	120	
Tb	159	He	1568694	11.7	1829197.42	85.76	70	120	
Ge	74	HEHe	264688	0.1	290827.29	91.01	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRL8**	**Sample Type**	CRL2
File Name	101_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 22:11:56	**Sample QC Pass/Fail**	Pass
Comment	A20A191 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.829	ug/l	2.7	7128	92.11	70	130	
Na	23	45	He	44.277	ug/l	0.8	87687	98.39	70	130	
Mg	24	45	He	44.121	ug/l	1.9	45007	98.05	70	130	
Al	27	45	He	43.950	ug/l	2.4	21849	97.67	70	130	
K	39	45	He	45.771	ug/l	1.4	74709	101.71	70	130	
Ca	44	45	He	43.724	ug/l	5.3	3172	97.16	70	130	
Ti	47	45	He	0.864	ug/l	13.5	287	96	70	130	
V	51	74	He	0.826	ug/l	1.5	9960	91.78	70	130	
Cr	52	74	He	0.644	ug/l	3.5	22374	71.56	70	130	
Mn	55	74	He	0.858	ug/l	1.5	6948	95.33	70	130	
Fe	56	74	He	41.757	ug/l	1.0	503936	92.79	70	130	
Co	59	74	He	0.873	ug/l	1.8	14657	97	70	130	
Ni	60	74	He	0.893	ug/l	2.8	5054	99.22	70	130	
Cu	65	74	He	0.907	ug/l	1.8	5473	100.78	70	130	
Cu	65	74	No Gas	0.856	ug/l	1.1	15133	95.11	70	130	
Zn	66	74	He	0.973	ug/l	2.1	2077	108.11	70	130	
As	75	74	He	0.880	ug/l	2.8	1346	97.78	70	130	
Se	78	74	HEHe	0.880	ug/l	5.2	203	97.78	70	130	
Mo	95	103	He	0.850	ug/l	0.9	7316	94.44	70	130	
Ag	109	103	No Gas	0.862	ug/l	1.8	39164	95.78	70	130	
Cd	111	103	He	0.841	ug/l	3.4	3399	93.44	70	130	
Cd	111	103	No Gas	0.880	ug/l	2.5	9033	97.78	70	130	
Sb	123	103	No Gas	0.918	ug/l	1.1	26093	102	70	130	
Ba	138	159	He	0.832	ug/l	2.9	24279	92.44	70	130	
Hg	201	159	No Gas	39.066	ng/l	5.9	189	108.52	70	130	
Tl	205	159	No Gas	0.869	ug/l	2.3	71652	96.56	70	130	
Pb	208	159	No Gas	0.888	ug/l	1.3	100120	98.67	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1253308	1.2	1305096.65	96.03	70	120	
Ge	74	No Gas	1867252	0.7	1989219.35	93.87	70	120	
Rh	103	No Gas	1824185	0.3	1924055.37	94.81	70	120	
Tb	159	No Gas	3198221	1.2	3266294.67	97.92	70	120	
Bi	209	No Gas	1682201	2.4	1636705.1	102.78	70	120	
Sc	45	He	334435	0.3	385078.04	86.85	70	120	
Ge	74	He	300702	1.1	329956.68	91.13	70	120	
Rh	103	He	884017	0.3	951366.82	92.92	70	120	
Tb	159	He	1776338	1.8	1829197.42	97.11	70	120	
Ge	74	HEHe	265844	1.7	290827.29	91.41	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRL9**	**Sample Type**	CRL3
File Name	102CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 22:16:38	**Sample QC Pass/Fail**	Pass
Comment	A20A192 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.640	ug/l	0.9	14426	91.11	70	130	
Na	23	45	He	88.013	ug/l	1.8	167592	97.79	70	130	
Mg	24	45	He	88.532	ug/l	0.5	89363	98.37	70	130	
Al	27	45	He	86.485	ug/l	0.4	42647	96.09	70	130	
K	39	45	He	87.615	ug/l	0.4	118109	97.35	70	130	
Ca	44	45	He	81.767	ug/l	2.0	5258	90.85	70	130	
Ti	47	45	He	1.770	ug/l	7.4	580	98.33	70	130	
V	51	74	He	1.679	ug/l	2.8	17908	93.28	70	130	
Cr	52	74	He	1.473	ug/l	2.0	31536	81.83	70	130	
Mn	55	74	He	1.677	ug/l	1.3	13221	93.17	70	130	
Fe	56	74	He	84.706	ug/l	0.7	940218	94.12	70	130	
Co	59	74	He	1.760	ug/l	0.9	29095	97.78	70	130	
Ni	60	74	He	1.746	ug/l	1.5	8514	97	70	130	
Cu	65	74	He	1.810	ug/l	4.8	10322	100.56	70	130	
Cu	65	74	No Gas	1.748	ug/l	3.9	28826	97.11	70	130	
Zn	66	74	He	1.775	ug/l	2.5	3693	98.61	70	130	
As	75	74	He	1.763	ug/l	1.2	2614	97.94	70	130	
Se	78	74	HEHe	1.788	ug/l	4.1	407	99.33	70	130	
Mo	95	103	He	1.686	ug/l	1.0	13299	93.67	70	130	
Ag	109	103	No Gas	1.688	ug/l	3.6	77656	93.78	70	130	
Cd	111	103	He	1.687	ug/l	2.1	6763	93.72	70	130	
Cd	111	103	No Gas	1.765	ug/l	2.3	18358	98.06	70	130	
Sb	123	103	No Gas	1.759	ug/l	2.7	50415	97.72	70	130	
Ba	138	159	He	1.695	ug/l	1.3	48356	94.17	70	130	
Hg	201	159	No Gas	71.088	ng/l	1.1	345	98.73	70	130	
Tl	205	159	No Gas	1.706	ug/l	1.1	143138	94.78	70	130	
Pb	208	159	No Gas	1.733	ug/l	1.2	198090	96.28	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1284239	0.7	1305096.65	98.4	70	120	
Ge	74	No Gas	1852788	3.1	1989219.35	93.14	70	120	
Rh	103	No Gas	1848457	3.1	1924055.37	96.07	70	120	
Tb	159	No Gas	3259548	0.3	3266294.67	99.79	70	120	
Bi	209	No Gas	1682337	3.2	1636705.1	102.79	70	120	
Sc	45	He	332343	0.6	385078.04	86.31	70	120	
Ge	74	He	297656	0.8	329956.68	90.21	70	120	
Rh	103	He	876738	0.7	951366.82	92.16	70	120	
Tb	159	He	1750472	1.5	1829197.42	95.7	70	120	
Ge	74	HEHe	264004	1.9	290827.29	90.78	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRLA**	**Sample Type**	CRL4
File Name	103CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 22:21:21	**Sample QC Pass/Fail**	Pass
Comment	A20A193 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.594	ug/l	4.4	30053	99.83	70	130	
Na	23	45	He	174.267	ug/l	1.5	333032	96.82	70	130	
Mg	24	45	He	175.800	ug/l	1.9	180745	97.67	70	130	
Al	27	45	He	172.513	ug/l	0.7	86748	95.84	70	130	
K	39	45	He	176.678	ug/l	1.4	215867	98.15	70	130	
Ca	44	45	He	171.905	ug/l	2.3	10464	95.5	70	130	
Ti	47	45	He	3.291	ug/l	7.6	1098	91.42	70	130	
V	51	74	He	3.360	ug/l	2.5	34418	93.33	70	130	
Cr	52	74	He	3.110	ug/l	2.0	51044	86.39	70	130	
Mn	55	74	He	3.376	ug/l	0.4	26881	93.78	70	130	
Fe	56	74	He	171.337	ug/l	0.7	1865493	95.19	70	130	
Co	59	74	He	3.543	ug/l	0.9	59556	98.42	70	130	
Ni	60	74	He	3.652	ug/l	2.2	16659	101.44	70	130	
Cu	65	74	He	3.696	ug/l	3.0	20946	102.67	70	130	
Cu	65	74	No Gas	3.741	ug/l	5.1	57676	103.92	70	130	
Zn	66	74	He	3.510	ug/l	3.6	7370	97.5	70	130	
As	75	74	He	3.517	ug/l	2.8	5254	97.69	70	130	
Se	78	74	HEHe	3.673	ug/l	3.8	845	102.03	70	130	
Mo	95	103	He	3.424	ug/l	1.9	25902	95.11	70	130	
Ag	109	103	No Gas	3.560	ug/l	3.6	159007	98.89	70	130	
Cd	111	103	He	3.403	ug/l	1.9	13667	94.53	70	130	
Cd	111	103	No Gas	3.721	ug/l	2.6	37572	103.36	70	130	
Sb	123	103	No Gas	3.647	ug/l	2.9	101290	101.31	70	130	
Ba	138	159	He	3.479	ug/l	1.8	98300	96.64	70	130	
Hg	201	159	No Gas	152.938	ng/l	2.9	704	106.21	70	130	
Tl	205	159	No Gas	3.619	ug/l	2.8	291349	100.53	70	130	
Pb	208	159	No Gas	3.652	ug/l	2.6	400087	101.44	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1224023	6.8	1305096.65	93.79	70	120	
Ge	74	No Gas	1792368	5.6	1989219.35	90.1	70	120	
Rh	103	No Gas	1795504	4.8	1924055.37	93.32	70	120	
Tb	159	No Gas	3133633	4.4	3266294.67	95.94	70	120	
Bi	209	No Gas	1608261	6.8	1636705.1	98.26	70	120	
Sc	45	He	339266	1.2	385078.04	88.1	70	120	
Ge	74	He	303341	0.9	329956.68	91.93	70	120	
Rh	103	He	878423	0.9	951366.82	92.33	70	120	
Tb	159	He	1741484	2.4	1829197.42	95.2	70	120	
Ge	74	HEHe	267219	0.8	290827.29	91.88	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**0A24028-CCV8**	**Sample Type**	CCV
File Name	114_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 23:12:43	**Sample QC Pass/Fail**	Pass
Comment	A20A138 - JPB 01/24	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	38.450	ug/l	2.8	304766	40	96.12	90	110	
Na	23	45	He	3935.814	ug/l	2.6	6675858	4000	98.4	90	110	
Mg	24	45	He	4064.609	ug/l	2.6	3764616	4000	101.62	90	110	
Al	27	45	He	3913.569	ug/l	2.8	1774525	4000	97.84	90	110	
K	39	45	He	3903.391	ug/l	2.5	3795207	4000	97.58	90	110	
Ca	44	45	He	4082.979	ug/l	1.3	208948	4000	102.07	90	110	
Ti	47	45	He	95.835	ug/l	2.5	28738	100	95.84	90	110	
V	51	74	He	93.860	ug/l	0.8	832549	100	93.86	90	110	
Cr	52	74	He	97.449	ug/l	2.0	1049231	100	97.45	90	110	
Mn	55	74	He	98.096	ug/l	0.7	712659	100	98.1	90	110	
Fe	56	74	He	3978.288	ug/l	1.5	38405001	4000	99.46	90	110	
Co	59	74	He	104.305	ug/l	2.0	1609931	100	104.3	90	110	
Ni	60	74	He	104.442	ug/l	0.7	403884	100	104.44	90	110	
Cu	65	74	He	105.328	ug/l	0.8	536323	100	105.33	90	110	
Cu	65	74	No Gas	102.720	ug/l	2.5	1462931	100	102.72	90	110	
Zn	66	74	He	99.881	ug/l	1.3	191166	100	99.88	90	110	
As	75	74	He	95.631	ug/l	1.0	130047	100	95.63	90	110	
Se	78	74	HEHe	42.176	ug/l	2.2	8825	40	105.44	90	110	
Mo	95	103	He	39.562	ug/l	1.0	273115	40	98.9	90	110	
Ag	109	103	No Gas	37.037	ug/l	2.6	1592011	40	92.59	90	110	
Cd	111	103	He	96.558	ug/l	1.4	368212	100	96.56	90	110	
Cd	111	103	No Gas	99.889	ug/l	4.0	970297	100	99.89	90	110	
Sb	123	103	No Gas	38.205	ug/l	4.4	1018944	40	95.51	90	110	
Ba	138	159	He	98.369	ug/l	1.5	2731247	100	98.37	90	110	
Hg	201	159	No Gas	834.679	ng/l	1.3	3840	800	104.33	90	110	
Tl	205	159	No Gas	41.520	ug/l	1.8	3363907	40	103.8	90	110	
Pb	208	159	No Gas	102.444	ug/l	1.9	11279597	100	102.44	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1159452	2.9	1305096.65	88.84	70	120	
Ge	74	No Gas	1701027	1.6	1989219.35	85.51	70	120	
Rh	103	No Gas	1726963	2.0	1924055.37	89.76	70	120	
Tb	159	No Gas	3154358	1.1	3266294.67	96.57	70	120	
Bi	209	No Gas	1671465	2.1	1636705.1	102.12	70	120	
Sc	45	He	306283	1.8	385078.04	79.54	70	120	
Ge	74	He	279141	0.9	329956.68	84.6	70	120	
Rh	103	He	834360	1.0	951366.82	87.7	70	120	
Tb	159	He	1717606	0.9	1829197.42	93.9	70	120	
Ge	74	HEHe	243608	1.9	290827.29	83.76	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**0A24028-CCB7**	**Sample Type**	CCB
File Name	115_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/24/2020 23:17:15	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.009	ug/l	8.8	92	0.09	
Na	23	45	He	3.726	ug/l	4.0	11567	45	
Mg	24	45	He	0.487	ug/l	3.3	803	45	
Al	27	45	He	0.455	ug/l	15.5	285	22.5	
K	39	45	He	2.390	ug/l	35.7	26523	45	
Ca	44	45	He	-3.861	ug/l	N/A	478	45	
Ti	47	45	He	0.025	ug/l	134.7	11	1.8	
V	51	74	He	-0.073	ug/l	N/A	1299	0.45	
Cr	52	74	He	-0.141	ug/l	N/A	12473	0.45	
Mn	55	74	He	0.012	ug/l	16.7	309	0.45	
Fe	56	74	He	0.219	ug/l	42.8	67747	22.5	
Co	59	74	He	0.014	ug/l	22.6	350	0.09	
Ni	60	74	He	0.019	ug/l	111.9	1330	0.45	
Cu	65	74	He	0.009	ug/l	42.9	514	0.45	
Cu	65	74	No Gas	0.018	ug/l	42.7	1900	0.45	
Zn	66	74	He	0.005	ug/l	195.1	77	1.8	
As	75	74	He	0.029	ug/l	11.5	94	0.45	
Se	78	74	HEHe	0.018	ug/l	43.3	5	0.45	
Mo	95	103	He	0.018	ug/l	36.5	1197	0.45	
Ag	109	103	No Gas	0.005	ug/l	7.1	254	0.09	
Cd	111	103	He	0.012	ug/l	18.1	49	0.09	
Cd	111	103	No Gas	0.017	ug/l	14.0	174	0.09	
Sb	123	103	No Gas	0.159	ug/l	0.9	4542	0.45	
Ba	138	159	He	0.016	ug/l	7.0	817	0.45	
Hg	201	159	No Gas	7.708	ng/l	11.4	42	36	
Tl	205	159	No Gas	0.025	ug/l	12.0	2234	0.09	
Pb	208	159	No Gas	0.020	ug/l	9.2	3125	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1167699	2.7	1305096.65	89.47	70	120	
Ge	74	No Gas	1732921	0.4	1989219.35	87.12	70	120	
Rh	103	No Gas	1761903	1.7	1924055.37	91.57	70	120	
Tb	159	No Gas	3118958	0.6	3266294.67	95.49	70	120	
Bi	209	No Gas	1664010	1.6	1636705.1	101.67	70	120	
Sc	45	He	306490	0.3	385078.04	79.59	70	120	
Ge	74	He	280256	0.5	329956.68	84.94	70	120	
Rh	103	He	843419	0.8	951366.82	88.65	70	120	
Tb	159	He	1719465	1.4	1829197.42	94	70	120	
Ge	74	HEHe	244790	0.9	290827.29	84.17	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**0A24028-CCV9**	**Sample Type**	CCV
File Name	126_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 00:08:49	**Sample QC Pass/Fail**	Pass
Comment	A20A138 - JPB 01/24	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	39.159	ug/l	1.0	306059	40	97.9	90	110	
Na	23	45	He	3865.252	ug/l	4.1	6507549	4000	96.63	90	110	
Mg	24	45	He	4014.842	ug/l	2.0	3691216	4000	100.37	90	110	
Al	27	45	He	3927.143	ug/l	2.1	1767827	4000	98.18	90	110	
K	39	45	He	3861.758	ug/l	2.3	3726843	4000	96.54	90	110	
Ca	44	45	He	4066.048	ug/l	2.7	206524	4000	101.65	90	110	
Ti	47	45	He	96.542	ug/l	2.2	28739	100	96.54	90	110	
V	51	74	He	94.400	ug/l	1.2	830551	100	94.4	90	110	
Cr	52	74	He	96.428	ug/l	1.5	1030015	100	96.43	90	110	
Mn	55	74	He	97.921	ug/l	1.3	705577	100	97.92	90	110	
Fe	56	74	He	3977.074	ug/l	1.3	38083974	4000	99.43	90	110	
Co	59	74	He	102.820	ug/l	0.7	1574198	100	102.82	90	110	
Ni	60	74	He	104.955	ug/l	1.0	402577	100	104.96	90	110	
Cu	65	74	He	105.432	ug/l	1.3	532517	100	105.43	90	110	
Cu	65	74	No Gas	103.006	ug/l	1.9	1483554	100	103.01	90	110	
Zn	66	74	He	99.685	ug/l	1.3	189252	100	99.68	90	110	
As	75	74	He	94.199	ug/l	1.5	127062	100	94.2	90	110	
Se	78	74	HEHe	41.345	ug/l	1.3	8601	40	103.36	90	110	
Mo	95	103	He	39.097	ug/l	1.8	270095	40	97.74	90	110	
Ag	109	103	No Gas	36.948	ug/l	2.5	1583164	40	92.37	90	110	
Cd	111	103	He	96.368	ug/l	2.7	367702	100	96.37	90	110	
Cd	111	103	No Gas	101.402	ug/l	1.2	982162	100	101.4	90	110	
Sb	123	103	No Gas	38.585	ug/l	1.6	1026167	40	96.46	90	110	
Ba	138	159	He	96.203	ug/l	1.9	2703572	100	96.2	90	110	
Hg	201	159	No Gas	826.881	ng/l	2.5	3814	800	103.36	90	110	
Tl	205	159	No Gas	41.522	ug/l	2.2	3372946	40	103.8	90	110	
Pb	208	159	No Gas	102.423	ug/l	1.0	11309942	100	102.42	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1142779	1.3	1305096.65	87.56	70	120	
Ge	74	No Gas	1720166	0.9	1989219.35	86.47	70	120	
Rh	103	No Gas	1721072	1.2	1924055.37	89.45	70	120	
Tb	159	No Gas	3163316	2.0	3266294.67	96.85	70	120	
Bi	209	No Gas	1680886	3.1	1636705.1	102.7	70	120	
Sc	45	He	304076	2.5	385078.04	78.96	70	120	
Ge	74	He	276881	0.7	329956.68	83.91	70	120	
Rh	103	He	834971	1.3	951366.82	87.77	70	120	
Tb	159	He	1738748	2.0	1829197.42	95.06	70	120	
Ge	74	HEHe	242149	0.4	290827.29	83.26	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**0A24028-CCB8**	**Sample Type**	CCB
File Name	127_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 00:13:22	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.011	ug/l	30.9	104	0.09	
Na	23	45	He	7.231	ug/l	2.3	17182	45	
Mg	24	45	He	0.443	ug/l	5.6	748	45	
Al	27	45	He	0.539	ug/l	17.9	317	22.5	
K	39	45	He	0.993	ug/l	35.3	24696	45	
Ca	44	45	He	-3.980	ug/l	N/A	463	45	
Ti	47	45	He	0.018	ug/l	70.5	9	1.8	
V	51	74	He	-0.053	ug/l	N/A	1458	0.45	
Cr	52	74	He	-0.143	ug/l	N/A	12328	0.45	
Mn	55	74	He	0.010	ug/l	50.1	286	0.45	
Fe	56	74	He	-0.258	ug/l	N/A	62473	22.5	
Co	59	74	He	0.011	ug/l	26.1	300	0.09	
Ni	60	74	He	0.027	ug/l	94.9	1348	0.45	
Cu	65	74	He	-0.002	ug/l	N/A	458	0.45	
Cu	65	74	No Gas	0.015	ug/l	34.0	1893	0.45	
Zn	66	74	He	0.046	ug/l	19.5	154	1.8	
As	75	74	He	0.082	ug/l	13.0	164	0.45	
Se	78	74	HEHe	0.018	ug/l	57.9	5	0.45	
Mo	95	103	He	0.016	ug/l	15.2	1166	0.45	
Ag	109	103	No Gas	0.005	ug/l	9.2	262	0.09	
Cd	111	103	He	0.012	ug/l	18.9	49	0.09	
Cd	111	103	No Gas	0.013	ug/l	15.1	136	0.09	
Sb	123	103	No Gas	0.259	ug/l	2.1	7338	0.45	
Ba	138	159	He	0.014	ug/l	22.2	777	0.45	
Hg	201	159	No Gas	8.153	ng/l	20.7	45	36	
Tl	205	159	No Gas	0.016	ug/l	4.9	1553	0.09	
Pb	208	159	No Gas	0.016	ug/l	3.9	2750	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1147441	1.9	1305096.65	87.92	70	120	
Ge	74	No Gas	1768162	0.5	1989219.35	88.89	70	120	
Rh	103	No Gas	1777491	1.3	1924055.37	92.38	70	120	
Tb	159	No Gas	3165566	0.8	3266294.67	96.92	70	120	
Bi	209	No Gas	1684185	2.3	1636705.1	102.9	70	120	
Sc	45	He	300666	0.5	385078.04	78.08	70	120	
Ge	74	He	277347	0.2	329956.68	84.06	70	120	
Rh	103	He	833808	0.8	951366.82	87.64	70	120	
Tb	159	He	1718306	0.7	1829197.42	93.94	70	120	
Ge	74	HEHe	245416	0.5	290827.29	84.39	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRLB**	**Sample Type**	CRL1
File Name	128CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 00:18:04	**Sample QC Pass/Fail**	Fail
Comment	A20A190 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.168	ug/l	2.0	1362	93.33	70	130	
Na	23	45	He	15.283	ug/l	2.9	30482	169.81	70	130	CRL1 Failed
Mg	24	45	He	8.994	ug/l	3.0	8495	99.93	70	130	
Al	27	45	He	9.021	ug/l	7.2	4079	100.23	70	130	
K	39	45	He	10.696	ug/l	12.2	33781	118.84	70	130	
Ca	44	45	He	14.037	ug/l	17.2	1359	155.97	70	130	CRL1 Failed
Ti	47	45	He	0.128	ug/l	7.1	41	71.11	70	130	
V	51	74	He	0.116	ug/l	15.4	2927	64.44	70	130	CRL1 Failed
Cr	52	74	He	0.037	ug/l	81.6	14151	20.56	70	130	CRL1 Failed
Mn	55	74	He	0.164	ug/l	2.2	1392	91.11	70	130	
Fe	56	74	He	7.858	ug/l	3.7	139406	87.31	70	130	
Co	59	74	He	0.182	ug/l	3.8	2899	101.11	70	130	
Ni	60	74	He	0.362	ug/l	1.8	2614	201.11	70	130	CRL1 Failed
Cu	65	74	He	0.164	ug/l	7.6	1289	91.11	70	130	
Cu	65	74	No Gas	0.178	ug/l	5.0	4286	98.89	70	130	
Zn	66	74	He	0.357	ug/l	4.0	740	198.33	70	130	CRL1 Failed
As	75	74	He	0.223	ug/l	4.4	354	123.89	70	130	
Se	78	74	HEHe	0.179	ug/l	9.9	39	99.44	70	130	
Mo	95	103	He	0.160	ug/l	10.4	2154	88.89	70	130	
Ag	109	103	No Gas	0.174	ug/l	3.5	7745	96.67	70	130	
Cd	111	103	He	0.166	ug/l	3.4	634	92.22	70	130	
Cd	111	103	No Gas	0.183	ug/l	3.8	1840	101.67	70	130	
Sb	123	103	No Gas	0.294	ug/l	2.7	8295	163.33	70	130	CRL1 Failed
Ba	138	159	He	0.170	ug/l	3.5	5133	94.44	70	130	
Hg	201	159	No Gas	9.940	ng/l	5.1	54	138.06	70	130	CRL1 Failed
Tl	205	159	No Gas	0.180	ug/l	0.9	15208	100	70	130	
Pb	208	159	No Gas	0.181	ug/l	0.6	21408	100.56	70	130	

All CRL failures < MRL
JB 01/27/20

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1170962	1.5	1305096.65	89.72	70	120	
Ge	74	No Gas	1758467	0.8	1989219.35	88.4	70	120	
Rh	103	No Gas	1780878	1.2	1924055.37	92.56	70	120	
Tb	159	No Gas	3230213	1.3	3266294.67	98.9	70	120	
Bi	209	No Gas	1681870	1.5	1636705.1	102.76	70	120	
Sc	45	He	299802	2.5	385078.04	77.85	70	120	
Ge	74	He	275840	1.4	329956.68	83.6	70	120	
Rh	103	He	831507	1.9	951366.82	87.4	70	120	
Tb	159	He	1732471	2.1	1829197.42	94.71	70	120	
Ge	74	HEHe	244473	1.3	290827.29	84.06	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRLC**	**Sample Type**	CRL2
File Name	129_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 00:22:46	**Sample QC Pass/Fail**	Fail
Comment	A20A191 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.824	ug/l	0.2	6656	91.56	70	130	
Na	23	45	He	49.043	ug/l	1.7	86805	108.98	70	130	
Mg	24	45	He	43.092	ug/l	1.8	39546	95.76	70	130	
Al	27	45	He	42.888	ug/l	2.2	19180	95.31	70	130	
K	39	45	He	44.969	ug/l	2.2	66440	99.93	70	130	
Ca	44	45	He	44.268	ug/l	2.3	2881	98.37	70	130	
Ti	47	45	He	0.901	ug/l	9.8	269	100.11	70	130	
V	51	74	He	0.762	ug/l	5.6	8553	84.67	70	130	
Cr	52	74	He	0.602	ug/l	3.9	20025	66.89	70	130	CRL2 Failed
Mn	55	74	He	0.829	ug/l	0.4	6149	92.11	70	130	
Fe	56	74	He	41.470	ug/l	0.9	458259	92.16	70	130	
Co	59	74	He	0.890	ug/l	1.0	13657	98.89	70	130	
Ni	60	74	He	0.864	ug/l	3.0	4515	96	70	130	
Cu	65	74	He	0.894	ug/l	1.5	4944	99.33	70	130	
Cu	65	74	No Gas	0.890	ug/l	0.3	14512	98.89	70	130	
Zn	66	74	He	1.012	ug/l	5.0	1975	112.44	70	130	
As	75	74	He	0.889	ug/l	0.8	1245	98.78	70	130	
Se	78	74	HEHe	0.936	ug/l	5.8	200	104	70	130	
Mo	95	103	He	0.827	ug/l	0.7	6757	91.89	70	130	
Ag	109	103	No Gas	0.880	ug/l	1.8	38128	97.78	70	130	
Cd	111	103	He	0.848	ug/l	1.4	3242	94.22	70	130	
Cd	111	103	No Gas	0.907	ug/l	1.3	8881	100.78	70	130	
Sb	123	103	No Gas	0.981	ug/l	0.9	26576	109	70	130	
Ba	138	159	He	0.809	ug/l	0.1	23072	89.89	70	130	
Hg	201	159	No Gas	36.954	ng/l	2.7	179	102.65	70	130	
Tl	205	159	No Gas	0.892	ug/l	1.1	73258	99.11	70	130	
Pb	208	159	No Gas	0.906	ug/l	1.8	101701	100.67	70	130	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1177955	0.8	1305096.65	90.26	70	120	
Ge	74	No Gas	1730277	1.5	1989219.35	86.98	70	120	
Rh	103	No Gas	1739513	1.0	1924055.37	90.41	70	120	
Tb	159	No Gas	3184634	0.6	3266294.67	97.5	70	120	
Bi	209	No Gas	1670467	2.1	1636705.1	102.06	70	120	
Sc	45	He	300814	0.4	385078.04	78.12	70	120	
Ge	74	He	275070	0.7	329956.68	83.37	70	120	
Rh	103	He	835380	0.7	951366.82	87.81	70	120	
Tb	159	He	1734127	0.4	1829197.42	94.8	70	120	
Ge	74	HEHe	246501	0.6	290827.29	84.76	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRLD**	**Sample Type**	CRL3
File Name	130CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 00:27:29	**Sample QC Pass/Fail**	Pass
Comment	A20A192 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.660	ug/l	1.6	13449	92.22	70	130	
Na	23	45	He	91.216	ug/l	2.3	155441	101.35	70	130	
Mg	24	45	He	86.908	ug/l	2.6	78600	96.56	70	130	
Al	27	45	He	85.057	ug/l	2.6	37585	94.51	70	130	
K	39	45	He	87.909	ug/l	2.4	106106	97.68	70	130	
Ca	44	45	He	82.430	ug/l	1.6	4745	91.59	70	130	
Ti	47	45	He	1.704	ug/l	7.7	500	94.67	70	130	
V	51	74	He	1.579	ug/l	2.3	15689	87.72	70	130	
Cr	52	74	He	1.457	ug/l	2.6	28986	80.94	70	130	
Mn	55	74	He	1.670	ug/l	3.0	12169	92.78	70	130	
Fe	56	74	He	83.034	ug/l	0.7	853152	92.26	70	130	
Co	59	74	He	1.717	ug/l	1.2	26240	95.39	70	130	
Ni	60	74	He	1.769	ug/l	2.4	7953	98.28	70	130	
Cu	65	74	He	1.825	ug/l	1.1	9612	101.39	70	130	
Cu	65	74	No Gas	1.783	ug/l	1.2	26995	99.06	70	130	
Zn	66	74	He	1.725	ug/l	5.3	3319	95.83	70	130	
As	75	74	He	1.789	ug/l	0.7	2450	99.39	70	130	
Se	78	74	HEHe	1.780	ug/l	5.6	379	98.89	70	130	
Mo	95	103	He	1.632	ug/l	0.9	12279	90.67	70	130	
Ag	109	103	No Gas	1.764	ug/l	2.0	75346	98	70	130	
Cd	111	103	He	1.663	ug/l	3.6	6339	92.39	70	130	
Cd	111	103	No Gas	1.829	ug/l	1.9	17659	101.61	70	130	
Sb	123	103	No Gas	1.862	ug/l	0.9	49537	103.44	70	130	
Ba	138	159	He	1.638	ug/l	1.1	45642	91	70	130	
Hg	201	159	No Gas	74.554	ng/l	4.4	342	103.55	70	130	
Tl	205	159	No Gas	1.800	ug/l	0.8	143036	100	70	130	
Pb	208	159	No Gas	1.841	ug/l	1.2	199423	102.28	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1183066	1.6	1305096.65	90.65	70	120	
Ge	74	No Gas	1702087	2.6	1989219.35	85.57	70	120	
Rh	103	No Gas	1715199	0.8	1924055.37	89.15	70	120	
Tb	159	No Gas	3088613	1.8	3266294.67	94.56	70	120	
Bi	209	No Gas	1671745	3.4	1636705.1	102.14	70	120	
Sc	45	He	297869	2.3	385078.04	77.35	70	120	
Ge	74	He	275099	0.8	329956.68	83.37	70	120	
Rh	103	He	834017	1.4	951366.82	87.67	70	120	
Tb	159	He	1709823	0.9	1829197.42	93.47	70	120	
Ge	74	HEHe	246912	1.8	290827.29	84.9	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRLE**	**Sample Type**	CRL4
File Name	131CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 00:32:11	**Sample QC Pass/Fail**	Pass
Comment	A20A193 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.413	ug/l	1.3	27971	94.81	70	130	
Na	23	45	He	178.754	ug/l	3.1	305953	99.31	70	130	
Mg	24	45	He	174.969	ug/l	2.5	161215	97.2	70	130	
Al	27	45	He	172.325	ug/l	2.7	77648	95.74	70	130	
K	39	45	He	174.104	ug/l	4.0	190951	96.72	70	130	
Ca	44	45	He	168.672	ug/l	3.2	9210	93.71	70	130	
Ti	47	45	He	3.387	ug/l	2.1	1012	94.08	70	130	
V	51	74	He	3.303	ug/l	2.4	31153	91.75	70	130	
Cr	52	74	He	3.102	ug/l	5.3	46844	86.17	70	130	
Mn	55	74	He	3.399	ug/l	2.5	24886	94.42	70	130	
Fe	56	74	He	170.038	ug/l	2.4	1702961	94.47	70	130	
Co	59	74	He	3.517	ug/l	3.7	54367	97.69	70	130	
Ni	60	74	He	3.677	ug/l	2.6	15417	102.14	70	130	
Cu	65	74	He	3.689	ug/l	1.1	19228	102.47	70	130	
Cu	65	74	No Gas	3.569	ug/l	1.7	54717	99.14	70	130	
Zn	66	74	He	3.610	ug/l	2.4	6969	100.28	70	130	
As	75	74	He	3.559	ug/l	2.2	4888	98.86	70	130	
Se	78	74	HEHe	3.544	ug/l	1.6	761	98.44	70	130	
Mo	95	103	He	3.414	ug/l	3.9	24587	94.83	70	130	
Ag	109	103	No Gas	3.532	ug/l	1.2	156177	98.11	70	130	
Cd	111	103	He	3.486	ug/l	3.6	13321	96.83	70	130	
Cd	111	103	No Gas	3.637	ug/l	2.1	36339	101.03	70	130	
Sb	123	103	No Gas	3.658	ug/l	0.6	100544	101.61	70	130	
Ba	138	159	He	3.315	ug/l	2.7	94450	92.08	70	130	
Hg	201	159	No Gas	149.351	ng/l	2.1	705	103.72	70	130	
Tl	205	159	No Gas	3.579	ug/l	1.5	295298	99.42	70	130	
Pb	208	159	No Gas	3.634	ug/l	0.7	408041	100.94	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1197594	2.0	1305096.65	91.76	70	120	
Ge	74	No Gas	1776714	1.5	1989219.35	89.32	70	120	
Rh	103	No Gas	1775644	2.0	1924055.37	92.29	70	120	
Tb	159	No Gas	3209175	0.2	3266294.67	98.25	70	120	
Bi	209	No Gas	1655644	0.7	1636705.1	101.16	70	120	
Sc	45	He	304124	2.5	385078.04	78.98	70	120	
Ge	74	He	279044	2.5	329956.68	84.57	70	120	
Rh	103	He	836558	3.1	951366.82	87.93	70	120	
Tb	159	He	1755918	2.4	1829197.42	95.99	70	120	
Ge	74	HEHe	249589	0.7	290827.29	85.82	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**0A24028-CCVA**	**Sample Type**	CCV
File Name	140_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 01:14:26	**Sample QC Pass/Fail**	Pass
Comment	A20A138 - JPB 01/24	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	38.027	ug/l	2.2	316363	40	95.07	90	110	
Na	23	45	He	3859.026	ug/l	0.4	6812230	4000	96.48	90	110	
Mg	24	45	He	3989.959	ug/l	3.0	3843225	4000	99.75	90	110	
Al	27	45	He	3938.229	ug/l	1.9	1857808	4000	98.46	90	110	
K	39	45	He	3887.969	ug/l	2.7	3931268	4000	97.2	90	110	
Ca	44	45	He	4007.461	ug/l	2.2	213325	4000	100.19	90	110	
Ti	47	45	He	96.139	ug/l	3.6	29979	100	96.14	90	110	
V	51	74	He	93.474	ug/l	1.3	866338	100	93.47	90	110	
Cr	52	74	He	95.710	ug/l	1.4	1077006	100	95.71	90	110	
Mn	55	74	He	96.973	ug/l	0.7	736075	100	96.97	90	110	
Fe	56	74	He	3921.071	ug/l	1.3	39553730	4000	98.03	90	110	
Co	59	74	He	102.032	ug/l	0.6	1645727	100	102.03	90	110	
Ni	60	74	He	102.923	ug/l	1.6	415863	100	102.92	90	110	
Cu	65	74	He	103.148	ug/l	1.6	548783	100	103.15	90	110	
Cu	65	74	No Gas	103.669	ug/l	0.9	1532671	100	103.67	90	110	
Zn	66	74	He	97.762	ug/l	0.6	195526	100	97.76	90	110	
As	75	74	He	93.773	ug/l	1.7	133238	100	93.77	90	110	
Se	78	74	HEHe	41.808	ug/l	0.7	8919	40	104.52	90	110	
Mo	95	103	He	38.903	ug/l	2.4	277299	40	97.26	90	110	
Ag	109	103	No Gas	36.375	ug/l	2.9	1595542	40	90.94	90	110	
Cd	111	103	He	95.126	ug/l	1.5	374580	100	95.13	90	110	
Cd	111	103	No Gas	99.649	ug/l	1.5	988098	100	99.65	90	110	
Sb	123	103	No Gas	37.616	ug/l	1.1	1024297	40	94.04	90	110	
Ba	138	159	He	96.734	ug/l	1.1	2767464	100	96.73	90	110	
Hg	201	159	No Gas	820.260	ng/l	1.5	3752	800	102.53	90	110	
Tl	205	159	No Gas	41.647	ug/l	3.7	3352885	40	104.12	90	110	
Pb	208	159	No Gas	102.350	ug/l	2.3	11203698	100	102.35	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1216850	2.9	1305096.65	93.24	70	120	
Ge	74	No Gas	1765472	1.3	1989219.35	88.75	70	120	
Rh	103	No Gas	1762147	1.4	1924055.37	91.59	70	120	
Tb	159	No Gas	3137138	3.7	3266294.67	96.05	70	120	
Bi	209	No Gas	1638831	2.5	1636705.1	100.13	70	120	
Sc	45	He	318649	2.9	385078.04	82.75	70	120	
Ge	74	He	291673	1.1	329956.68	88.4	70	120	
Rh	103	He	861632	1.9	951366.82	90.57	70	120	
Tb	159	He	1769902	2.1	1829197.42	96.76	70	120	
Ge	74	HEHe	248297	1.1	290827.29	85.38	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**0A24028-CCB9**	**Sample Type**	CCB
File Name	141_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 01:18:57	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.009	ug/l	27.0	97	0.09	
Na	23	45	He	4.206	ug/l	16.7	11844	45	
Mg	24	45	He	0.487	ug/l	24.7	766	45	
Al	27	45	He	0.419	ug/l	22.1	257	22.5	
K	39	45	He	10.543	ug/l	35.2	32888	45	
Ca	44	45	He	-2.713	ug/l	N/A	515	45	
Ti	47	45	He	0.062	ug/l	13.8	21	1.8	
V	51	74	He	-0.036	ug/l	N/A	1562	0.45	
Cr	52	74	He	-0.075	ug/l	N/A	12597	0.45	
Mn	55	74	He	0.009	ug/l	80.8	276	0.45	
Fe	56	74	He	0.303	ug/l	292.9	65620	22.5	
Co	59	74	He	0.013	ug/l	18.5	314	0.09	
Ni	60	74	He	0.029	ug/l	71.3	1317	0.45	
Cu	65	74	He	-0.003	ug/l	N/A	432	0.45	
Cu	65	74	No Gas	-0.003	ug/l	N/A	1655	0.45	
Zn	66	74	He	0.028	ug/l	51.0	116	1.8	
As	75	74	He	0.072	ug/l	21.6	146	0.45	
Se	78	74	HEHe	0.020	ug/l	4.3	6	0.45	
Mo	95	103	He	0.031	ug/l	125.4	1211	0.45	
Ag	109	103	No Gas	0.005	ug/l	16.6	270	0.09	
Cd	111	103	He	0.009	ug/l	32.9	34	0.09	
Cd	111	103	No Gas	0.014	ug/l	18.8	139	0.09	
Sb	123	103	No Gas	0.219	ug/l	4.2	6278	0.45	
Ba	138	159	He	0.017	ug/l	31.3	808	0.45	
Hg	201	159	No Gas	7.229	ng/l	12.3	42	36	
Tl	205	159	No Gas	0.016	ug/l	7.9	1577	0.09	
Pb	208	159	No Gas	0.017	ug/l	8.2	2926	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1217982	1.1	1305096.65	93.33	70	120	
Ge	74	No Gas	1792578	1.9	1989219.35	90.11	70	120	
Rh	103	No Gas	1793314	2.1	1924055.37	93.2	70	120	
Tb	159	No Gas	3238475	1.3	3266294.67	99.15	70	120	
Bi	209	No Gas	1672987	0.7	1636705.1	102.22	70	120	
Sc	45	He	295248	11.1	385078.04	76.67	70	120	
Ge	74	He	270754	11.1	329956.68	82.06	70	120	
Rh	103	He	806412	11.4	951366.82	84.76	70	120	
Tb	159	He	1658772	10.3	1829197.42	90.68	70	120	
Ge	74	HEHe	254019	0.5	290827.29	87.34	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRLE**	**Sample Type**	CRL1
File Name	142CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 01:23:39	**Sample QC Pass/Fail**	Fail
Comment	A20A190 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.167	ug/l	8.9	1429	92.78	70	130	
Na	23	45	He	12.594	ug/l	3.0	27284	139.93	70	130	CRL1 Failed
Mg	24	45	He	8.928	ug/l	1.3	8847	99.2	70	130	
Al	27	45	He	8.765	ug/l	2.9	4160	97.39	70	130	
K	39	45	He	15.300	ug/l	5.3	39994	170	70	130	CRL1 Failed
Ca	44	45	He	12.722	ug/l	11.3	1358	141.36	70	130	CRL1 Failed
Ti	47	45	He	0.176	ug/l	25.0	58	97.78	70	130	
V	51	74	He	0.125	ug/l	16.1	3148	69.44	70	130	CRL1 Failed
Cr	52	74	He	0.037	ug/l	40.2	14822	20.56	70	130	CRL1 Failed
Mn	55	74	He	0.176	ug/l	1.8	1550	97.78	70	130	
Fe	56	74	He	7.768	ug/l	2.7	145108	86.31	70	130	
Co	59	74	He	0.180	ug/l	4.9	2999	100	70	130	
Ni	60	74	He	0.344	ug/l	10.4	2665	191.11	70	130	CRL1 Failed
Cu	65	74	He	0.167	ug/l	7.1	1365	92.78	70	130	
Cu	65	74	No Gas	0.163	ug/l	15.3	4178	90.56	70	130	
Zn	66	74	He	0.347	ug/l	9.9	758	192.78	70	130	CRL1 Failed
As	75	74	He	0.196	ug/l	2.7	331	108.89	70	130	
Se	78	74	HEHe	0.195	ug/l	6.8	44	108.33	70	130	
Mo	95	103	He	0.168	ug/l	5.4	2284	93.33	70	130	
Ag	109	103	No Gas	0.167	ug/l	5.2	7618	92.78	70	130	
Cd	111	103	He	0.162	ug/l	12.8	640	90	70	130	
Cd	111	103	No Gas	0.180	ug/l	13.2	1846	100	70	130	
Sb	123	103	No Gas	0.263	ug/l	5.9	7642	146.11	70	130	CRL1 Failed
Ba	138	159	He	0.172	ug/l	2.8	5287	95.56	70	130	
Hg	201	159	No Gas	9.734	ng/l	9.5	53	135.19	70	130	CRL1 Failed
Tl	205	159	No Gas	0.180	ug/l	7.0	15199	100	70	130	
Pb	208	159	No Gas	0.183	ug/l	6.2	21545	101.67	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1238489	4.9	1305096.65	94.9	70	120	
Ge	74	No Gas	1817606	5.7	1989219.35	91.37	70	120	
Rh	103	No Gas	1831964	5.7	1924055.37	95.21	70	120	
Tb	159	No Gas	3238485	6.3	3266294.67	99.15	70	120	
Bi	209	No Gas	1679959	3.7	1636705.1	102.64	70	120	
Sc	45	He	314314	1.5	385078.04	81.62	70	120	
Ge	74	He	288879	1.7	329956.68	87.55	70	120	
Rh	103	He	859390	0.9	951366.82	90.33	70	120	
Tb	159	He	1757741	1.4	1829197.42	96.09	70	120	
Ge	74	HEHe	255298	2.8	290827.29	87.78	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRLF**	**Sample Type**	CRL2
File Name	143_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 01:28:21	**Sample QC Pass/Fail**	Fail
Comment	A20A191 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.822	ug/l	2.1	7081	91.33	70	130	
Na	23	45	He	45.799	ug/l	1.0	86718	101.78	70	130	
Mg	24	45	He	43.840	ug/l	0.6	42855	97.42	70	130	
Al	27	45	He	42.834	ug/l	1.3	20408	95.19	70	130	
K	39	45	He	48.351	ug/l	1.9	74193	107.45	70	130	
Ca	44	45	He	43.293	ug/l	5.4	3017	96.21	70	130	
Ti	47	45	He	0.778	ug/l	8.0	248	86.44	70	130	
V	51	74	He	0.764	ug/l	3.2	9065	84.89	70	130	
Cr	52	74	He	0.623	ug/l	9.4	21401	69.22	70	130	CRL2 Failed
Mn	55	74	He	0.822	ug/l	1.0	6446	91.33	70	130	
Fe	56	74	He	41.586	ug/l	0.9	485664	92.41	70	130	
Co	59	74	He	0.889	ug/l	1.4	14431	98.78	70	130	
Ni	60	74	He	0.890	ug/l	1.1	4878	98.89	70	130	
Cu	65	74	He	0.888	ug/l	3.6	5193	98.67	70	130	
Cu	65	74	No Gas	0.838	ug/l	5.0	14659	93.11	70	130	
Zn	66	74	He	0.987	ug/l	4.1	2038	109.67	70	130	
As	75	74	He	0.897	ug/l	3.4	1327	99.67	70	130	
Se	78	74	HEHe	0.871	ug/l	3.2	191	96.78	70	130	
Mo	95	103	He	0.815	ug/l	4.8	6991	90.56	70	130	
Ag	109	103	No Gas	0.858	ug/l	0.8	39199	95.33	70	130	
Cd	111	103	He	0.824	ug/l	0.7	3300	91.56	70	130	
Cd	111	103	No Gas	0.871	ug/l	2.1	8993	96.78	70	130	
Sb	123	103	No Gas	0.922	ug/l	3.2	26346	102.44	70	130	
Ba	138	159	He	0.827	ug/l	0.4	24146	91.89	70	130	
Hg	201	159	No Gas	36.029	ng/l	2.6	178	100.08	70	130	
Tl	205	159	No Gas	0.868	ug/l	1.4	72755	96.44	70	130	
Pb	208	159	No Gas	0.878	ug/l	1.4	100615	97.56	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1255192	2.0	1305096.65	96.18	70	120	
Ge	74	No Gas	1842686	1.8	1989219.35	92.63	70	120	
Rh	103	No Gas	1834531	1.1	1924055.37	95.35	70	120	
Tb	159	No Gas	3250661	0.7	3266294.67	99.52	70	120	
Bi	209	No Gas	1698872	1.7	1636705.1	103.8	70	120	
Sc	45	He	320453	0.6	385078.04	83.22	70	120	
Ge	74	He	290824	1.2	329956.68	88.14	70	120	
Rh	103	He	875580	0.7	951366.82	92.03	70	120	
Tb	159	He	1775712	0.2	1829197.42	97.08	70	120	
Ge	74	HEHe	253685	0.2	290827.29	87.23	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRLG**	**Sample Type**	CRL3
File Name	144CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 01:33:04	**Sample QC Pass/Fail**	Pass
Comment	A20A192 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.677	ug/l	2.1	14419	93.17	70	130	
Na	23	45	He	87.414	ug/l	0.4	161428	97.13	70	130	
Mg	24	45	He	86.339	ug/l	1.4	84505	95.93	70	130	
Al	27	45	He	84.184	ug/l	1.8	40248	93.54	70	130	
K	39	45	He	86.962	ug/l	1.6	113849	96.62	70	130	
Ca	44	45	He	80.913	ug/l	4.2	5052	89.9	70	130	
Ti	47	45	He	1.713	ug/l	7.1	544	95.17	70	130	
V	51	74	He	1.585	ug/l	1.4	16683	88.06	70	130	
Cr	52	74	He	1.428	ug/l	2.7	30404	79.33	70	130	
Mn	55	74	He	1.719	ug/l	4.2	13274	95.5	70	130	
Fe	56	74	He	82.888	ug/l	0.5	902878	92.1	70	130	
Co	59	74	He	1.739	ug/l	1.2	28166	96.61	70	130	
Ni	60	74	He	1.768	ug/l	1.2	8428	98.22	70	130	
Cu	65	74	He	1.791	ug/l	2.9	10010	99.5	70	130	
Cu	65	74	No Gas	1.720	ug/l	0.4	28490	95.56	70	130	
Zn	66	74	He	1.811	ug/l	3.1	3691	100.61	70	130	
As	75	74	He	1.756	ug/l	2.4	2550	97.56	70	130	
Se	78	74	HEHe	1.734	ug/l	2.1	382	96.33	70	130	
Mo	95	103	He	1.637	ug/l	2.5	12956	90.94	70	130	
Ag	109	103	No Gas	1.692	ug/l	0.1	78191	94	70	130	
Cd	111	103	He	1.682	ug/l	1.0	6750	93.44	70	130	
Cd	111	103	No Gas	1.744	ug/l	1.5	18209	96.89	70	130	
Sb	123	103	No Gas	1.758	ug/l	1.1	50626	97.67	70	130	
Ba	138	159	He	1.679	ug/l	3.3	48331	93.28	70	130	
Hg	201	159	No Gas	71.580	ng/l	4.0	354	99.42	70	130	
Tl	205	159	No Gas	1.692	ug/l	2.5	144598	94	70	130	
Pb	208	159	No Gas	1.728	ug/l	2.8	201291	96	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1255856	2.8	1305096.65	96.23	70	120	
Ge	74	No Gas	1857717	1.0	1989219.35	93.39	70	120	
Rh	103	No Gas	1855821	1.5	1924055.37	96.45	70	120	
Tb	159	No Gas	3321254	1.6	3266294.67	101.68	70	120	
Bi	209	No Gas	1711445	2.9	1636705.1	104.57	70	120	
Sc	45	He	322242	0.9	385078.04	83.68	70	120	
Ge	74	He	291620	0.4	329956.68	88.38	70	120	
Rh	103	He	877616	0.7	951366.82	92.25	70	120	
Tb	159	He	1766810	2.2	1829197.42	96.59	70	120	
Ge	74	HEHe	255508	0.4	290827.29	87.86	70	120	

CRL Verification ICPMS6

Sample Name	**0A24028-CRLH**	**Sample Type**	CRL4
File Name	145CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\0A24028.b	**Total Dilution**	1.0000
Acq Time	01/25/2020 01:37:46	**Sample QC Pass/Fail**	Pass
Comment	A20A193 - JPB 01/24	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.383	ug/l	1.4	29180	93.97	70	130	
Na	23	45	He	190.598	ug/l	14.8	318258	105.89	70	130	
Mg	24	45	He	188.318	ug/l	14.8	169371	104.62	70	130	
Al	27	45	He	187.655	ug/l	14.9	82539	104.25	70	130	
K	39	45	He	191.267	ug/l	17.0	202462	106.26	70	130	
Ca	44	45	He	180.618	ug/l	12.8	9607	100.34	70	130	
Ti	47	45	He	3.858	ug/l	18.6	1122	107.17	70	130	
V	51	74	He	3.538	ug/l	17.8	32288	98.28	70	130	
Cr	52	74	He	3.413	ug/l	21.4	48784	94.81	70	130	
Mn	55	74	He	3.649	ug/l	12.5	26039	101.36	70	130	
Fe	56	74	He	183.493	ug/l	13.8	1786108	101.94	70	130	
Co	59	74	He	3.800	ug/l	14.8	57162	105.56	70	130	
Ni	60	74	He	3.905	ug/l	16.4	15856	108.47	70	130	
Cu	65	74	He	3.901	ug/l	16.0	19746	108.36	70	130	
Cu	65	74	No Gas	3.671	ug/l	2.5	57862	101.97	70	130	
Zn	66	74	He	3.868	ug/l	15.0	7264	107.44	70	130	
As	75	74	He	3.757	ug/l	14.5	5022	104.36	70	130	
Se	78	74	HEHe	3.686	ug/l	3.5	806	102.39	70	130	
Mo	95	103	He	3.626	ug/l	14.9	25274	100.72	70	130	
Ag	109	103	No Gas	3.566	ug/l	1.2	160629	99.06	70	130	
Cd	111	103	He	3.679	ug/l	13.6	13655	102.19	70	130	
Cd	111	103	No Gas	3.664	ug/l	2.0	37295	101.78	70	130	
Sb	123	103	No Gas	3.636	ug/l	2.2	101810	101	70	130	
Ba	138	159	He	3.650	ug/l	15.5	97152	101.39	70	130	
Hg	201	159	No Gas	148.033	ng/l	3.6	710	102.8	70	130	
Tl	205	159	No Gas	3.562	ug/l	0.2	298656	98.94	70	130	
Pb	208	159	No Gas	3.604	ug/l	0.7	411159	100.11	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1260287	1.1	1305096.65	96.57	70	120	
Ge	74	No Gas	1827980	0.8	1989219.35	91.89	70	120	
Rh	103	No Gas	1808856	0.7	1924055.37	94.01	70	120	
Tb	159	No Gas	3260941	0.8	3266294.67	99.84	70	120	
Bi	209	No Gas	1687297	1.0	1636705.1	103.09	70	120	
Sc	45	He	300501	12.6	385078.04	78.04	70	120	
Ge	74	He	274875	12.5	329956.68	83.31	70	120	
Rh	103	He	820767	12.3	951366.82	86.27	70	120	
Tb	159	He	1663715	13.6	1829197.42	90.95	70	120	
Ge	74	HEHe	254160	1.1	290827.29	87.39	70	120	

APEX LABORATORIES, LLC
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Metals IFA/IFB Metals Internal Standards Recovery Summary

A20253 IFA
A20254 IFB
A0A0539 (I.S Tables)

Analytical Standard Record

A20A253

Description:	ICSA working std	Expires:	03/22/2020
Standard Type:	Calibration Standard	Prepared:	01/20/2020
Solvent:	3.5% HNO3 + 0.4% HCl	Prepared By:	Kevin Taucher
Final Volume (mls):	50	Department:	Metals
Vials:	1	Last Edit:	01/27/2020 14:17 by jsj

Analyte	Parent	CAS Number	Concentration	Units
Aluminum	A19K163	7429-90-5	100	ug/mL
Calcium	A19K163	7440-70-2	300	ug/mL
Carbon	A19K163	7440-44-0	200	ug/mL
Chlorine	A19K163	7782-50-5	2000	ug/mL
Iron	A19K163	7439-89-6	250	ug/mL
Magnesium	A19K163	7439-95-4	100	ug/mL
Molybdenum	A19K163	7439-98-7	2	ug/mL
Phosphorus	A19K163	7723-14-0	100	ug/mL
Potassium	A19K163	7440-09-7	100	ug/mL
Sodium	A19K163	7440-23-5	250	ug/mL
Sulfur	A19K163	7704-34-9	100	ug/mL
Titanium	A19K163	7440-32-6	2	ug/mL
Tungsten	A19L110	7440-33-7	0.1	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit		(mls)
A19I314	Conc. HCl - Omnitrace	09/24/2019	Omni Trace	58072	03/22/2020	10/08/2019 13:03	by jsj	0.2
A19J492	Conc. HNO3 - Omnitrace	10/31/2019	Omni Trace	59162	04/28/2020	11/11/2019 16:09	by jsj	1.75
A19K163	6020A ICS Interferents A	11/11/2019	LGC	1021679-1	10/30/2020	11/12/2019 15:04	by jsj	5
A19L110	1 W 10 ppm	12/09/2019	Dilution	n/a	06/06/2020	12/10/2019 14:39	by jsj	0.5

Reviewed By

Date

Analytical Standard Record

A20A254

Description:	ICSA+B working std	Expires:	03/22/2020
Standard Type:	Calibration Standard	Prepared:	01/20/2020
Solvent:	3.5% HNO3 + 0.4% HCl	Prepared By:	Kevin Taucher
Final Volume (mls):	50	Department:	Metals
Vials:	1	Last Edit:	01/27/2020 14:17 by jsj

Analyte	Parent	CAS Number	Concentration	Units
Mercury	A19J028	7439-97-6	0.002	ug/mL
Aluminum	A19K163	7429-90-5	100	ug/mL
Calcium	A19K163	7440-70-2	300	ug/mL
Carbon	A19K163	7440-44-0	200	ug/mL
Chlorine	A19K163	7782-50-5	2000	ug/mL
Iron	A19K163	7439-89-6	250	ug/mL
Magnesium	A19K163	7439-95-4	100	ug/mL
Molybdenum	A19K163	7439-98-7	2	ug/mL
Phosphorus	A19K163	7723-14-0	100	ug/mL
Potassium	A19K163	7440-09-7	100	ug/mL
Sodium	A19K163	7440-23-5	250	ug/mL
Sulfur	A19K163	7704-34-9	100	ug/mL
Titanium	A19K163	7440-32-6	2	ug/mL
Arsenic	A19K267	7440-38-2	0.1	ug/mL
Cadmium	A19K267	7440-43-9	0.1	ug/mL
Chromium	A19K267	7440-47-3	0.2	ug/mL
Cobalt	A19K267	7440-48-4	0.2	ug/mL
Copper	A19K267	7440-50-8	0.2	ug/mL
Manganese	A19K267	7439-96-5	0.2	ug/mL
Nickel	A19K267	7440-02-0	0.2	ug/mL
Selenium	A19K267	7782-49-2	0.1	ug/mL
Silver	A19K267	7440-22-4	0.05	ug/mL
Vanadium	A19K267	7440-62-2	0.2	ug/mL
Zinc	A19K267	7440-66-6	0.1	ug/mL
Tungsten	A19L351	7440-33-7	0.1	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit		(mls)
A19I314	Conc. HCl - Omnitrace	09/24/2019	Omni Trace	58072	03/22/2020	10/08/2019 13:03	by jsj	0.2
A19J028	Hg Stock 1.00ppm Std Primary	10/02/2019	n/a	n/a	03/30/2020	10/23/2019 17:40	by jsj	0.1
A19J492	Conc. HNO3 - Omnitrace	10/31/2019	Omni Trace	59162	04/28/2020	11/11/2019 16:09	by jsj	1.75
A19K163	6020A ICS Interferents A	11/11/2019	LGC	1021679-1	10/30/2020	11/12/2019 15:04	by jsj	5
A19K267	6020A & CLP-M ICS Analytes B	11/19/2019	LGC	1004999-3	11/11/2020	12/02/2019 15:04	by jsj	0.5
A19L351	1 W 10 ppm	12/30/2019	Dilution	n/a	06/27/2020	01/07/2020 15:23	by jsj	0.5

Reviewed By

Date

		6 Li (ISTD) [No Gas]	45 Sc (ISTD) [He]	74 Ge (ISTD) [No Gas]	74 Ge (ISTD) [He]	74 Ge (ISTD) [HEHe]	103 Rh (ISTD) [No Gas]	103 Rh (ISTD) [He]	159 Tb (ISTD) [No Gas]	159 Tb (ISTD) [He]	209 Bi (ISTD) [No Gas]
Acq. Date-Time	Sample Name	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value
01/24/2020 11:50	rinse										
01/24/2020 11:55	rinse										
01/24/2020 12:00	rinse										
01/24/2020 12:05	0A24028-CAL0	100	100	100	100	100	100	100	100	100	100
01/24/2020 12:10	0A24028-CAL1	101.8183969	98.52166677	101.7366379	99.28105209	99.17923337	100.9917601	99.78713363	100.4675054	99.28897833	101.0869107
01/24/2020 12:15	0A24028-CAL2	101.4160647	99.90818571	101.128875	99.48715894	99.49087996	101.6186838	100.8523333	100.8721264	101.2613871	102.0691675
01/24/2020 12:20	0A24028-CAL3	101.4237063	89.50463834	99.42558153	90.2040777	102.005456	101.7066988	89.96873257	102.098128	90.69911728	102.0766651
01/24/2020 12:25	0A24028-CAL3	102.9233884	100.4076992	101.0473119	100.9413862	101.7741446	101.633158	100.3339448	100.5203505	100.956904	100.0067746
01/24/2020 12:30	0A24028-CAL4	103.3239916	101.661967	101.2622536	101.1701789	101.8669213	101.6834885	101.9836169	100.0081738	101.8063773	102.4642924
01/24/2020 12:35	0A24028-CAL5	104.3821914	101.322609	100.4075684	101.8007909	99.08885441	101.6997879	102.5526421	101.3734855	101.043257	101.804647
01/24/2020 12:40	0A24028-CAL6	92.91104428	100.1708814	89.90124257	101.6346853	99.52988478	90.56999487	99.88924496	90.71947379	100.5220481	91.36781247
01/24/2020 12:44	0A24028-CAL7	104.8482323	97.39585602	98.48561564	98.67281163	98.82010384	98.47298088	97.03344149	100.0897339	98.91117913	102.2440249
01/24/2020 12:49	0A24028-CAL8	102.2842804	92.56374896	96.7121603	93.74681246	90.39478024	96.11106254	93.17988337	98.79438761	97.90114381	101.0200247
01/24/2020 12:54	0A24028-CAL9	95.30980661	86.91529742	88.13160715	85.93751054	85.04657621	86.00712827	82.41130833	92.73488278	90.98535502	91.13555784
01/24/2020 13:25	0A24028-CAL6	106.657556	91.6254647	98.90000483	93.79838792	95.66036937	99.06782811	93.63254859	101.6608226	97.2833459	103.9294619
01/24/2020 13:45	0A24028-CAL5	103.4256832	97.65067363	99.36075191	99.75148657	98.75363483	100.4035631	101.2505888	101.2876434	102.1418926	104.2659131
01/24/2020 14:17	0A24028-ICV1	101.8521545	92.03875581	93.85990991	93.43387138	92.02423991	95.65195188	94.17511849	98.34734915	97.75913599	100.7984599
01/24/2020 14:21	0A24028-ICB1	101.4913953	92.63694365	94.70728118	94.65216767	93.78042198	96.76406333	95.69106758	98.48790597	99.36860324	101.1555262
01/24/2020 14:26	0A24028-CRL1	101.0973364	93.51004372	96.81318838	95.5903777	93.55803913	97.47339756	96.43696704	98.64550484	99.59556416	100.1979198
01/24/2020 14:30	0A24028-CRL2	107.4791207	92.7166487	99.06957755	94.20705672	94.89060781	101.8674991	94.6601298	100.9103387	98.66553897	104.8311371
01/24/2020 14:35	0A24028-CRL3	102.4616575	95.59117683	97.52023827	96.95245752	95.95127284	98.79648283	97.03999697	99.97058012	100.1394633	101.1310211
01/24/2020 14:46	0A24028-IFA1	73.66797489	74.79388183	71.77210141	72.85552758	72.52305051	69.09079025	66.82830253	75.59979141	74.5258282	74.42324211
01/24/2020 14:50	0A24028-IFB1	76.32538524	74.62474901	73.28953353	73.73301752	73.3565154	70.41954931	67.71802805	79.60544991	75.12045201	76.2578754
01/24/2020 15:03	0010746-BS1	91.70084323	81.51703846	91.26799062	85.77730163	89.03216051	93.94394923	88.65659445	101.3744975	93.989318	105.0523402
01/24/2020 15:07	0010746-BLK1	92.16285244	82.70416145	90.19096041	86.80980384	85.36782759	93.97850454	90.9680716	99.78621086	95.86284568	104.1397802
01/24/2020 15:12	0010707-BLK2	91.96037446	82.23718598	89.52525571	85.68349033	89.29941306	93.11622184	89.02644163	98.52573038	93.97363025	102.6042631
01/24/2020 15:17	A0A0788-01	87.04209145	93.37394576	87.33629667	88.85227196	89.79392534	88.53933571	89.29224972	95.67338383	93.65212367	98.69741063
01/24/2020 15:21	0010746-DUP1	92.71053014	92.63743446	91.01930898	88.77484665	91.4197941	92.24207427	90.3998127	99.4106185	96.59953599	101.4865985
01/24/2020 15:26	0010746-MS1	92.60676158	92.05563551	91.82577425	88.76024069	89.63323547	92.96818729	89.06586701	99.51327263	95.6203273	104.2471974
01/24/2020 15:31	0010746-MSD1	93.11967813	88.71152898	93.45481833	91.1474086	93.84105934	94.1831991	92.39860849	99.75305647	96.27556676	103.15118
01/24/2020 15:35	0010745-BLK1	93.20058121	85.48710554	94.36800889	89.45478338	89.32933001	96.61554889	89.75358597	101.1644438	95.4521448	104.9814881
01/24/2020 15:40	0010745-BS1	96.9720314	82.03179818	98.55205695	85.54072411	90.65766479	98.32250756	86.2687237	104.634265	90.83019135	107.5423632
01/24/2020 15:45	A0A0060-12	93.90073983	84.52161641	92.45636333	88.39423608	92.26012103	93.32172008	88.28266718	100.1418008	95.02790264	103.4471751
01/24/2020 15:49	0A24028-CCV1	95.36233912	88.02957631	95.47110427	91.30476663	92.37706214	96.34902849	93.36689501	101.467733	98.78178668	103.1825334
01/24/2020 15:54	0A24028-CCB1	97.66890469	84.44208361	95.88177358	88.02222663	92.11295465	97.05744678	91.14726186	102.7626136	94.82259383	103.385862
01/24/2020 16:07	0A24028-CRL4	98.00234845	89.07965089	97.86644997	92.26254085	87.7581684	98.43920985	94.22595237	102.0052825	99.4075737	103.5079582
01/24/2020 16:12	0A24028-CRL5	99.02852712	86.55794821	98.982312	90.44539018	94.96398845	100.3061596	92.44107301	101.8740655	95.91016662	104.9213761
01/24/2020 16:16	0A24028-CRL6	101.1620087	88.14656471	97.9873081	92.85440238	95.30489264	100.5896312	94.03665455	101.5134173	96.14959695	105.4848716
01/24/2020 17:08	0010745-MS1	96.44529876	87.62694104	94.0931969	91.08227379	90.28284898	95.45421346	91.3132886	99.74231555	98.86071109	103.5821982
01/24/2020 17:13	A0A0736-01	97.69765735	90.60081786	96.06436129	94.63860731	92.33677363	96.43717201	94.74375685	102.3270964	100.3903105	104.3772003
01/24/2020 17:20	0010745-MS2	99.79958445	88.89333109	97.24269808	92.24849759	92.54485818	98.25731141	93.17210159	104.9575586	98.57973176	107.6684984
01/24/2020 17:24	0010756-BLK1	96.19620278	82.59565877	95.12080102	84.24115857	93.94985702	97.90825476	87.31339751	102.6299189	92.30241844	104.2282905
01/24/2020 17:29	0010756-BS1	98.20418459	89.85694441	95.80355697	92.3313317	94.63267695	98.46359307	93.88094524	101.2589242	99.72482139	103.728801
01/24/2020 17:34	A0A0538-01	95.1898607	98.46723365	92.63364025	89.86945498	92.37204084	91.14156765	90.15757806	102.069177	96.9641427	99.82168199
01/24/2020 17:38	A0A0538-02	92.04979159	107.0939161	91.23834314	88.91875544	91.96382719	89.92774863	88.39326069	100.1969007	96.75680842	101.2088649
01/24/2020 17:43	A0A0539-01	92.8955831	100.2585623	91.91006528	90.04456989	91.99311032	90.72313998	89.24827965	102.9125861	97.00213368	100.6012612
01/24/2020 17:48	A0A0539-02	92.3367333	102.5729122	90.13078538	89.49568067	91.43206599	90.03235546	89.87092522	102.2147133	97.45381192	100.2341024
01/24/2020 17:52	0010756-DUP1	88.63915018	99.7776494	88.26771147	88.3027281	91.58588581	88.10813017	88.2023918	97.99892192	95.68719379	95.33492257
01/24/2020 17:57	0A24028-CCV2	102.60538	100.73003323	100.2693581	95.10889227	93.57051733	102.3919071	95.37581624	106.0402063	98.72215142	106.7129088
01/24/2020 18:01	0A24028-CCB2	98.83240499	91.25301812	97.87264821	95.14060755	97.43232599	100.7283689	95.8354763	102.7096931	98.0811067	102.7393349
01/24/2020 18:06	NR rerun after CCV	95.48112751	98.26919241	92.57955789	88.30295035	90.66416922	94.4040046	87.14596017	103.1631079	97.07111129	103.1195624
01/24/2020 18:11	0A24028-CCV3	98.40030774	89.74541723	96.35702467	94.55816644	92.68501926	98.2444561	94.95778961	101.886519	98.66487256	104.371579
01/24/2020 18:19	0010756-BLK2	101.5851053	90.80402948	98.17522805	93.40406141	99.82687205	101.4450031	96.11360597	101.5531084	98.95673918	102.1935715
01/24/2020 18:24	0010756-MS1	92.2876174	99.1649684	90.96650535	88.58904549	90.27507689	91.79613492	88.43823353	101.5689074	97.06070345	100.3880813
01/24/2020 18:29	0010756-MSD1	95.95866328	92.44226969	95.34677443	93.56490777	95.29489473	95.87831387	93.94825997	102.0315866	97.90815307	103.2146064
01/24/2020 18:35	0010751-BLK1	97.66152593	90.04495825	96.66741394	91.84012479	95.07741972	98.39813532	94.49430557	100.4131816	96.76774309	101.6904786
01/24/2020 18:41	0010751-BLK2	97.90936581	89.29253415	96.43660547	91.26369357	95.53520803	97.82688721	93.18996256	100.1333188	95.89126871	104.2664907
01/24/2020 18:46	0010751-BS1	98.343479	89.99552325	95.84260327	92.69834048	94.01790772	99.28832055	95.18839992	102.204441	99.54818236	103.2084084
01/24/2020 18:51	A0A0626-02	86.95730488	98.50679187	85.02660669	91.1758881	93.53813041	84.19989563	92.24448498	90.22162689	96.21387049	91.01677611
01/24/2020 18:55	0010751-DUP1	93.98453541	99.02208481	93.07414555	90.92142742	93.43405833	93.71302604	91.76927395	100.2344144	96.64690339	100.5797811
01/24/2020 19:00	0010751-DUP2	94.90754317	100.4986253	92.45808026	90.69579174	93.06928972	93.29694516	92.26534689	100.0965841	97.24799051	100.0317131
01/24/2020 19:05	0A24028-CCV4	100.0368568	88.34916088	97.23997054	92.81171193	92.73945249	98.46059299	93.65423108	101.6340477	97.05750769	102.5048216
01/24/2020 19:09	0A24028-CCB3	99.42086179	90.31822493	98.37827051	93.84178351	93.03133248	100.7095924	95.74208541	100.3954383	96.932882	102.0478572
01/24/2020 19:14	0010751-MS1	95.25629078	99.24538587	93.4767596	90.83232785	90.66605694	94.4506526	90.67287912	100.9901096	97.8906279	101.4689156
01/24/2020 19:18	A0A0626-04	93.08260782	97.96728478	93.66380953	91.01112304	91.60249704	93.75175189	91.32238709	101.6241656	97.65245314	101.5417129
01/24/2020 19:23	A0A0626-02RE1	96.1005695	99.8590883	96.36508026	92.94126833	94.35509868	95.96593522	92.68024504	101.8312608	97.71664431	101.6560271
01/24/2020 19:29	A0A0626-06	93.21913641	99.07548871	93.43932331	93.29661094	93.52830786	92.89653152	93.59996705	97.47950573	98.09235663	97.03071249
01/24/2020 19:34	A0A0721-06	92.85510641	94.50528699	95.21785803	85.14439532	96.1692705	95.98732043	86.22609836	101.8360094	91.21938754	101.2660204
01/24/2020 19:39	A0A0721-08	93.57250666	102.2425047	96.03424043	92.70673148	94.2875053	96.65557927	93.02334999	102.5418189	98.11191001	101.7590962
01/24/2020 19:43	A0A0801-01	95.71654916	98.03306365	94.52965103	92.7365455	93.28562545	94.79527799	93.63742438	101.7525784	97.96226478	100.860591
01/24/2020 19:48	A0A0801-02	96.32913929	97.49520731	96.25153756	93.09168202	93.40467892	96.98729512	93.63417502	101.3356612	97.7229673	104.3071911
01/24/2020 19:52	A0A0801-03	97.57505954	95.82943676	96.58138672	92.72231737	95.28508363	96.2912637	93.38143129	101.7397378	99.18033451	103.3938853
01/24/2020 19:57	A0A0801-04	97.55531209	97.63443017	97.91863493	94.27001751	93.48242381	98.51170482	95.54529696	103.3567406	101.5438682	104.1054722
01/24/2020 20:02	0A24028-CCV5	98.22127222	93.23079816	97.50362707	97.03439454	94.08082937	97.32945697	98.19575237	100.9450503	101.3061123	101.9074283
01/24/2020 20:06	0A24028-CCB4	98.76626864	90.95729971	98.44309645	94.6018742	98.31639021	100.1238722	96.54002053	100.1801693	98.60052941	100.7611245
01/24/2020 20:12	A0A0801-05	95.25763729	97.4595245	94.55158979	90.93178131	93.23886688	94.53446723	91.03754393	101.2172857	97.45187646	101.268303
01/24/2020 20:17	A0A0801-06	95.31424408	98.82421583	95.90569687	91.96486642	95.0647249	95.7210606	93.31782386	102.2853805	99.16023243	103.069011
01/24/2020 20:23	A0A0801-07	96.02610963	98.44905119	95.48659745	92.44018639	94.40026409	96.91761435	92.66611449	103.196261	99.71121506	103.5709532
01/24/2020 20:28	A0A0801-08	96.17248627	98.75400755	96.06436296	92.42717357	96.0286395	97.67198366	93.29890651	104.2459883	100.5610213	105.2785883
01/24/2020 20:32	0010751-MSD1	96.57414618	94.78077574	99.22973066	96.3804693	99.19865956	98.98359491	97.6263975	102.0504226	99.40771602	103.0604351
01/24/2020 20:37	NR10694-BLK2 See CCV6	100.134766	83.6172638	100.6832479	86.76562935	98.90718416	102.6898536	87.95246857	103.224048	89.38614146	103.4118077
01/24/2020 20:41	NR10694-BS2	101.8684491	94.0488912	99.78171035	96.3874985	97.17942216	100.3468422	98.17669312	104.2502702	100.3239249	102.5995058
01/24/2020 20:48	NR10694-BLK3	103.107165	93.6231472	101.2897733	96.43866583	98.32598583	103.5574806	98.4828726	104.3175909	100.465274	104.9275764
01/24/2020 20:52	NR0408-02RE1	97.07538415	92.72010774	97.93908198	96.95210292	95.33830652	107.8066132	106.2576631	100.8421505	102.2603492	104.005333
01/24/2020 20:57	NRA0414-01RE1	101.9455438	90.17868265	98.15849284	93.07558091	92.84392916	99.34399896	94.98651109	104.3842077	101.4090025	106.005262
01/24/2020 21:02	0A24028-CCV6	96.94899658	83.58667866	96.79397263	88.11970509	92.74305485	97.45592422	87.929071	101.7214481	91.24185969	102.7159812
01/24/2020 21:06	0A24028-CCB5	100.3679224	88.9876981	97.73654206	94.05113423	96.21823656	101.0319206	95.53556219	102.728524	98.80996406	104.4756576
01/24/2020 21:11	NR10694-DUP2	98.48451939	89.45433511	95.98589734	92.22608556	92.3512278	98.09269228	94.3904224	102.7555316	99.22989067	106.6875377
01/24/2020 21:15	NR10694-MS3	97.73789703	88.71013619	96.78827023	92.96763947	91.15090026	98.66987213	94.68111189	102.4822034	98.76502833	103.8209137
01/24/2020 21:20	NRA0418-01RE1	92.72670442	87.7746756	92.40886782	91.18162118	86.1109227	94.71091486	91.45950875	100.4498387	98.9053991	103.6473541
01/24/2020 21:25	NRA0426-01RE1	94.71896327	90.43054329	93.00993594	94.43076689	91.91902626	93.57155073	94.81272569	97.4397361	100.6210195	99.00188413
01/24/2020 21:29	NRA0426-02RE1	97.49351309	85.8284831	95.69720151	89.95842121	91.41319912	96.26010018	91.28590449	99.46081778	97.51198661	105.5364775
01/24/2020 21:34	NRA0426-03RE1	97.48689876	87.00614048	92.31404151	88.76202577	89.52256727	93.90965587	90.04780547	99.67040359	97.17582297	101.8511618
01/24/2020 21:39	NRA0426-04RE1	98.53252017	86.46748257	94.73231898	90.43692342	90.78840663	96.33768353	91.28724922	101.4134879	98.44323346	105.4129391
01/24/2020 21:43	NRA0610-01RE1	96.77782279	85.30934071	92.75780772	90.02204067	89.07030113	94.17343968	90.81802152	98.53475763	96.50966287	102.9495112
01/24/2020 21:48	NR10694-MS4	96.33368813	85.45027318	93.46510796	89.31458518	88.57744962	95.41072805	91.72930584	99.05681862	97.11343969	104.1162834
01/24/2020 21:53	NRA0462-01RE1	94.28155224	79.75561283	91.51653887	81.90716834	89.00650381	93.06941116	83.67007271	97.52923813	89.27026969	104.0634258
01/24/2020 21:57	0A24028-CCV7	95.4711847	86.71998896	91.48142242	90.37002979	87.40264583	92.96183041	92.0923295	96.70279739	97.83679792	100.7506019
01/24/2020 22:02	0A24028-CCB6	96.19580715	84.25744745	92.27846457	88.41524792	89.49156605	94.57569872	90.18304037	99.60152779	95.44722443	100.9173874
01/24/2020 22:07	0A24028-CRL7	99.303613	76.47997207	93.0176222	79.61768496	91.01194379	95.53785901	81.7072315	98.76745954	85.75860645	101.569535
01/24/2020 22:11	0A24028-CRL8	96.03184381	86.84862089	93.86858601	91.1338836	91.40974117	94.8093604	92.92070434	97.91588196	97.11023956	102.7796987
01/24/2020 22:16	0A24028-CRL9	98.40185731	86.30543403	93.14145554	90.21060583	90.77699564	96.07090136	92.15557956	99.79345005	95.69616785	102.788058
01/24/2020 22:21	0A24028-CRLA	93.7879068	88.10310859	90.10409819	91.93349159	91.88221976	93.31872	92.3327825	95.93846198	95.20481702	98.26209111
01/24/2020 22:26	A0A0488-01RE1	94.70245797	77.16412516	92.42795772	79.72879046	89.77685679	92.18261687	81.0882645	97.88646105	85.82633616	100.0961246
01/24/2020 22:30	A0A0488-04RE1	95.59672559	85.44533046	92.58030056	88.87190585	89.46851342	93.82152379	89.84240029	97.96335553	95.40502231	99.62102132
01/24/2020 22:35	0010782-BLK1	95.19337871	86.36891727	93.69405506	89.30405349	87.94740214	94.8593011	91.39501803	98.71539474	96.88944583	99.71212427
01/24/2020 22:40	0010782-BS1	97.96939304	86.98924607	93.72467227	91.3930853	91.63152458	95.77164005	92.06768356	99.46151817	96.05236341	101.9718897
01/24/2020 22:44	A0A0448-01	94.73372335	83.25417983	93.3970538	85.42331981	90.33230559	93.99871377	87.85949216	97.05340599	91.1035032	106.0463472
01/24/2020 22:49	0010782-DUP1	88.13017408	79.31711124	85.88265389	83.4014251	87.50666862	88.72527475	87.00116183	94.17560909	92.31817325	104.4622504
01/24/2020 22:54	0010782-MS1	84.88508031	78.45249084	82.65306485	82.5398423	84.66436769	85.99710066	85.19856375	92.06705377	91.15906582	102.1451376
01/24/2020 22:58	0010770-BLK1	89.62639431	70.90966487	85.6611169	74.98634669	88.72901037	89.80841457	78.24401318	96.52262911	83.8711765	102.3429144
01/24/2020 23:03	0010770-BS1	88.38575797	80.10269572	86.22023825	84.24659564	85.16603658	87.2531501	87.82202221	94.21296569	93.25841931	99.24506946
01/24/2020 23:07	A0A0496-01	84.83137267	72.03010874	82.58262717	75.54969034	79.57616219	83.38493311	75.85504471	93.24184633	84.81100726	97.46189829
01/24/2020 23:12	0A24028-CCV8	88.84029391	79.53791843	85.51228867	84.59922072	83.76382633	89.75639476	87.70114735	96.5729825	93.89941081	102.1237788
01/24/2020 23:17	0A24028-CCB7	89.47220624	79.59157162	87.11565117	84.93722469	84.17029209	91.57238339	88.65334614	95.48916755	94.0010368	101.6682559
01/24/2020 23:21	A0A0498-02	87.6676441	83.15806511	86.79548485	87.76959044	86.57081764	83.41258287	81.33401618	92.22472918	90.66519129	92.4869426
01/24/2020 23:26	A0A0510-01	87.22406724	78.9689091	85.15911579	83.72512113	81.89116963	86.28786742	84.15771987	93.90360648	91.61546671	100.4189539
01/24/2020 23:31	A0A0513-01	86.74454771	79.88186689	85.40752697	84.46882482	81.05132295	87.59582163	84.84358816	95.81331691	93.99759067	102.1919868
01/24/2020 23:36	0010770-DUP1	86.01886812	79.6316648	85.21393562	83.44349729	80.38036688	85.83800822	84.64658739	94.60155474	92.75720059	99.7919837
01/24/2020 23:40	0010770-MS1	85.15660324	78.8488936	82.67489871	84.10069063	87.26561948	84.34014575	84.76814022	92.38053866	91.36677203	98.80617182
01/24/2020 23:45	A0A0705-01	85.70543156	81.43055728	80.76560701	82.36403134	79.55105107	78.65369107	80.1451225	87.51224734	89.45460044	86.89671949

01/24/2020 23:50	A0A0717-01	82.85935626	76.85264804	84.28596304	83.24329626	82.82140674	87.56426675	87.12372759	93.54614874	93.5746365	101.5012067
01/24/2020 23:54	A0A0719-01	85.18052178	76.16576131	85.6214779	82.76166839	83.0011824	88.81030383	86.17756994	94.88414325	94.21622225	105.1999288
01/24/2020 23:59	A0A0719-02	86.48743648	77.21931571	85.58974435	82.52260165	83.49547348	88.81081352	86.36286264	97.05900938	94.86195153	104.7041394
01/25/2020 00:04	A0A0719-03	85.70231123	78.08791193	84.56424591	84.33037331	83.46506597	87.8579099	87.35009594	96.11458316	96.1199466	103.279188
01/25/2020 00:08	0A24028-CCV9	87.56274995	78.96464936	86.4744254	83.9144086	83.26228009	89.4502272	87.76545413	96.84724312	95.05523812	102.6994053
01/25/2020 00:13	0A24028-CCB8	87.92000881	78.07936561	88.88724814	84.05550793	84.38543123	92.38250664	87.64321421	96.91611994	93.93767987	102.9009298
01/25/2020 00:18	0A24028-CRLB	89.72221863	77.85487865	88.3998499	83.59897831	84.06127435	92.55855528	87.401338	98.89532798	94.71206412	102.7595169
01/25/2020 00:22	0A24028-CRLC	90.25804613	78.11769377	86.98271123	83.36557898	84.7584877	90.40867485	87.80838499	97.49989601	94.8026246	102.0628247
01/25/2020 00:27	0A24028-CRLD	90.64969784	77.3528618	85.56557138	83.37432861	84.89982474	89.14501353	87.66516474	94.56015125	93.47396995	102.1408842
01/25/2020 00:32	0A24028-CRLE	91.76282255	78.97726412	89.31713219	84.56992496	85.82020147	92.28653799	87.93221981	98.25123688	95.99391993	101.1571127
01/25/2020 00:36	A0A0719-04	91.78776017	80.3439862	88.92976632	85.01952337	86.5519886	91.19850399	88.34375157	97.31381411	96.43634711	104.5647427
01/25/2020 00:41	A0A0828-01	90.92028469	77.92780759	90.30742502	83.15951456	86.88532046	92.57809336	86.74834662	98.09869512	91.72078758	106.4149457
01/25/2020 00:46	A0A0828-02	81.18971771	80.77970307	78.78397352	85.72276114	84.86499421	81.52456687	88.90404755	87.19230499	95.96444616	95.74679213
01/25/2020 00:50	A0A0828-03	91.36378646	79.07166403	88.60412987	84.92761333	85.34074737	91.67682581	88.13706614	98.36392716	96.15961937	104.2063798
01/25/2020 00:55	A0A0828-04	92.98886202	80.15704661	89.2002835	84.50044917	85.68615742	91.17009888	88.70530086	98.73905171	96.41629898	106.0617709
01/25/2020 01:00	0010770-MS2	92.47709226	80.83418034	89.49798554	87.2841651	85.66927225	92.68866796	90.11166271	98.44510243	95.72645399	106.3431566
01/25/2020 01:05	A0A0371-01RE1	88.71912842	86.30917959	85.14633607	87.46026903	78.94987295	82.84496858	84.03891501	90.61986632	94.41767563	92.11620508
01/25/2020 01:09	A0A0561-01RE2	88.97165378	79.06403787	85.98872381	84.91678463	83.18061192	89.441584	86.2202643	94.28044358	94.60047821	99.16953437
01/25/2020 01:14	0A24028-CCVA	93.23828876	82.74926573	88.75201117	88.3974668	85.37604323	91.58504467	90.56778121	96.04578379	96.75839272	100.1298788
01/25/2020 01:18	0A24028-CCB9	93.32504964	76.6721738	90.11467235	82.05751232	87.34358099	93.2048889	84.76353807	99.14826607	90.68304503	102.2167803
01/25/2020 01:23	0A24028-CRLF	94.89632893	81.62350951	91.37283459	87.55062533	87.78332308	95.21370566	90.33213428	99.14857651	96.0935567	102.6427514
01/25/2020 01:28	0A24028-CRLG	96.17615241	83.21778807	92.63360355	88.13995825	87.22869379	95.34709648	92.03391425	99.52136662	97.07601089	103.7982827
01/25/2020 01:33	0A24028-CRLH	96.22702859	83.68229304	93.38924437	88.38116163	87.85543576	96.45360067	92.24794141	101.6826141	96.58932951	104.566474
01/25/2020 01:37	0A24028-CRLI	96.56658403	78.0363345	91.89432242	83.30627221	87.39210578	94.01266642	86.2724352	99.83609848	90.95327866	103.0910684
01/25/2020 01:42	Final rinse	95.56579659	83.24219265	91.41473394	87.1300277	87.41195949	95.42128856	90.93485273	98.60340076	96.98901135	102.96306
01/25/2020 01:47	Final rinse	97.27542707	83.67543556	92.91726709	87.59398355	87.50388461	95.21683481	91.62070245	101.4496007	97.44161568	102.5169071

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

Total Cyanide by UV Digestion/Gas Diffusion/Amperometric Detection Benchsheet & Analysis (Including Calibration)

Batch 0010568
Sequence 0A20032 (A0A0539-01RE1,02RE1)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

JAN 2 4 2020

BATCH #: 0010568 (Soil)

Prep Method: ASTM D7511-12mod (S)

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	0010568-BLK1		QC	01/20/20 08:35	2.5	50									
	0010568-BS1		QC	01/20/20 08:35	2.5	50	A20A113		100						
	A0A0538-01	B	Cyanide, Total (ASTM D7511, OIA)	01/20/20 08:35	2.5473	50					PDI-WC-011420-01				
	0010568-MS1		QC	01/20/20 08:35	2.5175	50	A20A008	A0A0538-01	200						
	0010568-MSD1		QC	01/20/20 08:35	2.5254	50	A20A008	A0A0538-01	200						
	A0A0538-02	B	Cyanide, Total (ASTM D7511, OIA)	01/20/20 08:35	2.5279	50					PDI-WC-011420-03				
	A0A0539-01	B	Cyanide, Total (ASTM D7511, OIA)	01/20/20 08:35	2.5145	50					PDI-WC-011420-02				
	A0A0539-02	B	Cyanide, Total (ASTM D7511, OIA)	01/20/20 08:35	2.5488	50					PDI-WC-011420-04				

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A19E189	05/14/24	Syringe Filters 0.45um.
A19H345	02/18/20	Total CN-TA2/SAR-working
A19I171	03/11/20	Total CN-TA1 working
A19J296	04/19/20	0.1 N NaOH

Analyte Spike(s)

Std ID	Exp. Date	Description
A20A008	06/30/20	Cyanide working -1-
A20A113	06/30/20	Cyanide working -2- TOTAL

Surrogate(s)

Std ID	Exp. Date	Description

TWO 01/20/20
Prepared By: Date

Reviewed By: 1/20/2020
Date

Printed: 1/20/2020 8:37:05AM

APEX LABORATORIES

ELEMENT SEQUENCE LOG

Apex Laboratories

JAN 2 4 2020

Sequence: **0A20032** Instrument: **OIA FS3000-2**

Date: **01/20/20 08:26** Calibration: **A0A2001**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	0A20032-CAL1	Water	QC	QC				
2	0A20032-CAL2	Water	QC	QC				A20A009
3	0A20032-CAL3	Water	QC	QC				A20A010
4	0A20032-CAL4	Water	QC	QC				A20A011
5	0A20032-CAL5	Water	QC	QC				A20A012
6	0A20032-CAL6	Water	QC	QC				A20A013
7	0A20032-CAL7	Water	QC	QC				A20A014
8	0A20032-ICV1	Water	QC	QC				A20A250
9	0A20032-ICB1	Water	QC	QC				
10	0010567-BS2	Water	QC	QC		0010567		
11	0010567-BLK1	Water	QC	QC		0010567		
12	0010567-BS1	Water	QC	QC		0010567		
13	A0A0561-11	Water	Cyanide, Total (ASTM D7511, OIA)		01/23/20	0010567		
14	0010567-MS1	Water	QC	QC		0010567		
15	0010567-MSD1	Water	QC	QC		0010567		
16	A0A0498-01 5X	Water	Cyanide, Total (ASTM D7511, OIA)		01/28/20	0010567		
17	A0A0535-01	Water	Cyanide, Total (ASTM D7511, OIA)		01/29/20	0010567		
18	A0A0537-01	Water	Cyanide, Total (ASTM D7511, OIA)		01/29/20	0010567		
19	A0A0537-02	Water	Cyanide, Total (ASTM D7511, OIA)		01/29/20	0010567		
20	A0A0561-18	Water	Cyanide, Total (ASTM D7511, OIA)		01/23/20	0010567		
21	0A20032-CCV1	Water	QC	QC				A20A013
22	0A20032-CCB1	Water	QC	QC				
23	A0A0561-24	Water	Cyanide, Total (ASTM D7511, OIA)		01/23/20	0010567		
24	A0A0561-30	Water	Cyanide, Total (ASTM D7511, OIA)		01/23/20	0010567		
25	A0A0565-02	Water	Cyanide, Total (ASTM D7511, OIA)		01/27/20	0010567		
26	0A20032-CCV2	Water	QC	QC				A20A013
27	0A20032-CCB2	Water	QC	QC				
28	0010568-BLK1	Soil	QC	QC		0010568		
29	0010568-BS1	Soil	QC	QC		0010568		
30	A0A0538-01	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	01/27/20	0010568		
31	0010568-MS1	Soil	QC	QC		0010568		
32	0010568-MSD1	Soil	QC	QC		0010568		
33	A0A0538-02 5X	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	01/27/20	0010568		
34	A0A0539-01	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	01/27/20	0010568		
35	A0A0539-02	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	01/27/20	0010568		
36	0A20032-CCV3	Water	QC	QC				A20A013
37	0A20032-CCB3	Water	QC	QC				
38	A0A0498-01RE1	Water	Cyanide, Total (ASTM D7511, OIA)		01/28/20	0010567		
39	A0A0535-01RE1 2X	Water	Cyanide, Total (ASTM D7511, OIA)		01/29/20	0010567		
40	A0A0561-24RE1 20X	Water	Cyanide, Total (ASTM D7511, OIA)		01/23/20	0010567		
41	0A20032-CCV4	Water	QC	QC				A20A013
42	0A20032-CCB4	Water	QC	QC				
43	A0A0561-24RE2 20X	Water	Cyanide, Total (ASTM D7511, OIA)		01/23/20	0010567		
44	A0A0538-02RE1 50X	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	01/27/20	0010568		
45	A0A0539-01RE1 20X	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	01/27/20	0010568		
46	A0A0539-02RE1 50X	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	01/27/20	0010568		
47	A0A0561-24RE3 10X	Water	Cyanide, Total (ASTM D7511, OIA)		01/23/20	0010567		
48	0A20032-CCV5	Water	QC	QC				A20A013
49	0A20032-CCB5	Water	QC	QC				
50	A0A0561-24RE4	Water	Cyanide, Total (ASTM D7511, OIA)		01/23/20	0010567		
51	0A20032-CCV6	Water	QC	QC				A20A013

Sequence:	0A20032	Instrument:	OIA FS3000-2
Date:	01/20/20 08:26	Calibration:	A0A2001

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
52	0A20032-CCB6	Water	QC	QC				
53	A0A0561-24RE5 .2X	Water	Cyanide, Total (ASTM D7511, OIA)		01/23/20	0010567		
54	A0A0561-24RE6 .5X	Water	Cyanide, Total (ASTM D7511, OIA)		01/23/20	0010567		
55	0A20032-CCV7	Water	QC	QC				A20A013
56	0A20032-CCB7	Water	QC	QC				

Data Entered By: MVO 01/20/20

Data Reviewed By: CMR 1/24/2020

Comments:

Run Results Report

Apex Laboratories OIA FS3000-2

Operator Name	WVO
Operator ID	WVO
Platform	FS 3000
Software Rev Code	234
Data system ID	57
Result path	C:\FLOW_4\0A20032.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	20-Jan-20
Time acquired	14:52

	TOTAL CN 50ppb					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	RSD
Sync 25 ppb	1003925	25.176	OL			
Sync 25 ppb	1044772	26.169				
Sync 25 ppb	1042561	26.115				
(Statistics)				1043666	26.142	2.2% ✓
Carryover	20927	1.235				
Read Baseline	-4124	0.624	BL			
Cal 0.0 ppb	-4946	0.604				
Cal 1.0 ppb	7916	0.918 ✓				
Cal 2.0 ppb	33379	1.539 ✓				
Cal 5.0 ppb	149829	4.381 ✓				
Cal 10.0 ppb	355563	9.397 ✓				
Cal 25.0 ppb	1019579	25.556 ✓				
Cal 50.0 ppb	2022896	49.881 ✓				
Blank	9434	0.955				
Read Baseline	-1563	0.686	BL			
0A20032-ICV1	992643	24.902 ✓				
0A20032-ICB1	-12663	0.415 ✓				
Read Baseline	-9449	0.494	BL			
0010567-BS2	12369	1.026 ✓				
0010567-BLK1	-27459	0.054 ✓				
0010567-BS1	1128560	28.204 ✓				
Read Baseline	-19665	0.244	BL			
A0A0561-11	-46986	-0.423 ✓	LO			
0010567-MS1	239455	6.567 ✓				
0010567-MSD1	274056	7.410 ✓				
Read Baseline	-18879	0.264	BL			
A0A0498-01@5	-44056	-0.351 ✓	LO			

ok am 1/20/2020

NR over deluted see REI@1X

02/26/20 Anchor QEA, LLC - Gasco PreRD_DG 2019 - 4c. Waste Characterization Page 1528 of 1555

WVO 01/20/20

Result path	C:\FLOW_4\0A20032.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	20-Jan-20
Time acquired	14:52

TOTAL CN 50ppb

Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	RSD
A0A0535-01	546964	14.060				
Read Baseline	-3127	0.648	BL			
A0A0537-01	11857	1.014				
A0A0537-02	38747	1.670				
A0A0561-18	8200	0.925				
Read Baseline	11326	1.001	BL			
0A20032-CCV1	1057749	26.484				
0A20032-CCB1	15148	1.094				
Read Baseline	16647	1.131	BL			
A0A0561-24	8394706	201.777	HI			
A0A0561-30	-33745	-0.099	LO FL			
A0A0565-02	-5384	0.593	FL			
Read Baseline	-3309	0.644	BL			
0A20032-CCV2	982363	24.652				
0A20032-CCB2	5265	0.853				
Read Baseline	-8891	0.507	BL			
0010568-BLK1	-15751	0.340				
0010568-BS1	859551	21.666				
Read Baseline	2785	0.792	BL			
A0A0538-01	1372934	34.136				
0010568-MS1	2337556	57.487	HI			
0010568-MSD1	2459610	60.434	HI			
Read Baseline	-15868	0.337	BL			
A0A0538-02@5	18286054	428.738	HI			
A0A0539-01	14105262	334.119	HI			
A0A0539-02	20757946	483.777	HI			
Read Baseline	56846	2.112	BL			
0A20032-CCV3	902749	22.717	FL			
0A20032-CCB3	-47372	-0.432	LO			
Read Baseline	-5206	0.597	BL			
A0A0498-01RE1	21730	1.255				
A0A0535-01RE1@2	131678	3.938				
A0A0561-24RE1@20	-26267	0.083				
Read Baseline	-103	0.722	BL			
0A20032-CCV4	1094659	27.380				
0A20032-CCB4	1787	0.768				
Read Baseline	-6487	0.566	BL			

NR. possible matrix interference. see RE5 @ 2X

NR. over range. WLO 01/20/20

→ possible matrix interference. see RE6 @ 5X. WLO 01/20/20

Result path	C:\FLOW_4\0A20032.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	20-Jan-20
Time acquired	14:52

TOTAL CN 50ppb

Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	RSD
A0A0561-24RE2@20	-65222	-0.868	LO – NR			
A0A0538-02RE1@50	935290	23.508				
A0A0539-01RE1@20	939663	23.614				
A0A0539-02RE1@50	608044	15.547				
A0A0561-24RE3@10	-41675	-0.293	LO – NR			
Read Baseline	-926	0.702	BL			
0A20032-CCV5	979660	24.586				
0A20032-CCB5	14455	1.077				
Read Baseline	-3655	0.635	BL			
A0A0561-24RE4	4854695	117.938	HI – ND.			
Read Baseline	-11908	0.434	BL			
0A20032-CCV6	953487	23.950	FL			
0A20032-CCB6	12290	1.024				
Read Baseline	-2135	0.672	BL			
A0A0561-24RE5@2	1656007	40.999	– NR. over diluted			
A0A0561-24RE6@5	301959	8.091				
Read Baseline	9628	0.959	BL			
0A20032-CCV7	987394	24.774				
0A20032-CCB7	22957	1.285				
Read Baseline	865	0.746	BL			

Possible matrix interference see RE6 @ 5x } WWO 01/20/20

Possible matrix interference see RE6 @ 5x } WWO 1/20/20

see RE6 @ 5x. WWO 01/20/20

Run Results Report

Apex Laboratories OIA FS3000-2

Operator Name	WVO
Operator ID	WVO
Platform	FS 3000
Software Rev Code	234
Data system ID	57
Result path	C:\FLOW_4\0A20032.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	20-Jan-20
Time acquired	14:52

Date	Time	Cup	Name
20-Jan-20	11:02	106	Sync 25 ppb
20-Jan-20	11:04	106	Sync 25 ppb
20-Jan-20	11:06	106	Sync 25 ppb (Statistics)
20-Jan-20	11:08	0	Carryover
20-Jan-20	11:10	0	Read Baseline
20-Jan-20	11:12	101	Cal 0.0 ppb
20-Jan-20	11:14	102	Cal 1.0 ppb
20-Jan-20	11:16	103	Cal 2.0 ppb
20-Jan-20	11:18	104	Cal 5.0 ppb
20-Jan-20	11:20	105	Cal 10.0 ppb
20-Jan-20	11:22	106	Cal 25.0 ppb
20-Jan-20	11:24	107	Cal 50.0 ppb
20-Jan-20	11:26	0	Blank
20-Jan-20	11:28	0	Read Baseline
20-Jan-20	11:30	108	0A20032-ICV1
20-Jan-20	11:32	0	0A20032-ICB1
20-Jan-20	11:34	0	Read Baseline
20-Jan-20	11:36	109	0010567-BS2
20-Jan-20	11:38	110	0010567-BLK1
20-Jan-20	11:40	111	0010567-BS1
20-Jan-20	11:42	0	Read Baseline
20-Jan-20	11:44	112	A0A0561-11
20-Jan-20	11:46	113	0010567-MS1
20-Jan-20	11:48	114	0010567-MSD1
20-Jan-20	11:50	0	Read Baseline
20-Jan-20	11:52	115	A0A0498-01@5

Result path	C:\FLOW_4\0A20032.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	20-Jan-20
Time acquired	14:52

Date	Time	Cup	Name
20-Jan-20	11:54	116	A0A0535-01
20-Jan-20	11:56	0	Read Baseline
20-Jan-20	11:58	117	A0A0537-01
20-Jan-20	12:00	118	A0A0537-02
20-Jan-20	12:02	119	A0A0561-18
20-Jan-20	12:04	0	Read Baseline
20-Jan-20	12:06	106	0A20032-CCV1
20-Jan-20	12:08	0	0A20032-CCB1
20-Jan-20	12:10	0	Read Baseline
20-Jan-20	12:12	120	A0A0561-24
20-Jan-20	12:14	121	A0A0561-30
20-Jan-20	12:16	122	A0A0565-02
20-Jan-20	12:18	0	Read Baseline
20-Jan-20	12:20	106	0A20032-CCV2
20-Jan-20	12:22	0	0A20032-CCB2
20-Jan-20	12:24	0	Read Baseline
20-Jan-20	12:26	123	0010568-BLK1
20-Jan-20	12:28	124	0010568-BS1
20-Jan-20	12:30	0	Read Baseline
20-Jan-20	12:32	125	A0A0538-01
20-Jan-20	12:34	126	0010568-MS1
20-Jan-20	12:36	127	0010568-MSD1
20-Jan-20	12:38	0	Read Baseline
20-Jan-20	12:40	128	A0A0538-02@5
20-Jan-20	12:42	129	A0A0539-01
20-Jan-20	12:44	130	A0A0539-02
20-Jan-20	12:46	0	Read Baseline
20-Jan-20	12:48	106	0A20032-CCV3
20-Jan-20	12:50	0	0A20032-CCB3
20-Jan-20	12:52	0	Read Baseline
20-Jan-20	13:06	115	A0A0498-01RE1
20-Jan-20	13:08	116	A0A0535-01RE1@2
20-Jan-20	13:10	120	A0A0561-24RE1@20
20-Jan-20	13:12	0	Read Baseline
20-Jan-20	13:14	106	0A20032-CCV4
20-Jan-20	13:16	0	0A20032-CCB4
20-Jan-20	13:18	0	Read Baseline

Result path	C:\FLOW_4\0A20032.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	20-Jan-20
Time acquired	14:52

Date	Time	Cup	Name
20-Jan-20	13:34	120	A0A0561-24RE2@20
20-Jan-20	13:36	131	A0A0538-02RE1@50
20-Jan-20	13:38	132	A0A0539-01RE1@20
20-Jan-20	13:40	133	A0A0539-02RE1@50
20-Jan-20	13:42	120	A0A0561-24RE3@10
20-Jan-20	13:44	0	Read Baseline
20-Jan-20	13:46	106	0A20032-CCV5
20-Jan-20	13:48	0	0A20032-CCB5
20-Jan-20	13:50	0	Read Baseline
20-Jan-20	14:05	120	A0A0561-24RE4
20-Jan-20	14:07	0	Read Baseline
20-Jan-20	14:09	106	0A20032-CCV6
20-Jan-20	14:11	0	0A20032-CCB6
20-Jan-20	14:13	0	Read Baseline
20-Jan-20	14:27	120	A0A0561-24RE5@2
20-Jan-20	14:29	134	A0A0561-24RE6@5
20-Jan-20	14:31	0	Read Baseline
20-Jan-20	14:33	106	0A20032-CCV7
20-Jan-20	14:35	0	0A20032-CCB7
20-Jan-20	14:37	0	Read Baseline

TOTAL CN 50ppb:Calibration 1: Peak 6-83

File name: C:\FLOW_4\0A20032.RST
Date: 20-Jan-20
Operator: WVO

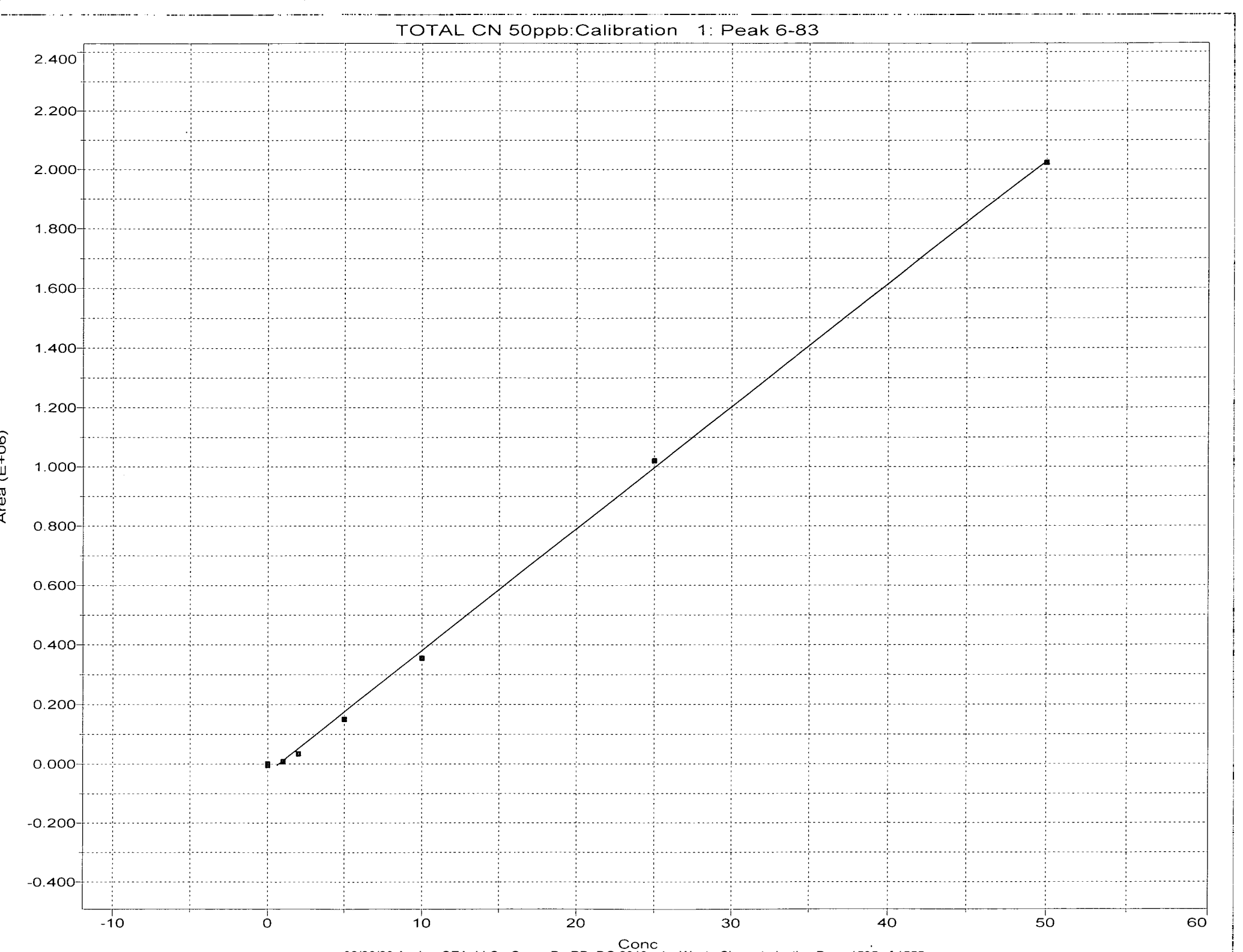
*	Name	Conc	Area
*	Cal 0.0 ppb	0.000000	-4946.390137
*	Cal 1.0 ppb	1.000000	7915.725098
*	Cal 2.0 ppb	2.000000	33378.937500
*	Cal 5.0 ppb	5.000000	149828.890625
*	Cal 10.0 ppb	10.000000	355562.593750
*	Cal 25.0 ppb	25.000000	1019579.062500
*	Cal 50.0 ppb	50.000000	2022895.500000

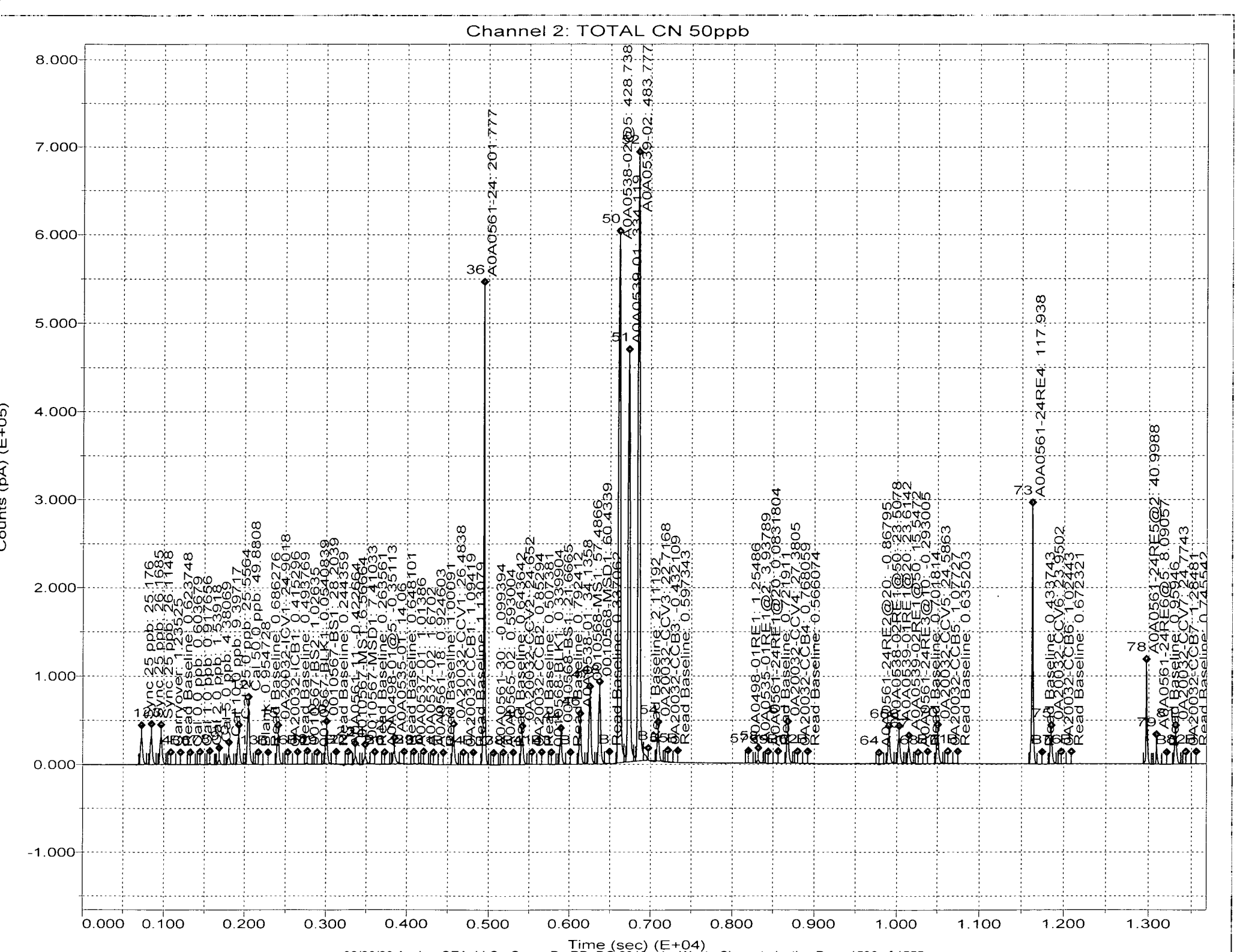
Calib Coef:
x=cyy+by+a
a: (intercept) 7.2443e-01
b: 2.4411e-05
c: -5.4938e-14

Corr Coef: 0.999499

Carryover: n/a

No Drift Peaks


TOTAL CN 50ppb:Calibration 1: Peak 6-83
Area (E+06)
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-10
0
10
20
30
40
50
60
Conc


Channel 2: TOTAL CN 50ppb
Counts (pA) (E+05)
Time (sec) (E+04)
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
0.000
0.100
0.200
0.300
0.400
0.500
0.600
0.700
0.800
0.900
1.000
1.100
1.200
1.300
A0A0561-24: 201.777
A0A0538-02: 428.738
A0A0539-02: 483.777
A0A0561-24RE4: 117.938
A0A0561-24RE6@5: 40.9988

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

Total Solids by SM2540/PSEP
Benchsheet Data

Batch 0010552 (A0A0539-01,02)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

Percent Solids + Dry Weight Worksheet

BATCH #: 0010552 (Matrix: Sediment)

ab 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
0A0539-01	Dry Weight		01/17/20 15:30		1.26	26.92	21.43	78.6	Use TS Results for Dry Weight
0A0539-01	Solids, Total (SM 254		01/17/20 15:30		1.26	26.92	21.43	78.6	Use Results for Dry Weight
010552-DUP1	QC	A0A0539-01	01/17/20 15:30		1.27	28.39	22.19	77.1	
0A0539-02	Dry Weight		01/17/20 15:30		1.27	27.12	22.39	81.7	Use TS Results for Dry Weight
0A0539-02	Solids, Total (SM 254		01/17/20 15:30		1.27	27.12	22.39	81.7	Use Results for Dry Weight

NDP 1/20/20
epared By: Date

James S. Johnson 01/23/20
Reviewed By: Date

Batch #: 0010552

Analyst: nrp

Total Solids Worksheet

Method: SM 2540 G

Date: 1/17/2020

Sample ID	Tare Wt. (g)	Vessel ID	Initial (wet) Wt. (g)	Final Weight (g)			Comments
				1st weighing	2nd Weighing	3rd Weighing	
A0A0539-01	1.260	539-01	26.920	21.430	21.430	[redacted]	Oven temp was 104.9 1/20@11:30
0010552-DUP1	1.270	539-01Dup	28.390	22.200	22.190	[redacted]	source: A0A0539-01
A0A0539-02	1.270	539-02	27.120	22.400	22.390	[redacted]	Oven temp was 104.9 1/20@11:30
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
					[redacted]	[redacted]	
Date/time first in oven:		**Oven temp. (°C; in/out):**		**100.0/103.1**	**99.5/102.0**	/	
1/17/20@17:55		**Time of weighing:**		1/20@10:29	1/20@12:36		

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

Conventional Chemistry Parameters
Benchsheet & Analysis Sequence Data

pH- EPA 9045D (non-aq)

Batch 0010593 (A0A0539-01,02)

JAN 2 4 2020 0010593

APEX LABORATORIES

pH PREPARATION BENCH SHEET

Apex Laboratories
BATCH #: 0010593 (Sediment)
Prep Method: DI Leach

Orde	Lab Number	Std ID / TV (SU)	Analyzed	Source ID	pH (SU)	Temp (deg C)	ClientID / Sample	Comments
	CAL STD 1 (4)		01/20/20 @ 1430		4.03	20.4		Slope=100.1%
	CAL STD 2 (7)		01/20/20 @ 1428		7.03	20.2		
	CAL STD 3 (10)		01/20/20 @ 1426		10.00	20.8		MMK 01/20/20
	A0A0538-01		1/20/2020@ 1645	20.1046 g 20.0379 g	7.18	21.6	Anchor QEA, LLC / PDI-WC-	7.28 21.5 @ 1643
	A0A0538-02		1/20/2020@ 1651	20.3938 g 20.4483 g	7.96	21.4	Anchor QEA, LLC / PDI-WC-	7.81 21.3 @ 1653
	A0A0539-01		1/20/2020@ 1705		6.02	21.3	Anchor QEA, LLC / PDI-WC-	20.0081 g
	0010593-DUP1		1/20/2020@ 1708	A0A0539-01	5.87	21.0		20.0231 g
	A0A0539-02		1/20/2020@ 1710	20.1158 g 20.0070 g	5.69	20.9	Anchor QEA, LLC / PDI-WC-	5.97 @ 1714 20.9

SRM1 (6) ~~A0A~~	01/20/20 1430	6.03	20.7	
SRM2 (8)	1432	8.01	20.7	
SRM3 (6)	1641	6.02	21.3	
SRM4 (8)	18:10	8.02	21.4	
538-02	1734	7.87	22.1	1735 7.94 21.8 ✓
539-01	18:03	6.06	22.4	
539-01 DUP	18:06	5.86	21.4	
539-02	18:08	6.00	21.9	
539-02 Dup	18:09	5.94	21.7	

MAS 1-20-2020
NK 1/22/2020

Thought, second Reading was needed for confirmation as with water samples
MMK 01/21/20

Reporting initial reading. ~~1/20/2020~~ 1/22/2020 1/22/2020

Reported by MAS 1-20-2020

Reagent(s)

Std ID	Exp. Date	Description
A19K088 ~~A19B221~~	03/18/20 ~~05/17/20~~	pH 10 Buffer
A19B222	06/24/20	pH 4 Buffer
A19B231	11/13/20	pH 7 Buffer
A19E295	05/23/29	pH Meter 3 (Orion Star A215)

MMK 01/22/20 — Prepared By: Date

1/22/2020 — Reviewed By: Date

APEX LABORATORIES, LLC
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Flashpoint by EPA 1010M

Batch 0010801 (A0A0539-01,02)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 0010801 (Oil)

Prep Method: Flashpoint

#	Lab Number		Analysis	Prepared	Initial (N/A)	Final (N/A)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH other	pH >11
	0010801-BS1		QC	01/27/20 10:08	70	70	A19K339		1						
	A0A0503-01	A	1010M - Flashpoint of Liquids/Soils	01/27/20 10:08	70	70					4444-US	Run Flashpoint first, then remaining volume for TCLP 8 Metals. Caution: Sample has strong odor			
	A0A0538-01	F	1010M - Flashpoint of Liquids/Soils	01/27/20 10:08	70	70					PDI-WC-011420-01				
	A0A0538-02	F	1010M - Flashpoint of Liquids/Soils	01/27/20 10:08	70	70					PDI-WC-011420-03				
	A0A0539-01	F	1010M - Flashpoint of Liquids/Soils	01/27/20 10:08	70	70					PDI-WC-011420-02				
	A0A0539-02	F	1010M - Flashpoint of Liquids/Soils	01/27/20 10:08	70	70					PDI-WC-011420-04				
	A0A0736-01	A	1010M - Flashpoint of Liquids/Soils	01/27/20 10:08	70	70					Used Oil + 3D Trasar				
	A0A0772-01	C	1010M - Flashpoint - High Temp	01/27/20 10:08	70	70					Pigging Oil	limited volume, share with TCLP; 200 F please			
	A0A0774-01	C	1010M - Flashpoint - High Temp	01/27/20 10:08	70	70					Pigging Oil	200F please.			
	A0A0774-01	C	1010M - Flashpoint of Liquids/Soils	01/27/20 10:08	70	70					Pigging Oil	Added for BatchQC in: 0010801			
	0010801-DUP1		QC	01/27/20 10:08	70	70		A0A0774-01							

Standards/Reagents

Reagent(s)			**Analyte Spike(s)**			**Surrogate(s)**		
Std ID	Exp. Date	Description	Std ID	Exp. Date	Description	Std ID	Exp. Date	Description

MAS 1-27-20
Prepared By: Date

Reviewed By: 1/27/2020
Date

Printed: 1/27/2020 4:32:28PM

Analyst: MAS

Batch:0010801

Flash Point Worksheet

Method EPA 1010A

Thermometer ID

SN: P59685

Pressure (in Hg): 29.97

Instrument ID: FLASHPOINT1

Sample ID:	BS1	A0A0538-01	A0A0503-01	A0A0538-02	A0A0539-01	A0A0539-02	A0A0736-01
Analysis time:	10:15:00 AM	11:45:00 AM	10:50:00 AM	12:13:00 PM	12:45:00 PM	01:07:00 PM	02:00:00 PM
Flash checks (°F) (As read from the thermometer)	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212
Flash point temperature (°F)	146	>150	>150	>150	>150	>150	>150
Flash point corrected for thermometer SN: P59685 (°F)	148	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Flash point corrected to 29.97 mm Hg (°F)	148	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Comments	FLASH	NO FLASH	NO FLASH	NO FLASH	NO FLASH	NO FLASH	NO FLASH

Analyst: MAS

Batch:0010801

Flash Point Worksheet

Method EPA 1010A

Thermometer ID

SN: P59685

Pressure (in Hg): 29.84

Instrument ID: FLASHPOINT1

Sample ID:	A0A0772-01	A0A0774-01	A0A0774-01DUP				
Analysis time:	02:30:00 PM	03:50:00 PM	04:10:00 PM				
Flash checks (°F) / (As read from the thermometer)	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212
Flash point temperature (°F)	>200	100	102				
Flash point corrected for thermometer SN: P59685 (°F)	#VALUE!	102	104	autofill	autofill	autofill	autofill
Flash point corrected to 29.84 mm Hg (°F)	#VALUE!	102	104	autofill	autofill	autofill	autofill
Comments	NO FLASH	FLASH	FLASH				

Analyst: MAS

Batch:0010801

Flash Point Worksheet

Method EPA 1010A

Thermometer ID

SN: P59685

Pressure (in Hg): 29.97

Instrument ID: FLASHPOINT1

Sample ID:	BS1	AOA0538-01	AOA0503-01	AOA0538-02	AOA0539-01	AOA0539-02	AOA0736-01
Analysis time:	10:15	11:45	10:50	12:13	12:45	13:07	14:00
Flash checks (°F) (As read from the thermometer)	146	>150	>150	>150	>150	>150	>150
Flash point temperature (°F)	146	>150	>150	>150	>150	>150	>150
Flash point corrected for thermometer SN: P59685 (°F)	autofill	autofill	autofill	autofill	autofill	autofill	autofill
Flash point corrected to mm Hg (°F)	autofill	autofill	autofill	autofill	autofill	autofill	autofill
Comments	Flash	NO Flash	NO Flash	NO Flash	NO Flash	NO Flash	NO Flash

Analyst: MAS

Batch: 0010801

Flash Point Worksheet

Method EPA 1010A

Thermometer ID: SN: P59685

Pressure (in Hg): 29.84

Instrument ID: FLASHPOINT1

Sample ID:	AOA0772-01	AOA0774-01	AOA0774-01 Dup				
Analysis time:	14:30	15:50	16:10				
Flash checks (°F) / (As read from the thermometer)	54 56 58 60 62 64 66 68 ~~70 72 74 76~~ ~~78 80 82 84~~ ~~86 88 90 92~~ ~~94 96 98 100~~ ~~102 104 106~~ ~~108 110 112~~ ~~114 116 118~~ ~~120 122 124~~ ~~126 128 130~~ ~~132 134 136~~ ~~138 140 142~~ ~~144 146 148~~ ~~150 152 154~~ ~~156 158 160~~ ~~162 164 166~~ ~~168 170 172~~ ~~174 176 178~~ ~~180 182 184~~ ~~186 188 190~~ ~~192 194 196~~ ~~198 200~~ 202 204 206 208 210 212	54 56 58 60 62 64 66 68 ~~70~~ 72 74 ~~76~~ ~~78 80 82 84~~ ~~86 88 90 92~~ ~~94 96 98~~ (100) 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 ~~70~~ 72 74 76 ~~78 80 82 84~~ ~~86 88 90 92~~ ~~94 96 98 100~~ (102) 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212	54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212
Flash point temperature (°F)	7200	100	102				
Flash point corrected for thermometer SN: P59685 (°F)	autofill	autofill	autofill	autofill	autofill	autofill	autofill
Flash point corrected to mm Hg (°F)	autofill	autofill	autofill	autofill	autofill	autofill	autofill
Comments	NO Flash	Flash	Flash				

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

Free liquid by EPA 9095B

Batch 0010775 (A0A0539-01,02)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 0010775 (Sediment)

Prep Method: Paint Filter

#	Lab Number		Analysis	Prepared	Initial (g)	Final (N/A)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH other	pH >11
	A0A0538-01	A	Paint Filter Test (9095B)	01/24/20 13:30	100	1					PDI-WC-011420-01				
	A0A0538-02	A	Paint Filter Test (9095B)	01/24/20 13:35	100.02	1					PDI-WC-011420-03				
	A0A0539-01	A	Paint Filter Test (9095B)	01/24/20 13:41	100.04	1					PDI-WC-011420-02				
	A0A0539-02	A	Paint Filter Test (9095B)	01/24/20 13:46	100.03	1					PDI-WC-011420-04				

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L221	11/30/23	Wet Chem Balance 3
A20A312	01/24/29	Paint filters for Free Liquid Testing

Analyte Spike(s)

Std ID	Exp. Date	Description

Surrogate(s)

Std ID	Exp. Date	Description

CMS 1/24/2020
Prepared By: Date

Reviewed By: 1/24/20
Date

Printed: 1/24/2020 1:56:49PM

Batch: 0010775 Analyst CMR

Paint filter test

Sample ID	Weight	Start time	End time	Liq.Vol
A0A0538-01	100	13:30	13:35	Ø
A0A0538-02	100.02	13:35	13:40	Ø
A0A0539-01	100.04	13:41	13:46	Ø
A0A0539-02	100.03	13:46	13:51	Ø

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

Balance Checksheets

Extractions December 2019
Extractions January 2020
Wet Chem December 2019
Wet Chem January 2020

Balance Challenge Log

Extractions
AND FX-2000
ID# 5210177

Weight ID	weight (g)	acceptance range (g)	
	=/<1g	± 0.02g	
	>1g	± 2%	
10077	0.5g	0.48	0.52
1000143395	300g	294.00	306.00

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Month: December
Year: 2019

Alternate Weight/ID used:

Date Range:

Day/Time	Initials	Weight One	Observed	Weight Two	Observed
1			0.50		300.00
2 0723	~~AJJ~~		0.50		300.00
3 10:35	CAH		0.50		299.99
4 0725	~~AJJ~~		0.50		300.01
5 0712	AJJ		0.49		300.00
6 10:30	CAH		0.50		300.02
7					
8					
9	JAG		.48		300.00
10 1004	~~AJJ~~		0.51		300.02
11 0710	~~AJJ~~		0.50		300.02
12 0715	JAG		.50		300.01
13 07:17	JAG		.49		300.00
14 ~~0707~~	~~AJJ~~		0. ~~AJJ~~ 12/19		
15					
16 0707	~~AJJ~~	0.50g	0.49	300.00g	300.01
17 0718	AJJ		0.50		300.02
18 06:55	CAH		0.50		300.01
19 07:20	JAG		.49		300.00
20 9:55	JC		0.50		300.00
21					
22					
23 3:50	CAH		0.51		300.02
24 1335	JC		0.50		300.02
25					
26 10:40	CAH		0.49		300.00
27 11:25	CAH		0.50		300.01
28					
29					
30 9:20	JC		0.48		300.00
31 0934	~~AJJ~~		0.50		300.00

Balance Challenge Log

Extractions
AND FX-2000
ID# 5210177

Weight ID	weight (g)	acceptance range (g)	
	=/<1g	± 0.02g	
	>1g	± 2%	
10077	0.5g	0.48	0.52
1000143395	300g	294.00	306.00

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Alternate Weight/ID used: Date Range:

Month: January
Year: 2020

	Day/Time	Initials	Weight One	Observed	Weight Two	Observed
1	0715	AJJ		0.51		300.01
2	0725	AJJ		0.49		299.99
3						
4						
5						
6	07:35	JAG		.50		299.99
7	0645	JAG		.50		300.00
8	10:20	JAG		.50		300.00
9	10:45	[illegible]		0.49		300.01
10	10:50	[illegible]		0.49		300.01
11						
12						
13	09:25	JAG		.48		300.00
14	10:35	[illegible]		0.51		300.02
15	10:55	[illegible]		0.49		300.00
16	11:25	[illegible]	0.50g	0.50	300.00g	300.01
17	0715	AJJ		0.49		300.00
18						
19						
20	0717	AJJ		0.49		299.95
21	07:25	JAG		.49		299.96
22	0729	AJJ		0.49		299.96
23	08:00	JAG		.49		299.98
24	07:15	JAG		.49		299.99
25	~~073~~ [illegible]					
26						
27					[illegible]	
28	0735	AJJ		0.51		299.99
29	08:20	JAG		.49		299.97
30	07:25	CAH		0.50		300.00
31	0711	AJJ		0.50		300.00

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: Dec
Year: 2019

Alternate Weight/ID used:

Date Range:

Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1							
2 8:16	MRF		99.9979		0.1000		0.0051
3 9:13	MRF		99.9971		0.1000		0.0049
4 11:24	MRF		99.9982		0.1000		0.0050
5 10:41	MRF		99.9987		0.1001		0.0050
6 10:21	MMK		99.9983		0.1000		0.0050
7							
8							
9							
10 10:25	MAS		99.9991		0.1002		0.0050
11 12:30	MAS		99.9993		0.1000		0.0049
12 10:25	MAS		99.9994	MAS 12-12-19	~~0.9~~ 0.1000		0.0051
13 1017	MAS		99.9995		0.1000		0.0052
MAS 12-16-19 14 ~~1030~~	~~MAS~~		~~99.9994~~		~~0.0999~~		~~0.0050~~
15							
16 1030	MAS	100.0000g	99.9994	0.1000g	0.0999	.0050g	0.0050
17 1030	MAS		99.9992		0.0999		0.0049
18 1315	~~MRF~~		99.9991		0.1002		0.0053
19 1016	MAS		99.9992		0.0999		0.0049
20 1038	MAS		99.9996		0.1000		0.0051
21							
22							
23 1024	MRF		99.9997		0.1000		0.0049
24 1020	MRF		99.9998		0.1001		0.0051
25							0
26 1017	MAS		99.9992		0.0999		0.0049
27 1307	MAS		99.9993		0.1001		0.0050
28							
29							
30 9:40	MRF		99.9989		0.1001		0.0050
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: Jan
Year: 2020

Alternate Weight/ID used:

Date Range:

Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1							
2 11:14	ME		99.9995		0.0999		0.0050
3							
4							
5							
6 14:35	MRF		99.9995		0.1000		0.0051
7 10:20	MRF		99.9995		0.1000		0.0050
8 10:05	MRF		99.9997		0.1000		0.0050
9 1229	MMK		99.9999		0.1002		0.0052
10							
11							
12							
13 1222	MMK		99.9995		0.1000		0.0050
14 1015	MAS		99.9993		0.0999		0.0050
15 1635	MAS		99.9994		0.1000		0.0051
16 1212	MAS	100.0000g	99.9991	0.1000g	0.1000	.0050g	0.0051
17 1152	MAS		99.9990		0.1000		0.0050
18							
19							
20 1640	MAS		99.9990		0.0999		0.0051
21 0949	CMR		99.9994		0.1002		0.0049
22 1012	MMK		99.9992		0.1000		0.0048
23 1403	MMK		99.9995		0.1001		0.0050
24 1134	MMK		99.9996		0.0999		0.0050
25							
26							
27 0957	MMK		100.0002		0.0999		0.0051
28 1026	MAS		100.0002		0.1001		0.0051
29 1156	MAS		100.0004		0.1000		0.0049
30 1139	MAS		100.0003		0.1000		0.0051
31 1006	MAS		100.0004		0.0999		0.0050